

# The Influence of Mobile Phone Banking Attributes on Commercial Banks Corporate Customers Loyalty in Kenya

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## Abstract

This study was to establish whether loyalty of commercial bank corporate customers was impacted by attributes of mobile phone banking. The specific objective was to determine the extent to which mobile phone banking attributes influence commercial bank customer loyalty. The study was anchored on diffusion of innovations theory and used a positivistic approach and descriptive cross-sectional design. The target population of the study was 78 top managers from 26 commercial banks in Kenya offering mobile phone banking services. Regression analyses tested the hypothesis to determine whether mobile phone banking attributes impacted on corporate customer loyalty. The research hypothesis showed a strong relationship ( $R=.728$ ). This was an indication that mobile phone banking dimensions explained 53% ( $R^2=.530$ ) of customer loyalty. The other variables in the firm explained the remaining 47%. P-value of less than 0.05 implied that mobile phone banking attributes had statistically significant effects on customer loyalty.

**Keywords:** Innovation Attributes, Diffusion Theory, Customer Loyalty

## 1. Introduction

Customer loyalty is of great importance because of its contribution to organizational performance. Many researchers have acknowledged the importance of customer loyalty in service industry as it has potential for development of sustained competitive edge (Gremler & Brown, 1996). Loyal customers try new company's goods or services; buy them frequently and recommend them to others. They also give the company sincere feedback (Caruana, 2002). Customers are concerned with the benefits a product offers; hence banks have to anticipate the service attributes that they seek to remain loyal. An understanding of perceived benefits that customers seek in services and its influence on customer loyalty is a fundamental basis for marketers to formulate sound marketing strategies. The attributes of an innovation as perceived by the targeted consumers influence its adoption. Mobile phone banking rate of adoption is influenced by these attributes namely; compatibility, relative advantage, trialability complexity and observability (Al-Jabril & Sohail, 2012). The trends of adopting new innovation as well as differentiating potential adopters and non adopters of various technologies can be measured by these attributes (Hiltz & Johnson, 1989)

Most researches regarding mobile phone banking in commercial banks are cross sectional surveys such as those conducted by Wamuyu (2014) in Kenya, Nyeko (2014) in Uganda, and Dzugbenuku (2013) in Ghana. These studies concentrated on determinants of mobile phone banking and adopter's characteristics. The few studies focusing on customer loyalty have been carried out on specific geographic areas and have not covered the whole country. This study is motivated by the importance of customer loyalty in the performance of commercial banks. Researchers have yet to agree on the customer loyalty antecedents (Auka, 2012; Khatibi et al., 2002). Innovative attributes are some of the factors found to significantly influence customer loyalty but the results have been contradictory (Dachyar & Fatkhurrohman, 2011; Rajaguru & Matanda, 2006; Lee & Liu, 2008; Rambocas, 2012). Other studies on customer loyalty for example Khan and Rizwan (2014) found out that Satisfaction together with Customer involvement, Perceived Service Quality and Corporate Image influenced Customer Loyalty of commercial banks in Pakistan. Rorio (2015) found that quality of service plays a vital in influencing customer loyalty in commercial banks in Kenya.

### 1.1 Objective of the study

To determine the extent to which mobile phone banking attributes influence commercial bank corporate customers' loyalty in Kenya.

### 1.2 Hypothesis

H01: Mobile phone banking attributes have no statistically significant influence on corporate customers' loyalty.

## 2.1 Theoretical Review

### 2.1.1 Diffusion of Innovations Theory (DIT)

This theory originated in communications and is one of the oldest theories in social science. It was developed by Rogers in 1962 and explains how a product or idea spreads through the social system or a certain population.

Through diffusion, the population adopts the product, idea or behaviour. Adoption implies that the behaviour of a person changes and he or she buys or use new products or services. In adoption it is critical that the product, idea or behavior be perceived as innovative or new. This theory takes a radical approach from other theories of change by considering reinvention of products, ideas or services rather than persuading people to change.

This is one of the earliest underlying theories that researchers use to investigate the factors that influence adoption of innovation by individuals (Nor et al, 2010). DIT main goal is to understand innovation adoption using the four elements of diffusion; innovation, time, communication and social systems. Time comprises of innovation decision process, relative time of innovation adoption and rate of adoption of innovation. Innovation decision process is the mental process individuals go through from innovation knowledge to attitude formation, adoption decision and lastly confirmation. Adoption of innovation by individuals is done at different times. The adoption tends to be on a time sequence in a specific innovation which is categorized according to their propensity to adopt the new idea. The five adopter categories are: innovators, early adopters, early majority, late majority and laggards. The following innovative attributes influence the adoption rate; compatibility, complexity, relative advantage, observability and trialability. According to Rogers (2003) these factors are correlated positively with adoption rate except complexity which is negatively correlated. The trends of adopting new innovation as well as differentiating potential adopters and non adopters of various technologies can be measured by these attributes (Hiltz & Johnson, 1989).

Studies from a variety of disciplines regarding innovative technology adoption have been done using diffusion of innovations theory as the conceptual framework. The findings of these studies are mixed, varied and contradictory. For instance, some empirical investigations indicate that only some innovative attributes have significant influence on adoption of mobile phone banking while other attributes have no significant influence (Mari, 2003; Al-Jabri & Sohail, 2012; Dzogbenuku, 2013; Nyeko, 2014). This is contrary to diffusion of innovation theory (Rogers, 2003) which postulates that all the five innovation attributes significantly influence adoption of innovations.

## **2.2 Literature on Mobile banking Attributes and Customer Loyalty**

Banking innovations provide service attributes which enhance adoption. Innovations in themselves do not influence customer loyalty directly but they do so through loyalty antecedents (Dachyar & Fatkhurrohan, 2011). According to Scott et al. (2008), innovation adoption process is not straightforward, but attributes of the innovation, contextual factors, and situational factors play an important role in the process. Enhancing understanding of these influencing factors could provide valuable information to guide the dissemination efforts and thereby increase the efficiency of innovation implementation.

Kibera (1979) noted that researchers differ on whether product attributes relates to innovation decision process and hence further studies should be conducted to conclude on the relationship between the attributes and innovation behavior. The innovation adoption framework helps in understanding consumers' acceptance of innovations as postulated by diffusion's theory. A study done by Domeher et al. (2014) in Ghana found out that attributes of financial innovation significantly influenced their adoption. Since these attributes can be controlled by marketers, an understanding of how service or product attributes influence adoption of an innovation is an important area for research (Menor & Roth, 2009).

Effective innovation is critical in winning and retaining customers in an organization. Innovations based on technology enhance customer benefits from the existing products in the same market (Benner & Tushman, 2003). Banks innovations are used as a strategy to compete in the market place and improve banks performance (Batiz-Lazo & Woldesenbet, 2006). A study by Gichungu and Oloko (2015) found that online banking, ATM banking agency banking and mobile phone banking positively impacted on the financial performance of commercial banks in Kenya. A study by Muiruri and Ngari (2014) found that mobile banking and other financial innovations influenced bank's performance in Kenya. According to Calantone et al. (2002), the ability of a firm to innovate determines its performance. Pooja and Singh (2009) found that innovative banks in India were more efficient and profitable than non innovative banks. A study by Kyei and Bayoh, 2017 in Ghana found that there is positive and significant relationship between innovation and customer retention. Service innovation was found to be the main driver of customer retention.

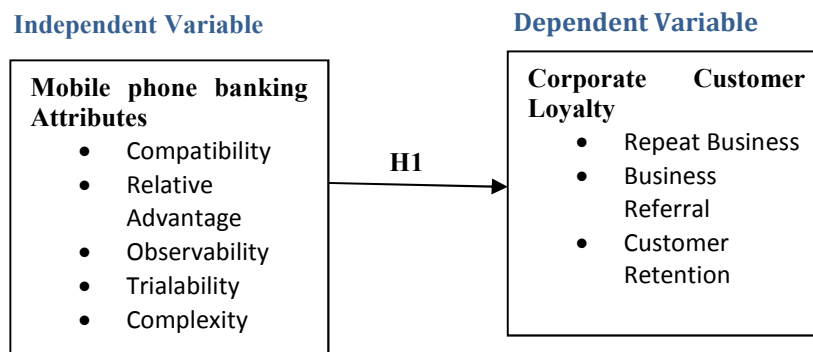
Mobile phone banking attributes predict the rate of adoption of mobile phone banking by customers. These attributes include compatibility, complexity, relative advantage, observability and trialability. Various studies have come out with varied and contradictory results on the attributes that influence adoption of mobile phone banking and indeed other innovations. For instance, Al-Jabri and Sohail (2012) observed that observability, relative advantage and compatibility influenced mobile phone banking adoption in Saudi Arabia, while no significant influence was noted with complexity and trialability. Studies have found out that innovative attributes influence customer loyalty but results are mixed and contradictory on which and whether all the attributes influence customer loyalty. For example Lee and Liu (2008) found out that compatibility and relative advantage are crucial in influencing customer loyalty. Rambocas (2012) did a study in Trinidad and Tobago and

found that relative advantage and government support are important determinants of internet banking loyalty. Complexity and trialability had no impact which contradicts previous studies on technology adoption for example Tan and Tao (2000).

### 2.3 Conceptual framework

Mobile phone banking attributes is critical in customer retention and organization performance but few studies have been done on the effect of mobile phone banking attributes and customer loyalty. The research variables have been conceptualized in the model below (Figure 2.1).

**Figure 2.1 Conceptual Model**



In the proposed conceptual model (Figure 2.1) mobile phone banking attributes has an independent empirical role while customer loyalty has a dependent role.

### 3.1 Methodology and Design

It assists the researcher in structuring how to collect, analyze and interpret data. This study used a descriptive cross-sectional design. According to Cooper and Schindler (2000) descriptive studies are used to describe the phenomena or characteristics of a population under study embracing the details of a topic. A descriptive cross-sectional survey affords the opportunity of capturing the characteristics of a population and test hypotheses quantitatively and qualitatively. It helps a researcher determine any significant relationships between the study variables (Nachmias & Nachmias, 2004).

According to Zikmund (2003), a survey is a quick means of accessing data on a population accurately at a single point in time. The design was appropriate since it involved data collection across commercial banks in Kenya. It enabled the researcher determine the relationship between the study variables at only one point in time. This type of design has previously been used in marketing research by many researchers including Munyoki (2007), Tibenderana (2010) and Kinoti (2012).

### 3.2 Population

The study population comprised of head office managers of all the twenty six commercial banks offering mobile phone banking services (Appendix 11) out of a total of forty three commercial banks in Kenya. Out of the twenty six commercial banks, seven are in the large peer group category, ten in the medium peer group category while nine are in the small peer group category (CBK, 2015). Small peer group consists of banks with less than 1% market share index each, medium peer group are banks with market share index of between 1% and 5% while large peer group is composed of banks with over 5% market share index each. Eight of these banks are foreign owned while seventeen are local.

The reason for choosing managers in head office of commercial banks to participate in the study is that they are responsible for development, implementation and performance of innovative products and customer loyalty in their respective banks. They also have a higher level of understanding backed by data on how mobile phone banking attributes influence customer loyalty.

### 3.3 Data Collection

Primary and secondary data were both used in the study. Secondary data was reviewed from commercial banks' and central bank reports. The unit of analysis was head office managers' of commercial banks in Kenya. Primary data was collected from top managers in Finance, Marketing and Operations in Head Office of each bank participating in the study. These managers provided the data used for inferential statistics related to the study variables such as descriptive statistics and tests of hypotheses. Three respondents per each bank were targeted to respond to the questionnaire. According to Newbert (2008) one senior managers per organization is deemed to be in a position to understand an organization's internal operations and therefore sufficient in a study.

Data was collected from head of Finance, Marketing and Operations using Semi Structured questionnaires.

The questionnaires were dropped at the respective head office department by the researcher assisted by two research assistants and picked after completion. For introduction, the researchers used a letter from the University of Nairobi. This method enabled the researcher reach a large number of potential respondents. The questionnaire was divided into section one and two. Section one collected data bank data and demographics of the respondent. The second section elicited information from respondents on the study variables namely: mobile phone banking attributes, managers' psychological capital and corporate customer loyalty. The 5-point rating scale used ranged from 'not at all' to 'a very large extent'. The study adopted measurements instruments from previous studies and customized them for mobile phone banking. The questionnaire was fine-tuned through input from the supervisors and discussants at the proposal's Departmental, Open Forum and Doctoral Committee presentations at the University of Nairobi. The questionnaire was further refined after the pilot study by clearing any ambiguity.

### 3.4 Data Analysis

Data diagnostics tests such as multicollinearity, normality and homogeneity was done using SPSS Statistical software that determined data was properly modelled. Multicollinearity between variables was tested using variance inflation factors (VIF). Principal components analysis was done on all the study constructs. Shapiro-wilk test (Ghasemi & Zahediasl, 2012) was done and the results plotted in Q-Q plot to establish data normality. Homogeneity of study variables was tested using levene test. The P-value result of less than 0.05 would indicate that the population had different variances. Inferential and descriptive statistics were then used to analyse the data. Descriptive statistics provided measures of central tendency and dispersion while inferential statistics tested the relationships between the study variables (correlation, analysis of variance and regression analysis).

Regression analyses tested the hypotheses determining mobile phone banking attributes, manager demographics, manager psychological capital relationships with customer loyalty. The strength of the relationship between the study variables was measured by Pearson moment correlation ( $r$ ) while the amount of variation between these variables was measured by coefficient of determination ( $R^2$ ). The general model for predicting customer loyalty was represented by the following model:  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n + \epsilon$ . Where  $Y$  is the dependent variable and is a linear function of  $X_1, X_2, \dots, X_n$  plus  $\epsilon$ ;  $\beta_0$  is the regression constant or intercept;  $\beta_1$ - $n$  are the regression coefficient or change induced in  $Y$  by each  $X$ ;  $X_1$ - $n$  are independent variables;  $\epsilon$  is the error term or random variation due to other unmeasured variables.

## 4.1 Study Findings

### 4.1.1 Mobile Phone banking Attributes

Mobile banking attributes namely compatibility, relative advantage, trialability complexity and observability were assessed through statements for each with the following overall mean score.

Attribute	N	Mean	Std. Deviation	Coefficient of Variation (%)
Compatibility	78	2.7967	0.79903	29
Relative advantage	78	3.3782	0.804605	24
Observability	78	3.1282	0.751843	24
Trialability	78	3.62981	1.086006	29
Complexity	78	3.07053	0.614358	20

The result in the above table indicates in general that respondents agreed that all attributes' measures influence commercial banks corporate customer loyalty. The result reveals that trialability had the highest mean score of 3.62981, standard deviation of 1.086006 and coefficient of variation 29. This depicts a strong influence on the customer loyalty. Compatibility had the lowest mean score of 2.7967, standard deviation of 0.79903 and coefficient of variation 29 depicting a moderate influence on customer loyalty. Respondents varied on whether mobile banking is consistent with the values and needs of corporate bank customers. The range of coefficient of variation between 20% and 29% depicts the low variations among the respondents concerning the various attributes.

### 4.1.2 Customer Loyalty

To capture data on the corporate customers' loyalty, statements regarding their manifestations were presented to the respondents. The results were presented below.

**Table 4.15: Descriptive Statistics for Measures Corporate Customer Loyalty**

	N	Mean Score	Std. Deviation	Coefficient of Variation (%)
Our corporate customers use mobile phone banking more compared to other delivery channels	78	1.6923	.73589	43
Our corporate customers use mobile phone banking to do most of their banking transactions	78	1.6538	.68948	42
Our corporate customers who use mobile phone banking encourage their business partners and staff to do business with this bank	78	2.9615	.77360	26
Our corporate customers who use mobile phone banking provide positive referrals to this bank	78	3.0000	.74833	25
Retention of our corporate customers who use Mobile phone banking services is relatively higher than those who don't	78	3.0385	.77360	25
Switching rate of our corporate customers who use mobile phone banking is very low	78	2.9231	.62757	21
<b>Overall Mean Score</b>		2.54486	0.724745	30

**Source: Primary Data**

The overall mean score for customer loyalty is 2.544, standard deviation of 0.7247 and coefficient of variation of 30% depicting moderate agreement by respondents on the customer loyalty manifestations. The statement that retention of corporate customers who use Mobile phone banking services is relatively higher than those who don't had the highest mean score of 3.0385, standard deviation of 0.7736 and coefficient of variation of 25%. However the statements with lowest means were that our corporate customers use mobile phone banking more compared to other delivery channels and our corporate customers use mobile phone banking to do most of their banking transactions with mean score of 1.6923, standard deviation of 0.73589 and coefficient of variation of 43% and mean of 1.6538, standard deviation of 0.68948 and coefficient of variation of 42% respectively. This may be attributed to the fact that corporate customers in some cases prefer internet banking rather than mobile phone banking.

**4.2 Relationship between mobile banking attributes and Customer Loyalty**

The study established the influence of mobile phone banking attributes on loyalty of commercial bank corporate customers through the following hypothesis:

**H1:** *Mobile phone banking attributes have no statistically significant influence on corporate customer loyalty*

The study first tested the independent effects of mobile Phone banking attributes dimensions on each of the performance measures before establishing the combined effect of Mobile Phone Banking attributes Customer loyalty.

The composite index was computed for both mobile phone banking attributes and customer loyalty and the hypothesis tested through simple regression analysis. The results of the combined effect are presented in table 4.1 below.

**Table 4.1: Regression Results for Overall Combined Results for the effect of Mobile Phone Banking Attributes on Customer Loyalty**

a) Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.802 <sup>a</sup>	.643	.640	.77199		
a. Predictors: (Constant), Mobile phone banking attributes						
b) ANOVA <sup>a</sup>						
Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	124.427	1	124.427	208.779	.000 <sup>a</sup>
	Residual	69.133	77	.596		
	Total	193.560	78			
a. Dependent Variable: Customer loyalty						
b. Predictors: (Constant), mobile phone banking attributes						
c) Combined coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.499	.273		-1.829	.070
	Mobile phone banking attributes	1.163	.081	.802	14.449	.000
a. Dependent Variable: Customer loyalty						

Source: Field Data (2017)

As shown in Table 4.1 coefficient of correlation R=.802 is an indication of relatively strong relationship between mobile phone banking attributes and corporate customers loyalty. The coefficient of determination R<sup>2</sup> =.643 thus mobile phone banking attributes explained 64.3% of customer loyalty.

The other variables in the firms explained the remaining 35.7%. The analysis from the model had the F value of 208.779 with p-value of 0.00 which is less than 0.05, the findings, thus, were sufficient to support the idea of the influence of mobile phone banking attributes, implying that mobile phone banking attributes had statistically significant effects on corporate customer loyalty thus the hypothesis was rejected. The results of the combined effects of mobile phone banking attributes showed that a unit increase in mobile phone banking attributes will cause a 1.163 increase in customer loyalty. Based on regression coefficients results in Table 4.1 the regression equation can be written as follows;

$$Y = -.499 + 1.163 X_1 \text{ where } Y = \text{customer loyalty, } X_1 = \text{mobile phone banking attributes}$$

### 5.1 Summary of the Findings

The objective was to establish the influence of mobile phone banking attributes on corporate customer loyalty and the corresponding hypothesis which stated that mobile phone banking attributes had no statistically significant influence on customer loyalty. The results showed a strong positive relationship between the two variables implying that mobile phone banking attributes influences customer loyalty in the studied banks. This is in line with finding of other researchers that Innovative attributes significantly influence customer loyalty (Dachyar & Fatkhurrohman, 2011; Rajaguru & Matanda, 2006; Lee & Liu, 2008; Rambocas, 2012). However Bersali and Guemat (2014) found little empirical support that innovation influenced customer loyalty.

### 5.2 Conclusion

From the results of the study hypothesis, we conclude that Mobile Phone Banking Attributes significantly influence commercial banks corporate customers' loyalty in Kenya. The hypothesis "Mobile phone banking attributes have no statistically significant influence on corporate customer loyalty" was therefore rejected.

### 5.3 Implications of the Study

Loyalty of commercial banks corporate customers is important as it impacts on the banks financial performance and therefore, the results of this study will assist policymakers to make sound decisions regarding the variables determining customer loyalty. The results suggest that commercial banks in Kenya need to embrace mobile phone banking attributes to attain a corporate customer loyalty and general efficiency in the banking industry. Policy makers in commercial banks in Kenya and other financial organizations should take advantage of the study findings and encourage the use of mobile phone banking to improve their output and enhanced customer loyalty.

### References

Al-Jabri, I. M., & Sohail, M. S. (2012). Mobile phone banking Adoption: Application of Diffusion of Innovation

- Theory. *Journal of Electronic Commerce Research*, 13,4, 379 -391.
- Auka, D.O. (2012). Service quality, satisfaction, perceived value and loyalty among customers in commercial banking in Nakuru Municipality, Kenya. *African Journal of Marketing Management*, 4,5, 185-203.
- Batiz-Lazo, B. & Woldeesenbet, K. (2006). The dynamics of product and process innovation in UK banking. *International Journal of Financial Services Management*, 1, 4, 400-421.
- Benner, M.J., and Tushman, M.L. (2003). Exploitation, exploration, and process management: The productivity dilemma revisited. *Academy of Management Review*, 28, 2, 238-256.
- Bersali, M. N., & Guermat, C. (2014). Loyalty and innovation: Evidence from Algerian mobile service providers. *International Journal of Technology Management & Sustainable Development*, 13, 1, 73-96.
- Calantone, R. J., Cavusgil, S. T., Zhao, Y., (2002). Learning orientation, firm innovation capability, and firm performance. *Industrial Marketing Management*, 31, 6, 515-524.
- Caruana, A. (2002). Service loyalty: The effects of service quality and the mediating role of customer satisfaction. *European Journal of Marketing*, 36, 7/8, 811 - 828.
- Central Bank of Kenya, *Annual Report*, 2015.
- Cooper, D. R., & Schindler, P, S. (2000). *Business Research Methods*. McGraw-Hill, New York.
- Dachyar, M.,& Fatkhurrohman, M.D. (2011). The Effect of Innovation Factors to Customer Loyalty by Structural Equation Model. *World Academy of Science, Engineering and Technology*, 5, 4, 21.
- Domeher, D., Frimpong, J.M., & Appiah, T. (2014). Adoption of financial innovation in the Ghanaian banking industry. *African Review of Economics and Finance* 6, 2, 88-114.
- Dzoghbenuku, R. K. (2013). Banking Innovation in Ghana: Insight of Students' Adoption and Diffusion. *Journal of Internet Banking and Commerce*, 18, 3.
- Ghasemi, S., & Zahediasl S. (2012). Normality Tests for Statistical Analysis: A Guide for Non-Statisticians, *International Journal of Endocrinology and Metabolism*, 10,2, 486-489.
- Gichungu, Z.N., & Oloko, M.A (2015). Relationship between bank innovations and financial performance of commercial banks in Kenya. *International Journal of Education and Research* 3, 5.
- Gremler, D.D., & Brown, S.W. (1996). Service loyalty: its nature, importance, and implications", in Edvardsson, B. et al. (Eds), *Advancing Service Quality: A Global Perspective*. *International Service Quality Association*, 171-80.
- Hiltz, R., & Johnson, K. (1989). Measuring acceptance of computer-mediated communication systems. *Journal of the American Society for Information Science*, 40,6, 86-397.
- Khan, B., & Rizwan, M. (2014). Factors Contributing to Customer Loyalty in Commercial Banking. *International Journal of Accounting and Financial Reporting*, 4, 2, 413-436.
- Khatibi, A.A., Ismail, H. & Thyagarajan, V. (2002). What drives customer loyalty: An analysis from the telecommunications industry. *Journal of Targeting, Measurement and Analysis for Marketing*, 11,1, 34-44.
- Kibera, F.N. (1979). *The effects of selected communication variables on the adoption of new agricultural practices by smallholders in central Kiambu, Kenya*. Unpublished PhD thesis, University of Toronto, Canada.
- Kinoti, M.W. (2012). *Green marketing practices, corporate image, organizational characteristics and performance of ISO 9000 and 14000 certified organizations in Kenya*. Unpublished Doctoral Thesis, University of Nairobi, Kenya.
- Kyei, D.A, bayoh, A.T.M. (2017). Innovation and Customer Retention in the Ghanaian Telecommunication Industry. *International Journal of Innovation*, 5, 2, 171-183.
- Lee, Y., & Liu T. (2008). The Effects of Innovation Diffusion on Customer Loyalty. *The Business Review, Cambridge*, 10, 1.
- Mari, S. (2003). *Adoption of Mobile phone banking in Finland*. Retrieved on 05/03/16 from: <https://jyx.jyu.fi/dspace/handle/123456789/13203>.
- Menor, L.J. & Roth, A.V. (2009). New service development competence and performance: An empirical investigation in retail banking. *Production & Operations Management*, 17, 3, 267-284.
- Muiruri, J.K., & Ngari, J.M. (2014) Effects of Financial Innovations on the Financial Performance of Commercial Banks in Kenya. *International Journal of Humanities and Social Science* 4, 7.
- Munyoki, J. M. (2007). The Effects of Technology Transfer on Organizational Performance: A Case of Medium and Large Manufacturing Firms in Kenya. *Unpublished Doctoral thesis*, University of Nairobi, Kenya.
- Nachmias, C. F., & Nachmias, D. (2004). *Research methods in the social sciences* (5<sup>th</sup>ed.). India: Replica Press.
- Newbert, S.L. (2008). Value, rareness, competitive advantage, and performance: a conceptual- level empirical investigation of the resource based view of the firm. *Strategic Management Journal* 29,745-768.
- Nor, K.M., Pearson, J. M., & Ahmed, A (2010). Adoption of Internet Banking: Theory of the diffusion of Innovation. *IJMS*, 17, 1, 69-85
- Nyeko, J. S. (2014). Factors Influencing the Short Message Service (SMS) Mobile Phone Banking Adoption: A Users' Perspective in the West Nile Region in Uganda. *European Journal of Business and Management*, 6,

- 5.
- Pooja, M., & Balwinder, S. (2009). The impact of internet banking on bank performance and risk: The Indian experience. *Eurasian Journal of Business and Economics*, 2 4, 43-62.
- Rajaguru, R., & Matanda, M. (2006). *Consumer Perception of Store and Product Attributes and its Effect on Customer Loyalty within the Indian Retail Sector* Conference article, ANZMAC conference, 2-6 December, Brisbane, Australia.
- Rambocas, M., & Arjoon, S. (2012). Using Diffusion of Innovation Theory to Model. *Journal of Business and Commerce*, 1, 8, 01-14.
- Rogers, E. M. (2003). *Diffusion of Innovations (5th Ed.)*. New York, Free Press.
- Rorio, E.C. (2015). Factors Influencing Customer Loyalty in The Banking Sector: A Case of Commercial Banks in Mombasa Kenya. *International Journal of Research in Management & Business Studies*, 2, 1.
- Scott, S. D., Plotnikoff, R. C., Karunamuni, N., Bize, R., & Rodgers, W. (2008). Factors influencing the adoption of an innovation: An examination of the uptake of the Canadian Heart Health Kit (HHK). *Implementation Science*, 3, 41. <http://doi.org/10.1186/1748-5908-3-41>
- Tan, M. & Teo, T.S.H. (2000), Factors Influencing the Adoption of Internet Banking. *Journal of the Association for Information Systems*, 1,5, 1-44
- Tibenderana, K.G.P. (2010). *A Model for measuring levels of end-users' acceptance and use of hybrid services and its applicability to universities*. Doctorial thesis, Makerere University, Uganda.
- Wamuyu, P.K. (2014). The Role of contextual factors in the uptake and continuance of mobile usages in Kenya. *The Electronic Journal of Information Systems in Developing Countries*, 64,4, 1-19.
- Zikmund, W.G. (2003). *Business Research Methods*, Thomson Learning, Inc., Eastern Press, Bangalore.