INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH & DEVELOPMENT

ISSN 2278 – 0211 (Online)

Mobile Banking Strategy and Firm Performance: A Case of Kenya Commercial Bank Limited, Kenya

Morang'a Monyangi Brendah
Banker, KCB Bank, Kericho, Kenya

Abstract:
Banking institutions face problem based on exponentially increasing rivalry in the market and which affect their performance significantly. The new technology has its challenges in its adoption on the other hand customer are becoming choosy. The paper, therefore, aimed at address the effect of mobile banking strategies on firm performance of KCB Kenya Limited. The study was guided by three theories; theory of performance, diffusion of innovation theory, financial intermediation theory, and delegation monitoring. It used descriptive research design. The target population was 100 employees, departmental heads and managers of KCB Bank Kericho County. The sample size of 30% of the target population which was 30 respondents was selected using simple random sampling. Questionnaires was used to collect data. The collected data was analyzed using inferential statistics. The results indicated that there is significant improvement in the firm's performance due to cell phone strategies. The cell phone saving did not significantly improved performance of the firms but the cell phone credit, pay bill service and money transaction indicate significant input to the bank performance. The research recommended that there should be customer sensitization because the strategies reduce cost of operation. Further research mobile transaction and customer satisfaction.

Keywords: *Strategic management, mobile banking strategies, descriptive design, Kericho, Kenya*

1. Introduction

Globally, banking industry is considered to be an important source of financing for most businesses. However, the global competitiveness in the banking sector, coupled with issues of recession, and Central banks regulation has made the performance of these banking institutions a matter of concern in both developed and developing countries including Kenya. This has made the banking institutions to devise strategies that are geared towards improving their performance. In Kenya, most banks have adopted new technologies in a bid to curb the problem of performance. KCB Kenya Limited has been in the fore front in the adoption of these technologies. Mobile banking is an innovative technology that has grown exponentially and has been popularized by its use across all the financial organizations. The use of mobile has thus expanded from mere text messaging services to that of pseudo internet banking. This therefore means that customers can not only view their balances and set up multiple types of alerts, but also transact activities such as fund transfers from account to account, account to M-pesa or from M-pesa to account, deposit cheques via the mobile phone and instruct payroll based transactions (Vaidya, 2011).

Mobile banking, also known as m –banking, is the provision of banking and financial services through using mobile phone (Mbiti& Weil, 2011). Services offered by M-banking system include; services bank trades, information access and opening account. Kenya based network money transfer includes M-pesa from Safaricom limited, Orange money from Orange, and Airtel money from Airtel. Kenya Commercial Bank, Co-operative bank, Equity Bank, Barclays and I&M Bank, are some of the banks that have partners with the mobile network providers. Kimenyi, (2009) added that software were necessary to enable mobile devices conduct financial transaction. It enable the mobile device to conduct financial service to the customers of financial institution.

According to the Central Bank of Kenya (2009) annual report, mobile technology has been adopted widely by numerous banks through the mobile banking model. This is has not left behind the smaller financial institutions. On the other hand, the growth of mobile banking technology has enable creation of application can integrate all service in one cell phone. This is growth from m-banking to improved internet based access to the banking service.

M-PESA is a minor price electronic payment and store of a value system that is accessible from the ordinary mobile handset (Safaricom, 2009). The service has grown subsequently since its introduction as one of the Safaricom product from 2007. It has been adopted by more than 40% of the Kenya's adults. KCB Kenya Limited has continuously embraced technology as they introduced mobile banking on 2009. The KCB Connect product has influenced the lifestyles of mobile subscribers in Kenya with an estimated of 17 million persons accessing the services. The mobile banking program provides complete banking services on the mobile phone at the touch of a button, banking instructions, including inquiries, funds, deposits and withdrawals. This is critical to the success of

mobile banking strategy and understanding of the customer needs (Wairagu, 2011). This is also critical to the establishment of regulations that meet the needs of the customer.
The ability to move money from point A to point B has been essential aspect of financial activity globally. However, the issue is exactly how money transfer is made to work in an emerging market where the infrastructure is underdeveloped and where very few people have or even need bank accounts. Mobile money transfer system is very instrumental in replacing the traditional banking method as it is in most of the emerging markets (Safaricom, 2009). The cell handset penetration has outnumbered the bank account infiltration (by a ratio of about 3:1, in that, for each and every one bank account holder, there about are three (3) mobile handset owners).
According to the CBK, (2009), unlike other banks in Kenya, KCB Bank Kenya limited has a long history. The bank continues to display strong balance sheet and is the largest bank in Kenya that accounts for 13% of all assets. The bank has also displayed improved earnings performance and has also managed to maintain a positive credit protection. However, with the emergence of mobile banking, and KCB M-pesa, it is difficult to predict whether it will continue to display positive credit ratios. The paper would then investigate the mobile banking strategies used in Kenya Commercial Bank (KCB) Limited and its effect on performance.

2. Literature Review

Mobile banking strategies and performance literature were discussed through the several theories and contextual review.

2.1. Theoretical Review

In particular the paper, concentrate on the theory of performance, the diffusion of innovation theory, which argues that diffusion of innovation theory is a process by which innovation is communicated over long period of time among participants in a social setup. It also focuses on the theory of financial intermediation theory and delegation monitoring theory.

2.1.1. Theory of Performance

Theory of Performance (ToP) was advanced by Richard Schechner in 1980's in which he asserts that the theory provide framework. Performance is a process of producing valued results. This theory view performance in six facet: fixed factors, personal factors, level of knowledge, level of identity and skills. Three axioms are proposed for effective performance improvements. This theory is thus relevant to this study as it explained the relationship between strategies, which in this case is the mobile banking strategy and the firm performance in terms of resources including revenue, asset acquisition, customer base and profitability among other performance indicators.

2.1.2. Diffusion of Innovation Theory

Diffusion of innovation theory was popularized by Everett Rogers in 1962, where hedictated that diffusion is the process by which an innovation is communicated over time among the participants in a social system. The origins of the diffusion of innovations theory are varied and has multiple disciplines. Diffusion of innovation theory is the process whereby technological innovation is utilized by the members of a certain social group (Lynn & Keith 2001). An innovation is an idea, product, practice, or a product that is believed to be new by the society, organization or individual and in which the participants, or users share the use of this technological innovation to achieve mutual benefit. The theory focuses on the conditions, which increase or decrease the likelihood that a new idea, or product, was adopted by the society, organization or individual. This theory therefore was relevant to the study because mobile banking is such a kind of innovation where KCB bank Kenya limited and users of mobile banking among other stakeholders like Safaricom Kenya Limited achieve a mutually beneficial engagement such as increased customer base, increased revenues, achieving a competitive edge, access to credit facilities and advancement in technological innovations. This study thus adopted the theory of diffusion of innovation in a bid to understand and determine the effect of mobile banking strategy on the performance of KCB Kenya Limited, Kericho branch.

2.1.3. Financial Intermediation Theory

Gurley and Shaw in 1960 advanced the financial intermediation theory. It focuses on merger between the theory of agency and information asymmetry. According to Scholtens&Van Wensveen, (2003), the theory is important in creation of specialization of financial institution in producing specific specialized products. The intermediary can then sell their products in a relative price that reduce cost of operation for the financial organization. This theory was relevant to the study as it assisted in analyzing mobile transactions behavior of KCB Bank, Kericho in respect to KCB M-pesa, and it effects on firm's performance.

2.1.4. Delegated Monitoring Theory

Andries on 2008 pioneered delegated monitoring theory which is based on two principles which are; the wide view of the investment projects, that explains the significance of delegate monitoring in view of an intermediary than to have it be worked on individually by creditors; and secondly, intermediaries who monitors debtors and allow them to finance a large number of debtors (Andries, 2008).
It lives to fulfill their purpose of being established. In the context of the study, the reason why the commercial banks have to incur exceedingly high costs in order to ensure customer satisfaction and enhance their performance can be explained by this theory. On the other hand, the theory is also relevant to this study as it sought to explain how KCB M-Pesa loan, as a financial intermediation interventions is monitored by KCB Kenya Limited, Kericho Branch.

2.2. Mobile Banking Strategies

Mobile banking has increased in used by commercial banks and other institution to ease financial payment. Donner & Tellez (2008) did a study on mobile banking and economic development in which their objective was to determine the link in adoption of mobile banking, impact, and use on economic development.

2.2.1. Mobile Savings

Wilson, et al. (2008), points out that, revenue growth in form of savings, interests on loans, and transactions charges in a banking institution is another aspect of the performance indicator, which is obtained by real-time access to service, large coverage and value for customer as result of mobile banking. This can also be measures in the number of people using the platform for savings. On the other hand, interest derived from the loans advanced to the customers is also another indicator of the performance of a banking institution.

According to World Bank (2013) many banking institutions globally have embarked on a saving strategy as a measure to overcome bank performance and liquidity challenges and realize increased profitability (WB, 2013). In Kenya, Commercial Banks have been competing to acquire a larger customer base over the other competitors in terms of price, service standards, advertising, innovation in products and services offered, relationship management and product differentiation (Mbiti& Weil, 2011).In this regard, several commercial banks, if not all, emphasizes on customer savings in order to improve their liquidity ratio.

Gitonga, (2010) states that, firms that harness these additional capabilities of mobile banking and banking institutions can see a profound impact on the nature of the money transfer relationship. This puts the banking sector in a particular position to develop a new line of business focused on saving capabilities of customers and other entities.

2.2.2. Mobile Credit Strategy

Adelman (2000) noted that the overall objectives and strategy of an organization determine the technology that the organizations adopt. Such strategies primarily focus on the technologies and in some cases the people who directly manage those technologies. Mobile banking technological strategy allows customers to access credit facilities through their mobile handsets if they are M-pesa registered users. Management theory, developed over the past century, describes how companies plan, organize, staff, lead and control their employees. Effective managers get people to accomplish goals and use the organization’s resources, including knowledge and technological innovations to increase the organization’s revenues, profit, expand the customer base and maintain a competitive advantage, mobile banking technology is one such strategy.

2.2.3. Pay Bill Services

Pay bill service is mobile service application that allows customers to buy goods and services and pay their bills directly to the supplier through their mobile handsets. The pay bill strategy has become an alternative payment model of financial transactions in Kenya. It is a strategy that considers factors such as customer demand, efficiency competition, expertise, implementation expense, security, maintenance costs, and capital support. It has become a competitive edge of modern successful financial transaction. Many banks and other organizations have already implemented Pay bill services for their customers to enable them pay loans, and other utility bills because of the numerous potential benefits associated with it. However, KCB bank Kenya limited is currently the only bank where customers can open virtual accounts using mobile phones and can access loans, make deposits, and do all other transactions that can be done over the counter, KCB M-pesa is an example. This means that banking services such as loan repayment, account balance inquiry, fund transfer, utility bills monthly payments, standing order payments, and so forth are provided by a bank through the mobile banking platform (Safaricom, 2014). A Paybill service has evolved into a one-step service and information unit that promises great benefits to both commercial and customers.

2.2.4. Mobile Banking Strategies

Donner & Tellez (2008) did a study on mobile banking and economic development in which their objective was to determine the link in adoption of mobile banking, impact, and use on economic development. The study established that through offering a way to lower the costs of moving money from place to place and offering a way to bring more users into contact with formal financial systems, m-banking/m-payments systems could prove to be an important innovation for the developing world. However, the true measure of that importance required multiple studies using multiple methodologies and multiple theoretical perspectives before answering the questions about adoption and impact. The study sought to analyze the opportunities for commercial banks to generate revenues by offering value-added, innovative mobile financial services while retaining and even extending their base of technology-savvy customers. The researchers found that the use of mobile banking systems as a strategy increased their customer base.

3. Research Objective

The objective were to investigate the effect of mobile phone strategies on the performance of firms. The firms considered are commercial banks. The specific aim will examines the effect of;

- Cell phone savings on firm’s performance.
- Cell phone credit on firm’s performance.
- Pay bill services on firm’s performance.
- Cell phone money transfer on the performance of the firm.

4. Methodology

The study adopted a descriptive research design which aimed at examining the impacts of strategic effect of mobile banking on the firm's performance of KCB bank Kenya Limited, Kericho Branch, where the context was the bank staffs in strategic impacts of mobile banking on Kericho Branch. According to KCB Kenya Limited annual report of 2016, there are four branches which include, Kericho Branch, Kericho East Branch Londiani Branch and Litein Branch. Thus the study targeted 100 respondents which included bank's head of departments and managers who naturally would possess enough knowledge on issues to do with strategic impacts entered into by the bank and their impacts on the performance of KCB M-Pesa on Kericho Branch. Mugenda and Mugenda (2003) suggest that a sample of 30% of the population can suffice the study. In this research study, a sample of 30 KCB Bank, Kenya Limited being the 30% of the target population, as calculated below.

Target population = 100 bank officials
Sample size = 30% of Target population
Sample size = (30% of 100) = 30
Sample size = 30 bank officials.

Primary data collection that was obtained from questionnaires. Data was reliable as tested through Cronbach's constant from piloted data of six bank official. ANOVA and multiple regression model were developed for the purpose of testing the objectives.

5. Results and Discussion

The regression model was used to relay inferential statistics. The results were obtain from SPSS software version 21.0 with coefficient of determinant, ANOVA and model table representing the information for the research.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.873[a]	.762	.724	.48767
a. Predictors: (Constant), Cell phone money transfer, Pay bill service, Cell phone savings, Cell phone credit				
b. Dependent Variable: Firm's performance				

Table 1: Coefficient of determination (SPSS version 21.0)
Source: Research data (2017)

The data collected indicated strong correlation relationship (R of 0.873) between the firm's performance and strategies of cell phone money transfer. The determinant of correlation indicate that significantly 76.2% of the data was used to determine the variation of the firm's performance against cell phone money transfer and 23.8% was due to other factors (R Square of 0.762).

			Sum of Squares	df	Mean Square	F	Sig.
Performance * Cell phone savings	Between Groups	(Combined)	1.233	2	.616	.701	.505
	Within Groups		23.734	27	.879		
	Total		24.967	29			

Table 2: ANOVA on Cell Phone Savings (SPSS version 21.0)
Source: Research data (2017)

Cell phone saving was not significantly related with performance (F=0.701, P (0.505) >0.05).

			Sum of Squares	df	Mean Square	F	Sig.
Performance * Cell phone credit	Between Groups	(Combined)	14.100	2	7.050	17.517	.000
	Within Groups		10.866	27	.402		
	Total		24.967	29			

Table 3: ANOVA on Cell Phone Credit (SPSS version 21.0)
Source: Research data (2017)

The cell phone credit was significant because (F =17.517, P (0.00) < 0.05).

			Sum of Squares	df	Mean Square	F	Sig.
Performance * Pay bill service	Between Groups	(Combined)	2.478	2	1.239	1.487	.044
	Within Groups		22.489	27	.833		
	Total		24.967	29			

Table 4: ANOVA on Pay Bill Service (SPSS version 21.0)
Source: Research data (2017)

The investigation indicated pay bill service was significant (F = 1.487, P (0.044) < 0.05).

			Sum of Squares	df	Mean Square	F	Sig.
performance * Cell phone money transfer	Between Groups	(Combined)	13.525	3	4.508	10.246	.000
	Within Groups		11.441	26	.440		
	Total		24.967	29			

Table 5: ANOVA on Cell Phone Money Transfer (SPSS version 21.0)
Source: Research data (2017)

Cell phone money transfer was significant (F = 10.246, P (0.000) > 0.05).

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.021	4	4.755	19.995	.000[b]
	Residual	5.946	25	.238		
	Total	24.967	29			
a. Dependent Variable: Firm's performance						
b. Predictors: (Constant), Cell phone money transfer service, Pay bill service, Cell phone savings, Cell phone credit						

Table 6: ANOVA on Regression Model (SPSS version 21.0)
Source: Research data (2017)

There is significant effect of cell phone strategies on firm's performance because (F= 19.995, P (0.000) <0.05).

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.943	.936		-2.076	.048
	Cell phone savings	.113	.145	.081	.780	.443
	Cell phone credit	.654	.152	.539	4.316	.000
	Pay bill service	.446	.133	.343	3.364	.002
	Cell phone money transfer service	.382	.134	.350	2.841	.009
a. Dependent Variable: Firm's Performance						

Table 7: Multiple Regression analysis
Source: Research data (2017)

The regression model was used to interpret the hypothesis based on the objectives which were in agreement of the ANOVA test conducted.

- $H_0$1: There is no significant effect of cell phone savings on the firm's performance. The null hypothesis was accepted as t-statistics had P value 0.443 greater than 0.05.
- $H_0$2: There is no significant influence of cell phone credit on the firm's performance. P value 0.000 was less than 0.05 meaning null hypothesis was rejected.
- $H_0$3: There is no significant effect of pay bill service on firm's performance. The null hypothesis was rejected because (P (0.002) < 0.05).
- $H_0$4: There is no significant influence of money transfer service on firm's performance. The hypothesis was rejected because (P (0.009) was less than 0.05.

The study from Gitonga (2010) gave a light to the development of m-banking where he noted technology advance is an instrument to strategic turnaround and recommended Kenya Commercial Bank to improve on experience, knowledge and knowledge to improve performance. M-banking is one of technological venture that Kenya Commercial Bank that has improved the performance.

6. Conclusion and Recommendation

The conclusion of the study was that the cell phone strategies were significant to the firms' performance. Cell phone credit provided the highest input to the performance of the banks. The interest from mobile loan facility proved the gain. Pay bill provided the commission for the service and would provide financial performance. The commission obtained and charge for the service contribute positively on the banks net income. The bank service relies on commission, charges and interest. Cell phone money transfer was significant though rated the lowest based on the withdrawal and transaction charges. Firm's performance was affect slightly by cell phone saving, since it creates liquidity and no tangible source of income the bank. The Kenya Commercial Bank should advertise and sensitize people on mobile banking service and the important of saving money. Technology change with time it is important that the bank become dynamic with it.

The technology has made strides in the banking sector by reducing cost of operation and service. This has encouraged the non-banking customer to join in banking. There is significant improvement of performance therein overall.
The paper recommend that cell phone technology should be sensitized to encourage saving. This would increase the customer share as well as assist the bank in performance. Saving through mobile phone was low in the commercial banks. People preferred to use cell phone money transfer through paying bills or borrowing credit facilities. A saving culture should be created in Kenya. It further recommended that sensitization was important since the service of mobile banking were known to the learned group.

7. References

i. Adelman, C. (2000). A Parallel Post-secondary Universe: The Certification System in Information Technology. Washington, D.C.: U.S. Department of Education.
ii. Andries A. M. (2008). Theories Regarding the Banking Activity. AI, I University, Iasi Romania.
iii. Central Bank of Kenya (2009). Annual report. Nairobi. Government Press.
iv. Donner, J. and Tellz, C. (2008). Mobile banking and economic development: linking adoption, impact, and use. Asian Journal of Communication. Vol 18(4). PP318-332.
v. Gitonga, W. (2010). The role of board capital on strategic turnaround in Kenya Commercial Bank Limited. http://erepository.uonbi.ac.ke:8080/handle/123456789/5415 retrieved on 3rd May 2017.
vi. Kimenyi, Mwangi and NjugunaNdung'u (2009). "Expanding the Financial Services Frontier: Lessons from Mobile Phone Banking in Kenya." (Washington, DC: Brookings Institution), October.
vii. Lynn K. M &Keith, S. (2011). Diffusion of Innovation theory. Maastricht, The Netherland
viii. Mbiti, I. and Weil, D. (2011) Mobile Banking: The Impact of M-Pesa in Kenya. National Bureau of Economic Research. Working Paper 17129. Available at: http://www.nber.org/papers/w17129/ retrieved on 5th May 2017
ix. Mugenda M. and Mugenda A., (2003). "Research Methods. Quantitative & Qualitative Approaches." Nairobi, Kenya: African Centre for Technology Studies (ACTS).
x. Safaricom (2009). M-PESA Key Performance Statistics" and various financial reports available on www.safaricom.co.ke. retrieved on 3rd May 2017.
xi. Safaricom, (2012), M-pesa assessments. Annual Report.
xii. Vaidya, s. (2011) "Understanding Strategic Alliances: An Integrated Framework." Journal of Management Policy and Practice, Vol. 12, Iss. 6, pp. 90 - 100
xiii. Wairagu, P. (2011). The relationship between financial innovation and profitability of commercial banks in Kenya.http://erepository.uonbi.ac.ke/handle/123456789/6148.Retrieved on 7th May 2017
xiv. Wilson N, J. Watson and B. Summers (2013), Trading relationship, credit management and corporate performance; A survey. University of Bradford, credit management research group, Bradford.
xv. World Bank (2013). Annual report. Genevan. UN.