

# THE ROLE OF INNOVATIONS ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN NAIROBI COUNTY, KENYA

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**Abstract:** Kenya has evolved in innovation over the years, her being the home to an early entrant form of mobile money banking with world class standards. The innovation in financial sector has propelled the industry to higher heights. This thesis was to study the role of innovations in the commercial banks in Kenya and especially on KCB groups in Nairobi County. The study focused on the role of innovations on financial performance of commercial banks. The researcher was guided by the following objectives; to determine the role of product innovation, process innovations and ICT integration on financial performance of KCB bank. The scope of the study was in all KCB Group branches in Nairobi County. The sample size was 132 staffs of the target population by using the Loren Morgan formulae; the target population was 200 management staff in KCB Group branches. This research was adopted a descriptive survey design with questionnaire being the basic tool for collection of primary data. Data was collected by use of questionnaires. Data was analyzed and presented using descriptive and inferential statistical tools to determine the relationship between independent and dependent variables. In addition, advanced statistical technique was used. SPSS (Statistical package for social sciences) version 23 model was used in data analysis. The information was displayed using tables and graphs. The study depicted that there is proper significant positive correlation on product Innovation, ICT integration, Process Innovation and Marketing Innovation to the role of innovations on financial performance of commercial banks in Nairobi County in Kenya. The independent variables were good predictors of dependent variable. This research did not exhaust bank innovations hence gave a recommendation for further study to cover innovations like securitization, credit guarantees and agency banking and their impact on financial performance in banking institutions.

**Keywords:** INNOVATIONS, PERFORMANCE, COMMERCIAL BANKS.

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## 1. INTRODUCTION

### Background to the Study:

Innovation refers to the act of starting something for the first time or introducing something new Laforet (2006). Interest rate risk, exchange risks, credit risks and liquidity risks are the common risks commercial banks face hence the need to innovate as a way of managing these risks. Innovation exists so as to minimize the transactions, search and marketing, costs for the parties in financial transactions. In the contemporary business environment, customers are aware of the market dynamics as a result of readily available information in the market. Therefore, commercial banks have been forced to look for better business strategies in order to remain competitive hence the need and adoption of innovation to cater for this informed customers.

Innovation is a key factor globally and has continuously gained recognition. Hansen (2005) argued that greater efficiency and diversity in financial intermediation is achieved as a result of innovations which increases productivity and growth potential of the economy. Innovations also creates convenience to cardholders by giving them 24 hour access to their banked cash, increase in retail purchase outside banking hours that is, cash from ATMS has extended shopping hours providing. By extending the shopping hours, sales are increased and more job opportunities.

According to transaction cost innovation theory (Hicks, 1982), innovation by any business entity is aimed at reducing the costs of transactions. Innovations foster quick absorption of information by various players which is ultimately reflected in the security prices of the business entity. Derivatives market is one of the key innovations in the market sector, it has enabled the expansion of markets at the same time acting as a strategy for risk reduction. Trading in derivatives has really contributed to minimal transaction costs and the agency costs. Funds are made available at lower costs which will enhance financial stability.

### **KCB Group Limited:**

KCB Group Limited entered the Kenyan banking industry in 1896 then operating as the National Bank of India. The bank has for over a century now evolved to become the bank with the largest branch network in Kenya, the only bank that has its branch network covering all the East African Community member states and the bank that in 2011 generated a profit before tax of Kshs.15.1 billion which was the highest in the banking industry in Kenya. KCB Group has also utilized advancements in technology to reach out to its customers at every part of the world (KCB Group Limited Annual results, 2011; The KCB Story, 2012).

The vision statement of KCB Group limited as at October 2012 was to be the preferred financial solutions provider in Africa with a global reach while its mission statement is "To drive efficiency whilst growing market share in order to be the preferred financial solutions provider in Africa with global reach". Its immediate former mission statement that was in use until the year 2011 was "To grow our existing business whilst building the platform to be the preferred Financial Solutions Provider in Africa with Global Reach". The core values that give direction at KCB Group limited are; putting the customer first, working together as a team, being professional in everything we do, a willingness to change and caring for the community (KCB Internal Communications, 2010-2011; The KCB Story, 2012).

Before the year 2001, KCB Group limited then operating as Kenya Commercial Bank Limited had not embraced the formal strategic management approach to managing organizations that require the development and use of strategic direction components. At the time, KCB did not have any of the strategic direction components such as a vision statement, a mission statement and core values. After the year 2001, KCB Group Limited's top management adopted a formal strategic management approach to managing the organization. KCB Group limited has since generally maintained and refined its core values while periodically revising its mission and vision statements. It is worth noting that the leadership of KCB Group limited has always kept updating its management orientation to what is considered to be the best management practice at any given point in time. The current management orientation at KCB is the strategic management approach to managing an organization (KCB Annual Results, 1990-2011; KCB Internal Communications, 1990-2011)

### **Statement of the Problem:**

Innovations in the Kenyan banking sector include: increased use of paper money instead of cash. Cheques are the main paper based mode of payment accounting for 48% of non -cash payments. Use of Magnetic Ink Character Recognition (MICR) ensures clearing of cheques speedily and efficiently. According to Adewuyi (2011) noted that only the banks that have their whole activity networked electronically and have fully implemented the ICT that can withstand competitive innovation for survival in the new millennium. The challenge has been how to demonstrate that despite the huge cost arising from innovation, the returns are worth the consideration. The study sought to examine the role of innovations on financial performance of commercial banks in Nairobi County, Kenya

## **2. LITERATURE REVIEW**

### **Theoretical Framework:**

#### **Technology Acceptance Model:**

Technology acceptance model (TAM) was originally proposed by Davies in 1986. This model was designed to forecast the user's acceptance of information technology and usage in an organizational setting. Cracknell (2004) posits that firms

are adopting technology to cope with the dynamics of the external environment. This model has been tailored in a manner that can accommodate changes for improved costs reduction and efficiency. Technology Acceptance Model deals with perceptions as opposed to real usage, the model suggest that users , the key factors that influence their decision on how, where and when they will use it (Davis, 1989)

### **Schumpeter Theory of Innovation:**

Schumpeter (1934) argued that entrepreneurs, who could be independent inventors or R& D engineers in large corporations, created the opportunity for new profits with their innovations. In turn, groups of imitators attracted by super-profits would start a wave of investment that would erode the profit margin for the innovation. However, before the economy could equilibrate a new innovation or set of innovations, conceptualized by Schumpeter (1934) as Kondratiev cycles, would emerge to begin the business cycle over again.

### **Buffer Capital Theory:**

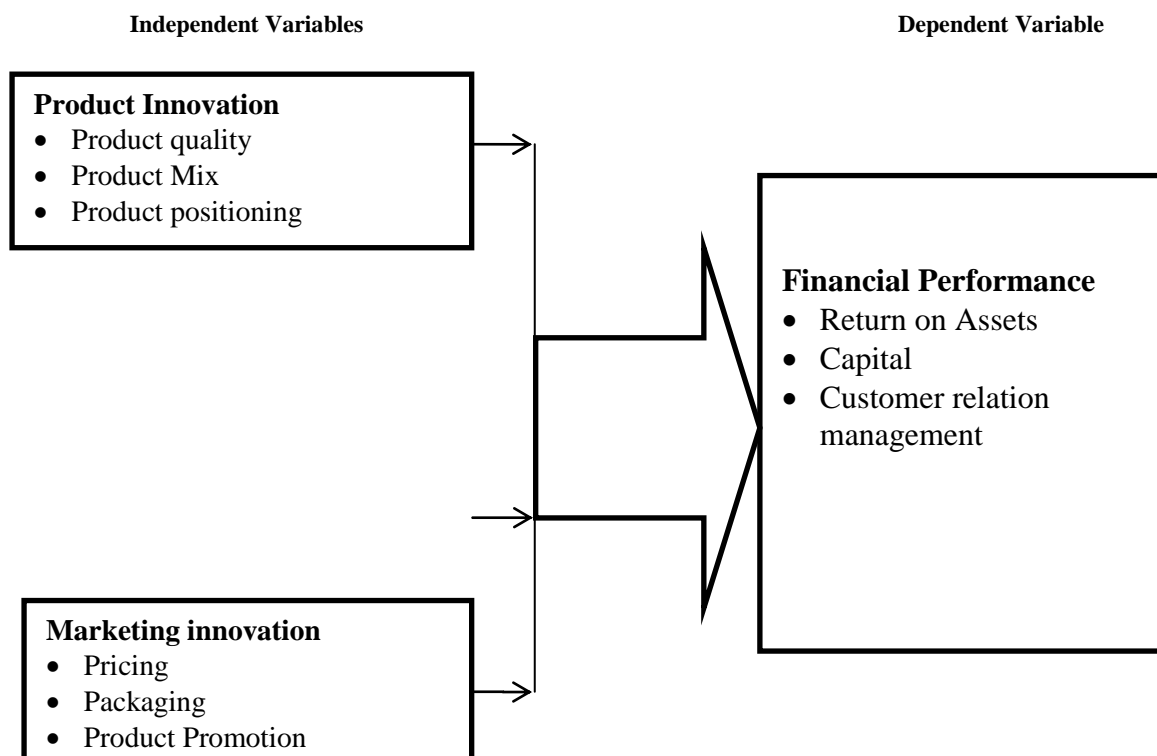
The buffer theory of Calem and Rob (1996) predicts that a bank approaching the regulatory minimum capital ratio may have an incentive to boost capital and reduce risk in order to avoid the regulatory costs triggered by a breach of the capital requirements (Ochei, 2013). The theory predicts that the behavior of banks depends on the size of their capital buffer, banks with high capital buffers will aim at maintaining their capital buffers while banks with low capital buffers will aim at rebuilding an appropriate capital buffer

### **Shiftability Theory of Liquidity:**

Formally developed by Moulton (1918), the theory held that banks could most effectively protect themselves against massive deposit withdrawals by holding, as a form of liquidity reserve, credit instruments for which there existed a ready secondary market (Maaka, 2013). Accordingly the liquidity of a bank depends on its ability to shift its assets to someone else without any material or capital loss when the need for liquidity arises. According to the theory, the liquidity of a bank may be measured by the extent to which it can shift its assets readily to other buyers for cash at satisfactory price (Casu *et al.*, 2006).

### **Conceptual Framework:**

A conceptual framework refers to the conceptualization of the relationships between variables in the study and it shows the relationship graphically or diagrammatically (Mugenda and Mugenda, 2003).



### 3. RESEARCH FINDINGS AND DISCUSSION

#### Response Rate:

The study targeted 132 respondents from commercial banks in Nairobi County, from which primary data was collected. Data was obtained from 127 respondents with 5 respondents failing to respond. This represented 96 % response rate and a response rate of 50% is adequate for reporting (Mugenda & Mugenda, 1999).

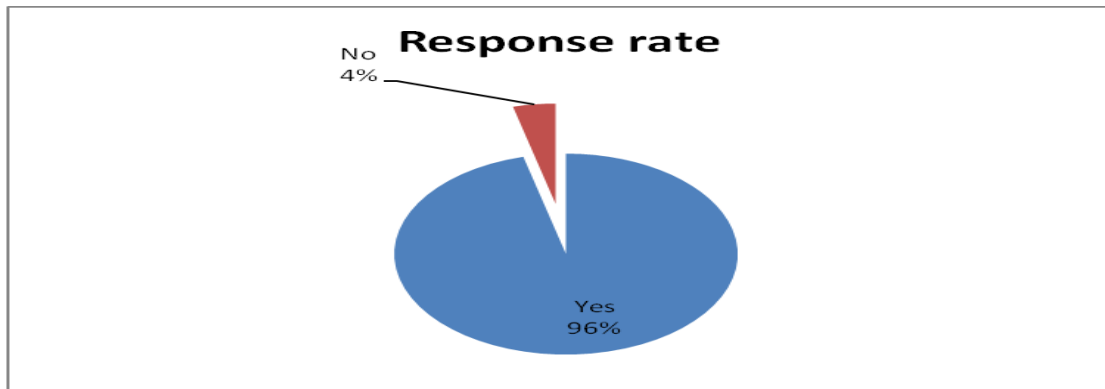


Figure below: Response rate in % of the sample population

#### Descriptive Analysis:

The main characteristics of the data are quantitatively described in the descriptive statistics. In the descriptive statistics summaries about the sample population responses are provided. The mean, median, mode, minimum, maximum, the standard deviation and the skewedness in relation to the independent, dependent and mediating variables are presented in the table below.

Table below: Independent and Dependent with the mean, median, mode, standard deviation and skewedness

Variable	No of Measures	Min	Max	Mean	Median	Mode	Std	Skewedness
Independent Variables								
Product Innovation	18	2	5	3.92	4	4	0.7	-0.7
ICT integration	13	2	5	3.8	4	4	0.7	-0.21
Process Innovation	6	2	5	3.97	4	4	0.7	-0.62
Marketing Innovation	4	2	5	3.02	4	4	0.7	-0.66
Dependent variable								
Financial Performance	15	2	5	3.84	4	4	0.5	-0.3

#### Product Innovation:

The regression of the Product Innovation on dependent variable, the role of innovations on financial performance of commercial banks in Nairobi County was performed. The results show that Product Innovation, product mix and product positioning have a significant direct effect on role of innovations on financial performance of commercial banks. In the table below the linear relationship between the variables is shown. The equation for this model is: role of innovations on financial performance of commercial banks = 2.438 + .273\* Product Innovation

- 0.112\* product mix + .285\* product positioning.

Table: Product Innovation

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	Beta	Std. Error	Beta		
(Constant)	2.438	0.28	-----	8.703	0
Product Innovation	0.273	0.056	0.339	4.886	0
Product Mix	0.285	0.058	0.591	4.887	0
Product positioning	-0.112	0.047	-0.236	-2.389	0.018

Source: Calculated with the researchers survey data

In the model summary we find that 32.6% of the role of innovations on financial performance of commercial banks in Nairobi County can be accounted for by Product Innovation, product mix and product positioning the adjusted R square is 0.294.

**Table: Model Summary of Product Innovation and the role of innovations on financial performance of commercial banks in Nairobi County**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.571	0.326	0.294	0.45298

Source: Calculated with the researchers survey data

**Marketing Innovation:**

The last regression involved the whole model with Marketing Innovation (independent) and the role of innovations on financial performance of commercial banks in Nairobi County (dependent). The table showed that Marketing Innovation, pricing, packaging and product promotion has a significant direct effect on the role of innovations on financial performance of commercial banks in Nairobi County. The equation for the model becomes.

$$\text{Role of innovations on financial performance of commercial banks in Nairobi County} = 0.690 + 0.258 * \text{Marketing Innovation} + 0.042 * \text{packaging} + 0.392 * \text{product promotion}$$

**Table: Regression coefficients on Marketing Innovation and the role of innovations on financial performance of commercial banks in Nairobi County, kenya**

Model	Unstandardized Coefficients		Standardized Coefficients		T	Sig.
	Beta	Std. Error	Beta			
(Constant)	0.69	0.432			1.355	0.178
Marketing Innovation	0.258	0.61	0.185		2.572	0.011
packaging	0.142	0.45	-0.195		-1.514	.000
product promotion	0.392	0.063	-0.127		2.267	0.025

The R square value found is that 62% of the Role of innovations on financial performance of commercial banks in Nairobi County can be credited to Marketing Innovation, pricing, packaging and product promotion. The adjusted R square value is 0.720.

**Table: Model Summary Marketing Innovation and the role of innovations on financial performance of commercial banks in Nairobi County, kenya**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.688	0.62	0.72	0.39998

Source: Calculated with the researcher survey data

**inferential Analysis:**

This section presents the results of the correlation and regression analysis done in the study to evaluate the nature of the relationship between the dependent and independent variables. Pearson Product Moment Correlation was used. An ANOVA test was also done to establish whether there were indeed significant differences between sample means.

**Correlation Analysis:**

In this section the Pearson Correlation analysis was done to examine how the various variables are related and the strength and directions of their relationships. According to Mugenda and Mugenda (2008), correlation technique is used to analyze the degree of relationship between two variables. Variables for further statistical analysis such as regression analysis are selected based on the value of their correlation coefficient. The computation of a correlation coefficient yields a statistic that ranges from -1 to +1. This statistic is called a correlation coefficient (r) which indicates the relationship between the two variables where the bigger the correlation the stronger the coefficient between the two variables being compared (Carver *et al.*, 2009).

In testing statistical significance between variables, the level of significance ( $\alpha$ ) is often set at 0.05 or 0.01 and the probability (p-value) should be less than the ( $\alpha$ ) value to conclude that a significant relationship exist between the variables (Mugenda, 2011). The direction of the relationship is also important in that if it is positive (+) it means that there is a positive relationship between the two variables and this means that when one variable increases, the other variable increases or when one variable decreases the other variable also decreases. A negative relationship (-) means that as one variable decreases, the other variable increase and vice versa and hence an inverse relationship. The score 1 indicates perfect correlation, which is found only when a variable is correlated with itself while 0 indicates no correlation at all hence no need for further analysis on such variables with no relationship. The Pearson's correlation coefficient (r) can vary from -1 to +1. The larger the value, the stronger the relationship. A coefficient of +1 indicates a perfect positive relationship and a coefficient of -1 indicates a perfect negative relationship. 0 indicates that there is no linear relationship between the variables (Field, 2009).

The values for interpretation according to statistics are as follows (Pallant, 2007):, Rho = .10 to .29 or -.10 to -.29 (small effect), Rho = .30 to .49 or -.30 to -.49 (medium effect), Rho = .50 to 1.0 or -.50 to -1.0 (large effect)

To test the hypotheses the p-value was computed. The p-value measures the support (or lack thereof) given by the sample for the null hypothesis. Accepting or rejecting the null hypothesis relies on the p-value, whether it is smaller than or equal to the significance level. In this case the level of significance is .05. In the following table the correlation values are presented. The researcher carried out correlation analysis between the variables of the study using Pearson correlation coefficient to test whether there existed interdependency between the independent variables and also whether the independent variables were related to the dependent variable and the correlation results presented in Table below.

**Table: Correlation Matrix**

		1	2	3	4	5
1	The role of innovations on financial performance of commercial banks in Nairobi County	1				
2	Product Innovation	.383**	1			
3	ICT integration	.247**	.324**	1		
4	Process Innovation	.294**	.408**	.516**	1	
5	Marketing Innovation	0.224**	.483**	.547**	.437**	1

The correlation coefficient results in Table above indicate that according to the study, there was a highly significant linear correlation between the independent variables and the dependent variable.

#### 4. SUMMARY, CONCLUSION, AND RECOMMENDATION

##### Summary of Major Findings:

The study found out that respondents were aware and were directly involved in the role of innovations on financial performance of commercial banks in Nairobi County. The study revealed that, product Innovation, ICT integration; Process Innovation and Marketing Innovation have significant effect on the role of innovations on financial performance of commercial banks in Nairobi County.

##### 1. Relationship between s product Innovation and Financial Performance.

Product Innovation that encompasses product mix, product quality and product positioning has a significant effect on the overall financial performance of the bank. This is so since consumers are offered products that are tailored to their needs and the product keeps on changing to suite the changing consumer dynamics this product innovation significantly explains the financial performance of Kenya Commercial Bank Group branches.

##### 2. Relationship between Marketing innovation and Financial Performance.

Marketing is the how things are sold to the clientele a good marketing strategy is usually followed by a good marketing innovation hence leading to better and overall financial performance of an organization.

Kenya Commercial Bank Group has been innovative through marketing via means of pricing packaging and product promotion several views have been raised on how customers will be well served through the pricing and packing of the bank products a good example is the KCB Group bundle strategy of Marketing in our case it's clear that marketing Innovation significantly affects the overall financial performance.

#### **Conclusion:**

Product Innovation *and* Marketing Innovation should be strengthened to encompass more areas, more involvement on innovations leads to better or increased financial performance of commercial banks in Nairobi County. The building of a more robust and inclusive innovation systems should be the norm of the day in most financial institutions since all these innovations explain financial performance in more in depth and broader way and the more the innovation the better it is for financial performance.

#### **Recommendations of the Study:**

The study makes the following recommendations about the role of innovations on financial performance of commercial banks in Nairobi County. The recommendations are consistent with the literature review. The study recommends that the institutional infrastructure that supports innovation in commercial banks should be improved. This was involved restructuring the laws, offering advanced training to the respondents' who handle innovations directly. Also, the public institutions charged with dealing with innovation or facilitation of innovation in commercial banks should be reformed to enable them carry out their duties effectively.

#### **Suggestions for Further Research:**

The study did not consider the factors that affect the role of innovations on financial performance of commercial banks in Kenya. Therefore, another study should focus on the factors influencing the adoption of innovations on financial performance of commercial banking sector. The study has considered organizations in the banking sector only commercial banks, another study should focus on all the financial sectors in Kenya.

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