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FACTORS DETERMINING AGENT BANKING SERVICE ACCEPTANCE AMONG RURAL ENTREPRENEURS IN ADAMAWA STATE

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Abstract

The study is to examine the factors determining agent banking service acceptance among rural entrepreneurs in Adamawa state. The study was conducted based on the data gathered from the rural entrepreneurs in Adamawa state. A quantitative research approach was used to answer the research questions that emerge through the review of existing literature. The study statistically analyses data obtained from the survey questionnaire. The research work was delimited to relevant agents having direct role to the subject matter. Additionally, the researcher tried to review various empirical and theoretical literatures in light of having an in-depth understanding on the subject matter to supplement the research construct. A research framework developed based on Technology acceptance model to guide the study. The result of the study indicated that, the major barriers agent banking industry faces in the provision of the service are, lack of awareness , be deficient in trust, lack of supportive training , Lack of ICT infrastructure as well as be deficient in competitiveness' with other banks. The study also identified perceived ease of use and perceived usefulness as a driver for the frequent use of agent banking system. The study suggests a series of measures which could be taken by the bank to address various challenges identified in the thesis. These measures include: Establishing a frequent training to minimize knowledge gap between

agents also work on creating awareness to the society, supporting agent banking by working with ethiotel come to work on ICT infrastructure and network problem, banks needs to be focused on technological innovation competition rather than traditional bases of retail bank competition so the bank have to be work on providing other channels.

INTRODUCTION

Over the years, there has been an explosion of different forms of remote access of financial services, i.e. beyond branches. These have been provided through a variety of different channels, including mobile phones, automatic teller machines (ATMs), and Point-of-Sale (POS) devices and banking correspondents (Derese, 2017). In many countries, these branchless channels have made an important contribution to enhancing financial inclusion by reaching people that traditional branch-based structures would have been unable to reach (Afewerk, 2015).

Agent banking represents a significant opportunity to reduce transaction costs such as travel for clients by bringing financial services hard-to-reach and geographically dispersed areas. This is especially true in Africa where some areas are sparsely populated leaving long distances between the customer and the bank. Moreover, in these areas overall literacy levels are fairly low. Also, banks and other financial institutions often do not have sufficient incentive or capacity to establish formal branches in these areas. Obviously, the set-up of agent banking is less costly and more flexible than for traditional bank branches since it reduces the need to invest in staff and physical infrastructure (Barasa & Mwirigi , 2013).

With all the significance of agent banking service, the service still face with challenges face with poor internet and mobile network connectivity, lack of skilled man power, absence of suitable legal and regulatory framework are challenges to provide and enhance the service theses have made rural entrepreneurs less acceptance to the use of agent banking service. Moreover, the cost that involved in servicing low-value accounts, availing physical infrastructure to remote rural areas and cost (in money and time) incurred by customers in remote areas to reach bank branches are among the major concerns (Ndungu, 2014). Although agent banking is gaining a lot of interest from the banking industry,

it has not received a lot of attention from scholars. There are limited studies that have been done to highlight the factors that determines agent banking service acceptance among rural entrepreneurs especially in Adamawa State.

However, prior study like Nidungu (2014), Gichuki, (2013) focused on different frameworks and theories such as diffusion innovation theories with little emphasis on factors determining agent banking services among rural entrepreneurs in Adamawa state. Different research have also been conducted in the area of E-Banking, Mobile Banking and Internet Banking among rural dwellers outside and inside Nigeria, like that Githae , et al., (2018), Kejela and Porath (2021), Nyirahabineza (2017) but much has not been done on agent banking service acceptance among rural entrepreneurs especially, in Adamawa state, Nigeria. This study is, therefore, intending to fill the gap, which is the factors determining agent banking service acceptance among rural entrepreneurs in Adamawa.

Research Questions

The following are the research questions of the study;

i. What is effect of perceived usefulness on agent banking acceptance among entrepreneurs in Adamawa State?
ii. What is effect of perceived ease of use on agent banking acceptance among entrepreneurs in Adamawa State?
iii. What is effect of perceived self-efficacy on agent banking acceptance among entrepreneurs in Adamawa State?
iv. What is effect of perceived trust on agent banking acceptance among entrepreneurs in Adamawa State?

Objectives of the Study

The aim and objectives of the study is to examine the factors determining agent banking service acceptance among rural entrepreneurs in Adamawa state. The specifically address the following objectives;

a) To examine the effect of perceived usefulness on agent banking acceptance among entrepreneurs in Adamawa State.
b) To assess the effect of perceived ease of use on agent banking acceptance among entrepreneurs in Adamawa State.

c) To examine the effect of perceived self-efficacy on agent banking acceptance among entrepreneurs in Adamawa State.

d) Assess the effect of perceived trust on agent banking acceptance among entrepreneurs in Adamawa State.

LITERATURE REVIEW

Agent Banking

Agent banking services are provided by authorized banking agents. These agent points are much smaller than bank branches and are equipped with point of sales (POS) devices, mobile phones, barcode scanners, computers, and biometric devices. By reducing the overhead required to set up a bank branch and through its use of technology, agent banking allows financial institutions to reach underserved segments of the population, particularly in rural and remote areas, in a more cost effective way.

The agent banking model also heavily stresses rural access, and banks are required to have two agent points in rural communities for every one agent point they have in an urban area (Afsana & Josh , 2016). Branchless banking, the use of alternative delivery channels such as mobile banking and agent banking, is becoming increasingly popular among commercial banks in many developing countries. Branchless banking is believed to increase the use of financial services among financially excluded adults and is therefore becoming an increasingly popular phenomenon in many developing countries. Several countries adopted the concept of agent banking and getting huge success in the area of financial inclusion (Rezwan & Sandip ,2015).

Nyirahabineza (2017) defines an agent as a company contracted by an institution and approved by the central bank to provide the services on its behalf. Mwangi et al., (2016) highlighted that a bank agent is a commercial entity that has been contracted by commercial banks and approved by the National Bank of Rwanda to provide the specific services on behalf of the bank. Ndirangu (2013) pointed out that agent banking is about the provision of financial services outside bank branches using non-bank retail outlets that depend upon technologies such as Point of Sale machines and mobile phones to effect transactions. The services can include mobile baking and Internet banking. Mobile banking refers to the performing the banking activities which primarily consists of opening and maintaining mobile accounts and effecting

cash in and cash out transactions using mobile devices (Afework, 2015).Internet banking refers to the provision of banking services and the initiation and performance of payments through the banking system by electronic means and other advanced technologies (Apostolos, 2006)

Agent Banking and Rural Entrepreneurs

In some countries, banks have successfully expanded their outreach by engaging local agents or correspondents to offer their services. These local agents or correspondents may be known and trusted retail outlets such as shops or post offices. Agents help reach more people in areas where bank branches do not exist or by easing traffic at existing branches. While init ially focused on traditional payments products such as the payment of bills or taxes, agents in a number of countries are now authorized to offer a broader range of financial services, such as withdrawals, deposits, pre-approved credit lines, simplified current accounts, and international remittances(Kitaka, 2001)

Agent banking represents a significant opportunity to reduce transaction costs such as travel for clients by bringing financial services to hard -to-reach and geographically dispersed areas. Banks and other financial institutions often do not have sufficient incentive or capacity to establish formal branches in these areas. Based to Kasekende, (2008) To achieve loyalty, a product or service must be beyond achieving visibility and differentiation. It should instead develop deep relationships with the entrepreneurs to a point where the brand becomes a meaningful part of the customer s life and or self concept and when this occurs the customer was highly loyal (Atman, E. 1993). Thus, brand loyalty is at the core of relationship banking, which goes beyond traditional banking and focuses more on creating a pool of committed, profitable entrepreneurs. A successful brand aims to develop high quality relationship in which entrepreneurs feel a sense of commit ment and belonging. Relationship banking aims at developing long-term entrepreneurs (Kitaka, 2001)

Underpinning Theories

According to Rose;1992 the agency theory views the company as a link of contracts among self-interested individuals rather than a unified, profit maximizing entity. Agents need constant supervision and management, which

raises agency costs or coordination costs. Information technology, by reducing the costs of acquiring and analyzing information, permits organizations to reduce overall management costs, and allows them to grow in revenues while shrinking the numbers of middle management and clerical workers. The theory, thus, focuses on how the problems existing in agency relationships can be resolved. Specifically, the agency theory addressees the problems that occur when there are conflicts goals set by agent and the principal (Mwangi-Mendez & Willey, 1995). The conflict worsens when the principal cannot confirm what the agent is doing. Also, the theory examines the problems that occur when the agent and principal perceive risks differently. Agency theory states self interest is the motivating factor for the principal and the bank agent. This 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 mechanism exist that compel managers to act in ways that maximize the utility of a firm‘s owners where ownership and control are separated (Lomosi, 2015).

The assumption of self-interest dooms agency theory to inherent conflicts. Agents tend to follow self-interested objectives where self interest is the driving force, leading to deviation and confliction of the goals of the principal (Mwa ngi -Mendez & Willey, 1995). Agency theory is concerned with resolving problems that can exist in agency relationships; that is, between principals and agents of the principals. The two problems that agency theory addresses are: The problems that arise when the desires or goals of the principal and agent are in conflict, and the principal is unable to verify what the agent is actually doing; and the problems that arise when the principal and agent have different attitudes towards risk. Because of different risk tolerances, the principal and agent may each be inclined to take different actions (Mwangi -Mendez & Willey, 1995).

The first scholars to propose, explicitly, that a theory of agency be created, and to actually begin its creation, were Stephen Ross and Barry Mitnick in the early, 1970s. Most notably, an agent is more likely to adopt the goals of the principal, and therefore behave in the interest of the principal, when the contract is outcome-based. Also, when the agent is aware of a mechanism in place that allows the principal to verify the behavior of the agent, he is more likely to comply with the goals of the principal (Charles & Dr. Agnes, 2014). Their main purpose though is to work towards achieving the object of the principal. The agency

theory highlights the bond existing amidst the agent and principal (Mwa ngi - Mendez & Willey, 1995).

Agency banking is an innovation that requires time to reach the intended target population; therefore, it becomes easier to relate it to diffusion theory. Communication channels can be used to popularize agency products and create confidence among bank customers. The rate of diffusion of agency banking will be based on various factors to be examined in the dissertation. Agency theory describes how important the relationship between the banks and the bank agents can be. Notably, banks take responsibility for the actions of their agents. Supervisory and monitoring strategies can be used to prevent loss-making or loss of reputation resulting from the activities of its agents. Some dishonest agents engage in activities that violate banking procedures for their own self interest. There has also been the concern of agents being conned by fraudsters or agents colluding with fraudsters to promote card skimming. Banks have had to increase surveillance and supervision resulting in increased agent costs.

However, such unscrupulous practices can be minimized through proper screening of agents at the time of recruitment to ensure that values and cultures of the banks are not compromised. Among the strategies that can be used to ensure agent compliance with the practices of the commercial banks include; recognition, giving awards, or instituting stiffer disciplinary actions on agents who fail to comply (Otieno & Raphael, 2016).Although this definition of agency theory views their associated costs as costs the company incurs, I believe the customer also incurs agency costs in dealing with a company. Agency costs do not necessarily have to constitute monetary costs, as the definition might assume (Saropa, 2013).The agency theory considers a company as a link of contracts initiated by self-interest individuals instead of a unified or profit maximizing entity (Rose, 1992).

In agency relationship, the principal delegates work to an agent (Kiburi, 2016). In relation to bank-led theory, Njagi (2014) highlighted that a licensed financial institution delivers financial services through retail banking. Njagi (2014) citing (Lyman, Ivatury and Staschen, 2006) argued that the bank develops financial products and services but distributes them through retail agents who handle all or most customer interactions. The bank led theory deals with customer requests financial services and retail agent checks customer's ID and processes transaction, either directly through bank infrastructure (POS) or through payment processing agent,

which enables bank credits and debits bank accounts of customer and other party to the transaction

Innovation theory

Diffusion of Innovation (DOI) Theory, developed by E.M. Rogers in 1962, is one of the oldest social science theories. It originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system. This study was also based on the innovation theory of a trade cycle proposed by J.A. Schumpeter. He regards innovations as the originating cause of trade cycles. The five innovation characteristics that affect adoption of new ideas include; complexity, elative advantage, treatability, compatibility, and observable. When promoting a particular innovation, different strategies can be used to appeal to different adopters to create a relative advantage. Notably, relative advantage can be measured from the resultant convenience, satisfaction, economic benefits, status, and social prestige. The inability level to easily use and understand an invention is known as complexity. The more an innovation becomes complex, the negative the adopters perceives it to be. Compatibility refers to the knowledge individuals have on innovation consistency with the past values, existing values, as well as needs of adopters. When an idea is not compatible with norms and values in a given social system, then such an idea may not be easily adopted. Trainability is the level that a given innovation is experimented before use. Apparently, trying an innovation before adopting it can reduce unfounded uncertainties and increase the possibility of adopting it. Finally, Observability refers to how innovation findings can be seen or communicated to others. Therefore, the likelihood adoption of an invention could be steered by seeing of its outcome by individuals (Otieno & Raphael, 2016).When promoting an innovation to a target population, it is important to understand the characteristics of the target population that will help or hinder adoption of the innovation (Charles & Agnes, 2014).

Empirical review

Related studies were conducted by different researchers in different parts of the world but there is a limited study the researcher could conducted on Agency Banking in Ethiopia. Agnes (20013) studies a survey of adoption of agency banking by commercial banks in Nakuru. In the study descriptive survey design was adopted. the

researcher targeted on banking agencies of commercial banks the study used questionnaires as the main source of data collection. The research study has shown that independent variables that are agent banking services, agent banking efficiency and clientele's perception play a very important role in enhancing bank performance. Each independent variable not only influences dependent variable but complement each other as well. The researcher concluded that the roles that Agent banking plays include offering bank products and services, decongesting branches, being conceived as branch substitutes especially where transaction numbers and volume might be too low to support a full-fledged branch thus expanding the geographical coverage of a branch, agent banking helps to increase client convenience and reduce transaction costs.

Ndome (2011) did a study of agent banking and its adoption in Nairobi -adoption of its services among the residents of Kawangware area in Nairobi Kenya. His study focused on a low end residential area within the city of Nairobi and it was evident that the services were very welcome by the residents with lots of transactions being done at the agent points. His focus was on adoption of the services and not financial inclusion but the high utilization of agent services was an indicator of some level of exclusion was existent and no one had paid attention to it. The other descriptive case study analysis conducted by Harun M(2012) on the effect of agent banking and financial inclusion in Kenya , aimed to identify the main potential factors or impediments that are currently inhibiting the agent banking in Kenya with emphasis on the factors contributing to financial exclusion, both natural barriers and man-made barriers . The target population of the study was all the agents carrying on agency banking in Kenya. Data, used in their study were collected using cross-sectional study. And Secondary data was used for this study since it is easily accessible, cheaper and for this case very accurate. The results of their study provide agent banking has the effect of increasing the level of financial inclusion in the country. The study therefore recommends that agency banking as a means of enhancing financial inclusion be highly supported and encouraged by all players- the banks, government, and licensing bodies especially local authorities; so as to reduce the high compliance costs in bureaucracy in registration. The study further recommends adoption of agency banking by all banks operating in the retail market.

Saropa (2013)"adoption of agency banking by equity bank Kenya limited in its international business operations" the researcher employed a case study research design. data was collected using an interview guide. The indings of the study revealed that the main factors influencing the adoption of agent banking among commercial banks in Kenya are, (i) Cost reduction (ii) Enhancement of customer service (iii) Expanded presence by banks particularly in remote areas. It is therefore recommended that banks should adopt a risk – based approach to the supervision and regulation of age ncy banking. Enough security measures should be put in place. Mosoti and Mwaura. (2014)"An Investigation on Slow Adoption of Agent Banking Services in Kenya as Strategic Response by Commercial Banks" The objective of the study was to investigate on the factors influencing slow adoption of agent banking services by customers as a financial inclusion tool by commercial banks in Kenya. The study has found that costs charged due to use of Agent Banking services were high this is because they were much higher compared to normal bank charges such as ATM charges. Transport is also an issue for those areas where there is no wide network coverage, trustworthiness, security of transacting, infrastructure challenges such as system and power failure and liquidity concern were some of the challenges that contributed to the slow adoption of Agent Banking. The study also found out that other competing services offered by banks which are far much convenient, reliable, guarantees confidentiality and which operate for 24 hours such as ATMs, Internet Banking and Mobile Banking creates slow adoption of the Agent banking business.

Elfagid (2015) studied the challenges and prospects of mobile and agent banking in Ethiopia. It is a descriptive study. The author used a mixed research approach which is questioner and interview employees of the institution. The finding of the study revealed that major challenges facing up the successful implementation of Mobile and Agent banking in Ethiopia were the infrastructural problem associated with ICT and road network, lack of appropriate agent banking channels and low level of financial literacy in the Country. The research found out that Mobile and Agent banking serves as a successful propagator of financial inclusion entailing an immense opportunities towards enhancing accessibility to financial services to the unbanked/under banked of the society and serving as an additional revenue generating mechanism, cost reduction and increasing customer base for financial institutions. The researcher was recommended that the Mixed Model serves as a way

out for Ethiopia mainly attributed to its fundamental role to alleviate the major challenges.

Anuwar(2015) This is a descriptive study aimed at assessing the factors affecting adoption of agent banking and electronic banking in Ethiopian banking industry. A survey design was employed by use of questionnaires sent out to the respondents. The study population comprised the selected ten banks. The data collected was analyzed using descriptive statistics. A research framework developed based on technology organization-environment framework. The findings of the study revealed that the main challenges face the banking industry in adoption of agent banking and e-banking are lack of adequate national ICT infrastructure, Lack of skilled IT personnel's, Lack of government support, Security risk, Lack of legal and regulatory frameworks and lack of competition between local and foreign banks. This study found that the introduction of third party retail agents presents several risk factors with regard to effective regulation and supervision of banks. The study also identified perceived ease of use and perceived usefulness as prospects of adopting agent banking and e-banking system.

On the other hand the descriptive study conduct ed by Afewerk.G (2015) also studded on "assessment of agency banking innovation in Ethiopia: barriers and derivers". The author used a quantitative research approach sent out to respondents which is from the selected four banks. The finding of the study re vealed that the main factors influencing the adoption of agent banking in Ethiopia are the prospects of cost reduction, availing services beyond restriction of space and time through established third party with the application of technology. The benefits were also classified as Perceived Ease of Use and Perceived Usefulness. In the conclusion The study recommended banks to consider technology based competition focusing on customer base expansion, cost reduction, awareness creation, credibility, security, ease of use, and availability to exploit the benefit of agency banking while the government should support banking sector by facilitating sufficient ICT infrastructure development and issue workable legal frameworks to ease the adoption of agency banking system.

Watiri (2011) in her qualitative research conducted in Kenya targeting managers of commercial banks noted that, comparing to Kenya, the South African regulatory framework provides open caution to banks to use nonbank third parties to give banking services outside their conventional bank branch, either as agents or through

outsourcing arrangements. This is similar to agent banking in Rwanda which started by the central bank guidelines on agent banking. It also gives a clear picture of the list of financial services to be offered outside the traditional bank network using agents. In another study by Mwando (2013) in his quantitative research that was conducted on agents and commercial banks in Kenya, citing Bold's study (2011) conducted in Brazil identified that some countries restrict the locations of agents though such transactions are sometimes eased when regulators recognize that regulators create obstacles to financial inclusion. In addition to this, Mwando (2013) in his quantitative research conducted in Kenya, on both agents and commercial banks citing Tarazi and Breloff (2011) found that regulations often impose some form of "fit and proper" requirements, mandating a form of agent due diligence that requires financial institutions to verify that potential agents have good reputations, no criminal records, and no history of financial trouble or insolvency.

Kanini (2011) in another quantitative research that was carried out in Kenya on the managers of commercial banks, found out that the success of agent banking is based on the simplicity of banking by the agent. In Brazil for example, the existing IT infrastructure allows any agent to cash -in in any bank to be deposited to his own bank at no fee. It is consequently not required for an agent of one bank to travel long distances to deposit cash, in his own bank branch. Bean (2009) in the qualitative research conducted in England argued that an agent banking has narrowed the costs and improves efficiency in the financial sector with the possibility and availing financial services at much lower cost to consumers.

Technology Acceptance Model (TAM)

There are several models existing that have been used to investigate adoption of technology. Several studies focusing on adoption of mobile services have their roots in Technology Acceptance Model (TAM) originally proposed by Davies in 1986. The model is originally designed to predict user's acceptance of Information Technology and usage in an organizational context. TAM focuses on the attitude explanations of intention to use a specific technology or service; it has become a widely applied model for user acceptance and usage. There are a number of meta-analyses on the TAM that have demonstrated that it is a valid, robust and powerful model for predicting user acceptance (Bertrand and Bouchard, 2008).

Perceived ease of use: Several researchers including Pikkarainen et al., (2004) concur on the definition of perceived ease of use as the extent to which a person accepts that using a certain method would be free of effort and at no cost to him or her Bhatti (2007) affirmed it as a term that represents the degree to which an innovation is perceived as easy to understand, learn or operate. Lu et al, (2003) noted that the drivers of growth in electronic banking are determined by the perceived ease of use, thereby making perceived ease of use a major factor affecting the acceptance of any information system (Venkatesh & Morris 2003). They revealed that ease of use and usefulness are believed to be essential in determining the acceptance and the use of a number of corporate information technology.

Perceived usefulness: In a study conducted in Singapore, Liao and Cheung (2002) sought to measure consumer attitudes towards the usefulness of and willingness to use agent banking and found that expectations of ac curacy, security, network speed, user involvement, and convenience and user friendliness were the major quality attributes underlying perceived usefulness. Similarly, using the TAM model, Al-Somali et al., (2004) also found that security, quality of Internet connection and awareness about agent banking and its benefits have significant effects on the perceived usefulness and perceived ease of use in agent banking acceptance.

Attitude towards adoption: Customers' attitude can be defined as an evaluative statement of an individual's feeling and thought which could be favourable or unfavourable towards certain events in his environment (Robbins, 2012).The concept of attitude is psychological in nature due to the fact that it can only be generated from the mind of an individual (Pickens, 2005). However, the predisposition of customers' attitude towards behaviour or use of electronic related systems such as agent banking services can be defined as positive or negative feeling that an individual has towards certain action (Wu ,et al , 2008; Labianca, 2014). Attitude towards behaviour can be summarized into two concepts; positive and negative. Therefore, the idea of developing positive or negative attitude towards behaviour depends largely on the banking sector ability to improve customers' trust towards the use of its products and services (Bagraim& Werner, 2007)

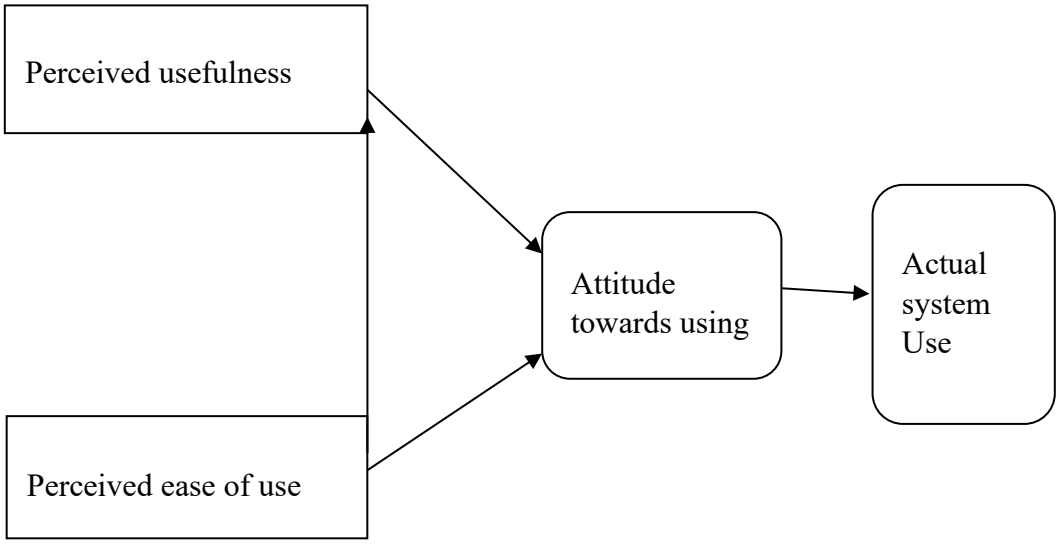
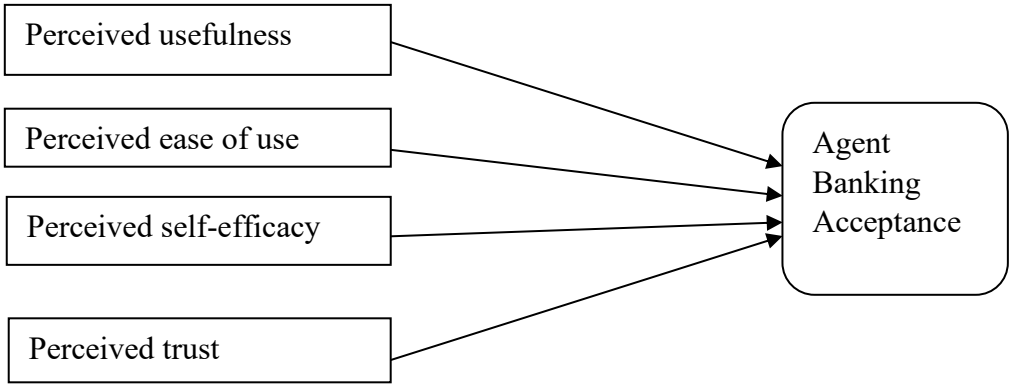


Figure 1: Technology Acceptance Model
Source: (Davis, 1989)

Conceptual Framework

Previous research has suggested that trust-related constructs and resource related constructs should be the critical antecedents of the behavioural intention to use information systems. Based on the information systems acceptance literature, especially the extended TAM by Luarn & Lin, (2004), this research adopts the research model indicated in Figure 1. As noted by Davis (1989), future research of Information System and Information Technology usage has to address the other variables which affect usefulness, ease of use and user acceptance. This study sought to find effect of perceived usefulness; perceived ease of use, perceived self-efficacy and perceived trust on agent banking acceptance. Based on the above arguments, this research integrates TAM with additional variables.



Hypotheses of the Study

The following are the hypotheses for the study;

i. There is no significant effect of perceived usefulness on agent banking acceptance among entrepreneurs in Adamawa State.
ii. There is no significant effect of perceived ease of use on agent banking acceptance among entrepreneurs in Adamawa State.
iii. There is no significant effect of perceived self-efficacy on agent banking acceptance among entrepreneurs in Adamawa State.
iv. There is no significant effect of perceived trust on agent banking acceptance among entrepreneurs in Adamawa State.

METHODOLOGY

This study used descriptive survey research design in order to gather quantitative data. Target population of the study will be 624 Rural Entrepreneurs who are using First bank Plc agent banking service in Adamawa (First bank Plc Forensic Accounting Department , 2021). The sample size for the study will be determining using Taro Yamane (1967) formular for determine sample size Where, n = is the sample size

N = is the population size,

E = is the level of precision or sampling error = (0.05)

$$n = \frac{624}{1 + 624 (0.05)2}$$

$$= 624/2.6125$$

$$= 238.85$$

Thus, sample size of 239 rural entrepreneurs who are using First Bank PLs agents banking service in Adamawa State selected from the population of 624.This study used purposive sampling method to draw the sample from the population. The study used questionnaire for collecting of data. The questionnaires was structured mainly in close-ended questions by which the respondents will be ask to indicate their level of agreement using a five Likert rating scale of 1 to 5 where; strongly Disagree (SD) = 1, Disagree (D) = 2, Neutral (N) = 3, Agree (A) = 4 and Strongly Agree (SA) = 5. The use of Linker scale is to make easier for respondents to answer question in a simple way.

The data collected using the questionnaires will be edited, coded and tabulated for completeness and accuracy. First raw data gathered will be analyzed using

Statistical Package for Social Scientist (SPSS) program version 26. Descriptive statistics such as tables will used in the presentation of the data and the quantitative data collected required a descriptive analysis on various variables on the determinant of agent banking service acceptance. Similarly, multiple regression will be use to test hypotheses for the study. The hypothesis testing will be done with linear Regression with a 5% (0.05) level of significance. Therefore, reject and accept null hypothesis if the significance level is less than 0.05 and accept alternate hypothesis, vice versa.

Result

Reliability Analysis

This study carried out a reliability analysis to establish the reliability of the independent and dependents variables in the study. As indicated in Table 5. Cronbach's Alpha value of the variables on Table 5 are as follow; perceived ease of use = 0.703, perceived usefulness = 0.807, self-efficacy = 0.788, trust = 0.792 and agent banking = 0.794. The Variable-Total statistics in Table 5 reveal that all the variables had a measure of over 0.7, that means all the variables are reliable.

Table 5: Reliability Result

S/N	Variables	Number of items	Cronbach alpha
1	Perceived Ease of Use	6	0.703
2	Perceived Usefulness	8	0.807
3	Self-efficacy	5	0.788
4	Trust	6	0.792
5	Agent Banking	4	0.794

Source; Filed Survey, 2022

Regression

The researcher conducted a linear regression analysis so as to test relationship among variables. The research applied the statistical package for social sciences (SPSS) to code, enter and compute the measurements of the multiple regressions for the study. Table 6 provides the summary of the regression model applied in this study.

Coefficient of determination explains the extent to which changes in dependent variable can be explained by the change in the independent variables or the percentage

of the variation in the dependent variable (agent banking) that is explained by all the four independent variables (non financial motivation). According to the regression model applied in this study on Table 6, R-square value was 0.316 implies that the independent variables studied explain 31.6% of the effect of perceived ease of use, perceived usefulness, self-efficacy and trust on agent banking. This implies that the other variables not studied in this research contributed 68.4% variability in agent banking. Durbin Watson is between 1.5 and 2.5, for this study it can be assume that the value is within the range of critical criterion that is 2.161 as shown in Table 6 below, which indicates that there is no violation of autocolloretion in this study.

Table 6: Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.562[a]	.316	.303	1.72282	1.883

a. Predictors: (Constant), TRUST, PEU, SE, PU

b. Dependent Variable: AB

The ANOVA report or F statistics on Table 7 indicated that the overall significance of the regression model applied in this study indicates that, $p<0.05$ (Sig. = 0.00) and therefore our model is significant. The F value is 25.611 and the significant level is 0.000.

Table 7; ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	304.065	4	76.016	25.611	.000[b]
	Residual	658.922	222	2.968		
	Total	962.987	226			

a. Dependent Variable: AB

b. Predictors: (Constant), TRUST, PEU, SE, PU

Table 8 shows the coefficient of the variables which indicated that; Perceived ease of use (PEU) has $\beta = 0.155$, $t = 3.601$, $P=0.000$, this means PEU has significant effect on

agent banking (AB), null hypothesis rejected and accept alternate since the calculated value is less 0.005 significance level.

Table 8: **Coefficients[a]**

Variables		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	6.838	1.230		5.560	.000		
	PEU	.155	.043	.211	3.601	.000	.898	1.113
	PU	.068	.036	.143	1.877	.062	.533	1.876
	SE	-.084	.040	-.152	-2.097	.037	.588	1.701
	TRUST	.240	.038	.446	6.336	.000	.621	1.611

a. Dependent Variable: AB

Table 8 shows the coefficient of the variables which indicated that; Perceived usefulness (PU) has $\beta = 0.068$, $t = 1.877$, $P=0.062$, this means PU has no significant effect on agent banking (AB), null hypothesis is accepted and reject alternate since the calculated value is greater 0.005 significance level.

Based on Table 8 the coefficient of the variables which indicated that; self-efficacy (SE) has $\beta = -0.084$, $t = -2.097$, $P=0.037$, this means SE has no significant effect on AB, null hypothesis is rejected and accept alternate since the calculated value is greater 0.005 significance level. However, the negative sign indicated that an increase in SE will lead to decrease in AB with-0.084.

Table 8 shows the coefficient of the variables which indicated that; trust has $\beta = 0.240$, $t = 6.336$, $P=0.000$, this means trust has significant effect on AB, null hypothesis rejected and accept alternate since the calculated value is less 0.005 significance level.

Discussions

This study examines four objectives with multiple regressions, to see the overall effect of of perceived ease of use, perceived usefulness, self-efficacy and trust on agent banking. The result indicated that, three of the hypothesized effect are significant ($p<0.05$) and one is not hypothesis.

PEU has no significant effect on AB. Based on the findings this hypothesis was not supported because the calculated value is less than the 0.005 significance level. This

study is in line with study of Afewerk. (2015; Anuwar (2015) who affirmed that the main factors influencing the adoption of agent banking in Ethiopia are the prospects of cost reduction, availing services beyond restriction of space and time through established third party with the application of technology. The benefits were also classified as Perceived Ease of Use and Perceived Usefulness.

PU has no significant effect on AB. This hypothesis was supported because the calculated value is greater than the 0.005 significance level. The findings of this study are consistent with study of. Agnes (20013); Elfagid (2015) affirmed that costs charged due to use of Agent Banking services were high this is because they were much higher compared to normal bank charges such as ATM charges. Transport is also an issue for those areas where there is no wide network coverage, trustworthiness, security of transacting, infrastructure challenges such as system and power failure and liquidity concern were some of the challenges that contributed to the slow adoption of Agent Banking.

SE has no significant effect on AB; this hypothesis was also not supported because the calculated value is less than the 0.005 significance level. The findings of this study is in line with study of Kanini (2011); Njunji (2013) who reveals that banks to consider technology based competition focusing on customer base expansion, cost reduction, awareness creation, credibility, security, ease of use, and availability to exploit the benefit of agency banking.

Trust has no significant effect on AB; this hypothesis was also not supported because the calculated value is less than the 0.005 significance level. The result of this study is in line with study of Mosoti and Mwaura. (2014); Saropa (2013) who found that costs charged due to use of Agent Banking services were high this is because they were much higher compared to normal bank charges such as ATM charges. Transport is also an issue for those areas where there is no wide network coverage, trustworthiness, security of transacting, infrastructure challenges such as system and power failure and liquidity concern were some of the challenges that contributed to the slow adoption of Agent Banking.

Conclusions

This study aims at investigating the main barriers on the service of agent banking in LIB agent. To achieve the proposed objective basic frame works were used, i.e.

Technology acceptance model (TAM). On the other hand quantitative research approach was employed in the study.

Agent banking system was not well adopted by LIB Customers'. This is due to low level of ICT infrastructure and lack of available service channel, which can initiate agent banking industry to implement the system the other point is the commission of agents serving client is low so it have an impact to the agent willingness to serve Customers' The other point is environmental factor was location according to the analyses bank can increase its customers by expanding its agent in to the location that the bank couldn't reach.

In addition to the above four basic factors affecting the service of agent banking in LIB, Result of the study also shows that security risk and lack of trust on the use of technological adoption are other major barriers for the system. The level of security risk associated with agent banking product or service pose different challenges to the bank. Improvements are required to ensure client confidence. Lack of competitiveness among local banks is also another challenge for the service of Agent banking in the bank. On the other hand, the study reveals that even if the service provide by the system is user friendly and The speed of processing transaction by Agency Banking is much faster there is a frequent down time and the service package is not enough. According to agent awareness since there is a low rate of training provide by the bank it appear a lack of agent skill and knowledge. In general, the findings of this study offer additional insights into the current agent banking service situation. Furthermore, the understanding of the barriers to agent banking service identified in this study may help to identify the best course of actions to promote its development. It will also be valuable to the bank to increase their awareness and understanding of agent banking benefits.

Recommendations

Agent banking system is a new financial evolution in Ethiopia, but it's an important issue, because it has a great impact on the banking system, at the same time its difficult and need a lot of efforts to be used and accepted by the Customers'', so it need a lot of efforts to succeed. Based on the above conclusion, the researcher recommends the following points:

Availability of network is the key to give agent banking service; the banks should try to work with Ethio telecom to reduce the service down time as part of improving their

service and also the bank have to work on increasing its service package and preparing other substitute channels

i. Agent satisfaction on commission is low and since they play a huge role in getting new customers' the bank has to review its commission payment.
ii. The bank better continuously review and upgrade the existing system of security to the level that minimize risk and let the customers know the status for their decision and confidence in adoption of new innovation. Using all forms of media (brochures, web pages etc) , the bank tries to present the security used, outline the procedure on how to cope with the problems if any, and provide information on how to use agent banking services safely.
iii. Familiarization of the existing agent banking services to the customers' needs to be done through well trained personnel at the bank counter and agent.
iv. Moreover, extensive massive promotion that address the general public using mass medias, brochures, sponsorship for programs that have mass audience, different promotional materials that easily catch the attention of the individual at the same time that promote the bank's service and well designed user friendly web site need also be in effect appropriately for the enhancement of the service.

Suggestions for further study

This study was conducted to assess challenges on the agent banking Service targeting to LIB agents that facilitate the service to customer and found at Addis Ababa Area. Hence, the following could be considered for future research:-

i. The study on challenges in agent banking service focusing on the selected Addis Ababa Area agents can be extended to a more comprehensive study that incorporate upcountry (Outside of Addis Ababa) Area Banks of LIB.
ii. The study can also be extended to include all other Commercial Banks found in Ethiopia and also customers' so that the findings can be useful to conclude about agent banking services in Ethiopian context.

REFERENCES

Admassu B, & Asayehg D. (2014). Banking sector reform in Ethiopia. I*nternational Journal of Business and Commerce , 3*, 25-38.

Afewerk.G. (2015). *Assesment of adoption of agent banking innovation in Ethiopia barriers* . Addis Ababa: Addis Ababa University.

Afsana R. & Josh, W. (2016). *Google*. retrieved janwary 26, 2017, from Agent Banking 101" USAID: http://datatopics.worldbank.org/financialinclusion/country/banglades

Agnes. (2013). *the adoption of agency banking by Kenya commercial banks in Nakuru.* Nairobi: University of Nairobi.

Alfansi, L. & Sargeant, A. (2000). Market segmentation in the Indonesian banking sector: the relationship between demographics and desired customer benefits'. *International Journal of Bank Marketing, 18*. 12-27

Amit R. & Livnat, S. (2003). Geographic diversification in banking and its implications for bank portfolio choice and performance. *BIS Workshop* . Banking and Financial Stability.

Ansoff, H. I., & McDonnel, E. (1990). *Implanting strategic management.* New York: Prentice-Hall.

Anuwar, A. (2015). *Adoption of agent banking and electronic banking in Ethiopian banking industry: prospects and challenges.* Addis Ababa: Saint Mary's University.

Atman, E. (1993). *Corporate Financial distress & Bankruptcy.* Malasya.

Ayana. (2012). *Factors affecting adoption of electronic banking system in Ethiopian banking industry.* Addis Ababa: Addis Ababa University.

Bagraim J., & Werner, A. (2007). *Organizational Behaviour: A Contemporary South African Perspective.* Van Schaik.

Bagraim, J. (2013). *Adoption of agency banking by equity bank Kenya Limited in its International business operation.* Nairobi: school of business, university of Nairobi.

Barasa D. & Mwirigi F. (2013). The role of agency banking in enhancing financial sector deepening in emerging market: Lessons from the Kenyan experience. *European Journal of Business and Management,2(1), 24-45*

Beaver, L. (2002). *Strategic management Formulation and Implementation.* New York.: Harper Collins Publishers.

Bedman, N. (2013). SME bank selection and patronage behavior in the Ghanaian banking industry. *Management Research Review*, 36(11), 1061-1080.

Berger A. N. & Humprey B. D. . (1998). Reserve bank of cleveland. *Journal of Banking and Finance* .

Berger, A., & Black, L. K. (2011). Bank size, lending technologies and small business finance. *Journal of Banking & Finance*, 35(3), 724-735.

Bhatti, T. (2007). Exploring factors influencing the adoption of mobile commerce. *Journal of Internet Banking and Commerce , 3*, 1-13.

Bindra. (2007). *Crown your customer.* Nairobi: Story moja.

Bryman, A. & Bell, E. (2007). *Business Research Methods* (2nd edition ed.). New York ,USA: Oxford University Press.

CGAP & FGV . (2010). *Branchless Banking Agents in Brazil*. Retrieved from http://technology.cgap.org/2010/02/25/nationwideimpact-of-agents-in-brazil

Charles, D. &. Agnes. U. (2014). Assessment of Factors Influencing Adoption of Agency Banking in Kenya: The Case of Kajiado North Sub County. *International Journal of Business and Commerce , 3,* 91-111.

Charles, D. (2014). Bank size, lending paradigms, and usage of farm service agency's guaranteed loan programs. *Agricultural Finance Review*, 74(1), 133-152.

Chiteli, N. (2013). Agent Banking Operations as a Competitive Strategy of Commercial Banks in Kisumu City. *International Journal of Business and Social Science , 4*.

Christopher, W. (2002). Interfirm Relationships and Informal Credits in Vietnam. *Quarterly Journal of Economics , 114*, 153-170. x

Cohen, J., Cohen, P., West, S.G., & Aiken, L.S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*. 3rd Ed. Lawrence Erlbaum Associates Publishers.

Cohen, M. (2002). Making Micro Finance More client-led. *Journal of international Development presented at the Marrott School Research Symposium.*

Creswell, W. (2003). *Research Design: Qualitative, Quantitative and Mixed Approaches* (2ndedition ed.). California: Sage publication.

Davis, F. D. (1993). *User acceptance of information technology: system Character, User perceptions and behavioral impacts.*

De Coster, J. (2004). *Data analysis in SPSS*. Retrieved March 24, 2017, from http://www.stat-help.com/notes.html

Derese, M. (2017). *Assessment of agent banking service: case study on lion international bank agents.* A research project submitted in partial fulfillment of the requirement of masters of business administration

EFInA. (2011, October). *Evaluation of agent banking models in different countries*. retrieved from http://www.efina.org.ng/assets/Documents/EFInAAgent-banking-study-report-

Elfagid, A. (2015). *The challenges and prospects of mobile and agent banking in Ethiopia.* Addis Ababa: Saint Mary's University.

Giglio, V. (2002). Privacy in the world of cyber banking: emerging legal issues and how you are protected. *International Journal of Bank Marketing , 14*, 48-60.

Habbash, M., Salama, A., & Dixon, R. (2010). The effects of nonexecutive directors' commitment and chairman independence on earnings management: UK evidence. *Journal of Applied Accounting Research*, 10(1).

Hansen, T. (2012). Understanding trust in financial services: The influence of financial healthiness, knowledge, and satisfaction. *Journal of Service Research*, 15(3), 280-295.

Harper, M., & Marie, K. (2006). ICIC bank and microfinance Linkages inIndia. *17*, 30-39.

Harun, M. (2012). *The effect of agent banking and financial inclusion in Kenya.* Nairobi:

Hello, C. (2017, January 21). *Hello cash company profile*. Retrieved from https://www.cgap.org/sites/default/files/hello cash -profile of hello cash-Jan-

Ignacio, M. & Dan, R. (2010). *Bill & melinda gates foundation mobile payments go viral.* Kenya: M-PESA . xi

Järvinen, R. A. (2014). Consumer trust in banking relationships in Europe. *International Journal of Bank Marketing*, 32(6), 551-566.

Kasekende, A. L. (2008). *Africa continues Steady Growth.* Africa Forum.

Kaur, G., Sharma, R. D., & Seli, N. (2010). Internal market orientation in Indian banking: An empirical analysis. *Managing Service Quality*, 19(5), 595-627.

Kejela, A. B. & Porath, D. (2021) : Influence of attitude on mobile banking acceptance and factors determining attitude of end-users in Ethiopia, UASM Discussion Paper Series, No. 9/2021, University of Applied Sciences Mainz, Mainz

Kent, R. (2007). *Marketing research: approaches, methods and applications in Europe. USA.*

Kitaka, P. (2007). *A Survey of the use of Financial Performance Indicators by Micro.* Nairobi: University of Nairobi.

Krejcie, R.V. & Morgan, D.W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.

Kumar A. Nair A. Parsons A, & Urdapilleta, E. (2006). *Expanding Bank Outreach through Retail Partnerships: Correspondent Banking in Brazil.* Washington DC: World Bank.

Labianca, G. (2014). *Negative Ties in Organizational Networks, Research in the Sociology of Organizations.*

Laforet, S. (2005). Consumers' attitudes towards online and mobile banking in China. *Journal of Bank Marketing , 23*, 362-380.

Lehman, J. (2010). *Operational challenges of agent banking systems*. Bill and Melinda Gates Foundation.

Lion, I. B. (2017). *profile of agent banking customers and agents*. Retrieved from http://www. lib.org.ng/assets/Documents/libAgent-banking-report-

Lomosi, W. (2015). *Factors influencing the use of Agent banking by the residents of kitui country.* Kenya: University of Nairobi.

Lu, J, Yu, C, Liu, C, & Yao, J. (2003). *Technology acceptance model for wireless internet.* Electronic Networking Applications and Policy.

Lyman. (2006). *Use of Agents in Branchless Banking for the Poor: Rewards, Risks, and Regulation.* Washington, D.C: CGAP.

Mas, I. & Hannah, S. (2008). *Banking through networks of retail agents.* Washington D.C.: GAP.

Matoossi, H., & Grassa, R. (2014). Is corporate governance different for Islamic banks? *International Journal of Business Governance and Ethics*, 9(1), 27-51.

Merton, L. (1990). *Geographic diversification in banking and its implications for bank portfolio choice and performance.* Banking and Financial Stability.

Miller, M. (2003). *Can credit registries reduce credit constraints?, Empirical evidence on the role of credit registries in firm investment decisions.*

Mizruchi, M. S., Brewster, S., & Fleischer, A. (2011). Getting a bonus: social networks, performance, and reward among commercial bankers. *Organization Science*, 22(1), 42-59.

Mohamed, H. B., & Tarek, I. (2013). Impact of financial liberalization and foreign bank entry on Islamic banking performance. *International Journal of Islamic and Middle Eastern Finance and Management*, 6(1), 7-42.

Mohamed, H., Behery, T., & Ibrahim, E. (2010). Stakeholdersoriented banks and bank performance: Perspectives from international business management. *International Journal of Commerce and Management*, 20(2), 120-150.

Mols, N. (1999). The internet and banks' strategic distribution channel decision. *International Journal of Bank marketing , 17*.

Morris, G. & Davis, F.D.,. (2015). User Acceptance of information technology: Toward a Unified View. *27*, 425-478. xii \

Mosoti, Z. M and Mwaura, R. W. (2014). An investigation on slow adoption of agent banking services in kenya as strategic response by commercial banks: A case study of roysambu constituency. *Journal of Research in Business and Management* , 1-13.

M-Pesa. (2014). *The Safaricom Story Case study.* Proudly Made in Africa.

Mugenda O. M. & Mugenda A. G. (2003). *Research Methods: Quantitative and Qualitative Research*. Nairobi: Acts Press.

Mwangi, M. H. T., & Willy, M. M. (2014). Factors influencing the uptake of agency banking services by customers in commercial banks in Kenya: a case of Kenya Commercial Bank. *Strategic Journal of Business & Change Management* , 179-197 .

Nardos, Y. (2016). Agent banking. *banking new venture in Ethiopia* . Addis Ababa: Addis Fortune.

Ndome, D. (2011). *Adoption of agent banking services among the residents of Kawangware area in Nairobi Kenya.* Nairobi: University of Nairobi.

Ndung'u, N. (2011). At the launch of the draft electronic retail transfers and draft electronic money issuers Regulatio. Kenya: Central Bank of Kenya.

Njeru. (2014). Factors influencing adoption of agency banking in Kenya. *International Journal of Business and Commerce , 3*, 91-111.

Nunnaly, J. (1978). *Psychometric Theory.* New York. xiii Ombutora, E. K. & Mugambi, F. (2013). Role of agency banking on the performance of agent entrepreneurs : A case study of Co-operative Bank Co-op Jirani in Kibera. *International Journal of Social Sciences and entrepreneurship* .

Nyarumba, J. (2011). *Financial Focus*. Nairobi: PriceWaterhouseCoopers.

Oonagh, A. M. (2016). The federal housing finance agency's complaints against seventeen banks. *Journal of Financial Crime*, 23(1), 22-44.

Otieno, G. & Raphael O. (2016). *Factors influencing the adoption of agency banking by KCB bank of Kenya limited.* Nairobi: School of Business, university of Nairobi.

Pandery, N. (2004). *Making Money Work for the Poor in India Dhanraj Maha.* Mumbai .

Pauline, W. J., van Esterik-Plasmeijer, W., & Raaij, F. (2017). Banking system trust, bank trust and bank loyalty. *International Journal of Bank Marketing*, 35(1), 97-111.

Pickens, J. (2005). *Attitudes and Perceptions, in Organizational Behavior in Health Care.* Sudbury: Jones and Bartlett Publishers.

Pikkarainen, T, K. Karjaluoto, & Pahnila, S. (2004). Consumer acceptance of Online Banking: an extension of the technology acceptance model. *14*, 224-235.

Pikkarainen, T, K. Karjaluoto, & Pahnila, S. (2004). *Consumer acceptance of Online Banking: an extension of the technology acceptance model.* Internet Research.

Poon, W.C. (2008). User's adoption of e-banking services: The Malaysian perspective. *Journal of Business and Industrial Marketing*, 23(1), 59-69.

Rachdi, H., & Ben, A. (2011). Board characteristics, performance and risk taking behaviour in Tunisian banks. *International Journal of Business and Management*, 6(6), 88-97.

Rezwan, G. & sandip, H. (2015). inclusive Growth through Branchless Banking: A Review of Agent Banking and its Impact. *Journal of Economics and Sustainable Development , 3*, 48-49

Robinson, T. (2000). *Internet banking.* Information Week.

Rogers, E. (2003). *Diffusion of innovations* (5th ed.). New York: Free Press.

Rogers, E. M. (1983). *Diffusion of Innovations.* New York: Free Press.

Rose, P. S. (1992). *Agency theory and entry barriers in banking. The Financial Review* (Vol. 27).

Ross, S. A. (1973). *The economic theory of agency: The principal's problem* (Vol. 62). American economic review.

Saat, N. A. M., Karbhari, Y., Heravi, S., & Nassir, A. M. (2011). Effective oversight roles of board of directors – the case of listed firms on Bursa Malaysia. *World Review of Business Research*, 1(1), 231-

Sara, J. (2015). The effects of reward system on bank credit losses – an agent-based model. *Managerial Finance*, 41(9), 908-924.

Sekaran, U. (2003). *Research methods for business: a skill building approaches* (4th ed.).

Tarazi, M. (2010). *Branchless Banking: The Test and See Approach.*Thomson Learning. University of Nairobi.

Wairi, D. (2011). *Factors influencing the adoption of Agent Banking innovation among Commercial Banks in Kenya.* Nairobi: University of Nairobi.

William, E. (2002). Diversification in banking: Is noninterest income the answer. *Journal of Money, Credit, and Banking , 36*, 853-882.

Wu, Y. Tao, P. Yang,. (2008). The use of Unified Theory of Acceptance and use of Technology to Confer the Behavioral Model of 3G Mobile Telecommunication Users. *Journal of Statistics and Management Systems, 11*, 919-949.

Yemane, T. (1967). *statistic: An introductory analysis* (2nd ed.). new York: Harper and Row.

Yin, R.K. (2009). *Case study research: Design and methods*. Vol. 5, Sage Publications.

Zhao, R. T. (2008). Perceived risk and Chinese consumers' internet banking Service Adoption. *International Journal of Bank Marketing , 26*, 505-525.