Innovation and Performance of Commercial Banks in Kenya

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Abstract

The objective of this study was to establish the relationship between innovation and performance of commercial banks in Kenya. The study sought to address the main gap identified in the literature namely limited local empirical studies focusing on the relationship between innovation and organizational performance. In order to address these gap, a hypothesis was formulated and tested on a sample of thirty two (32) commercial banks in Kenya. Simple regression analysis was used to test the hypothesis. The results indicate a significant positive relationship between innovation and organizational performance. The results indicate that investing on innovations in the banking sector can contribute to superior returns. The findings of this study are useful to various stakeholders including bank managers, shareholders, regulators and the government. Future research efforts can be extended to different contexts such as the manufacturing sector so as to test the validity of the findings of this study. Further studies on the banking sector can also use longitudinal research design to track changes over time.

Keywords

Innovation, Performance, Commercial Banks, Kenya

I. Introduction

Innovation refers broadly to the introduction of something new. It can be a new or significantly improved product, service, process, technology, administrative structure among others. Organizations adopt innovations in response to changes in the internal and external environment. These changes can be in relation to technology, nature of competition, customer preferences or simply to improve organizational performance. According to Schumpeter (1934), innovation is a form of creative destruction whereby wealth is produced by unsettling existing market structures through the introduction of new products or services.

The banking environment in Kenya has changed drastically over the last three decades following the introduction of numerous innovations such as Automated Teller Machines (ATMs), mobile banking and agency banking. However, the turning point in the banking sector came following the introduction of M-Pesa. M-Pesa quickly captured a significant market share of cash remittances, a service which used to be offered mainly by commercial banks. The application of M-Pesa is now expected to cause a major transformation of the banking sector following the launch of M-Shwari between Safaricom and Commercial Bank of Africa in which customers earn interest on deposits and access micro-loans. M-Shwari has created a furor in the banking sector forcing many to invest heavily in technology to retain and attract customers. This is because of the realization that M-Shwari has elevated Commercial Bank of Africa enabling it to overtake one of Kenya`s biggest banks, Equity bank to become the bank with the highest number of loan accounts (CBK Annual Report, 2014). Other banks are now playing catch-up. Those which have now introduced modified

versions of M-Pesa and M-Shwari innovations include Kenya Commercial Bank (M-Benki), Barclays Bank of Kenya, NIC Bank (NIC NOW), and in the recent period Co-operative Bank of Kenya (M-Co-op Cash). As an offshoot of mobile banking, agency banking has gained popularity recently. It has been adopted by several banks such as Equity Bank, Kenya Commercial Bank and Co-operative Bank. The current scenario in the banking sector highlights the existing disparity in the application of innovations in the banking sector. The managerial concern facing many banks which have not embraced these innovations is: Does investing heavily on innovations improve performance?

Most studies in the banking sector have largely investigated commercial banks in mature and stable economies. In other words, most of the studies have been carried out in the developed world and very few in developing countries. Similarly, although some studies have explored the relationship between innovation and performance, the empirical results emanating from these studies have been inconsistent and often led to conflicting evidence on the relationship between innovation and performance. For instance, Aliyu and Tasmin (2012) found that innovations contribute to competitive advantage and profitability through the introduction of new products, quality improvement and substitution of outdated products. Geroski et al. (1993) found that the number of innovations produced by a firm has a positive effect on its profitability, but the effect is, on average, modest in size. They argue that innovations have had a far greater impact on users' productivity growth than on producers' productivity. On the other hand, Cho and Pucik (2005) established an insignificant relationship between innovation and performance. Therefore, this study fills the research gap relating to knowledge and understanding of the relationship between innovation and performance of commercial banks in Kenya. It sought to answer the following managerial concern facing many banks which have not fully embraced innovations: Do innovations improve the performance of commercial banks in Kenya? This study will help managers and business analysts understand the relationship between innovation and performance. To researchers and students of management the study will act as a point of reference and further research.

The rest of the paper is organized as follows: Section II explains the research design, section III presents the data analysis and interpretation, while section IV gives the conclusion of the study.

II. Research Design

The research design for the study was a survey. A survey was deemed more appropriate since this study involved relationships and comparative analysis. The survey results were used to explore the relationship between innovation and performance of the commercial banking institutions. The population of study consisted of all the 44 (CBK list, 2014) commercial banking

institutions operating in Kenya. Given that their number is not high, a census study was conducted.

Primary data was collected on innovation and organizational performance. The questionnaire method was preferred for the study because of the nature of the respondents who were deemed key custodians of information in their organizations and also because of the size of the population. The researcher used a semi-structured questionnaire for collecting the data. Questionnaires with Likert-type scales / cardinal scales were used. The respondents were either the head of Planning or that of Finance as was applicable. This was to ensure that the questionnaires were answered by people who were knowledgeable on innovation and performance.

III. Data Analysis and Interpretation

The study had predicted that innovation is directly related to performance of commercial banks in Kenya. Performance measure was obtained through principal components analysis using the four performance measures advanced by Kaplan and Norton (1992) namely financial perspective, customer perspective, internal business processes, and the learning and growth perspective. Innovation counts included process innovations, product innovations and distribution innovations. Simple linear regression analysis was used to address the following hypothesis.

H1: Innovation is directly related to organizational performance

The estimation equation is as follows:

$$PERF = \beta_0 + \beta_1 INN + e_1$$

Where:
PERF = Performance
INN = Innovation

A. Overview of Bank Profiles

1. Years of Operation

The number of years that the banks have been in operation is a key indicator of the growth trends in the industry. Table 1 shows the duration. It is indicated that 81.3 percent of the respondent banks have been operating in Kenya for over 15 years. However, it is also evident that a good number (12.5%) were established 6 to 10 years ago. In contrast, only one Bank joined in the last five years indicating new entrants could be finding the market quite challenging.

Table 1: Years of Existence of the Banks

Years of operation	Frequency/No. of banks	Percentage (%)
1-5	1	3.1
6-10	4	12.5
11-15	1	3.1
Over 15	26	81.3
Total	32	100

2. Distribution of Banks by Size

The sizes of the commercial banks in terms of asset base and profitability are as shown in Table 2. The findings indicate that most respondent banks (47%) are of small size, followed by medium at 34% and lastly large banks at 19%.

Table 2: Bank Size

Size of bank	Frequency/No. of banks	Percentage %
Small	15	47
Medium	11	34
Large	6	19
Total	32	100.0

3. Ownership

Most commercial banks in Kenya are purely locally owned. Those owned by the government are quite few. The results of bank ownership are represented in Table 3.

Table 3: Ownership

Ownership	Frequency	Percentage (%)
Local	12	38
Foreign	6	19
Local/Foreign	11	34
Government	1	3
Government/private	2	6
Total	32	100

From the results in Table 3, purely locally owned represented the highest ownership with 38% of the banks. Banks which are purely foreign owned were 19% while both locally and foreign owned were 34%. Government owned represented 3% whereas Government and private owned were 6%. We can therefore conclude that the majority of the commercial banks in Kenya are purely locally owned while Government ownership is small.

B. Correlation Analysis

This section presents the results of the correlation analysis of study variables using Pearson's product-moment correlation. Correlation results are reported at a significance level of 0.05 and 0.01. As shown in Table 4 below, there is a positive correlation between performance and innovation which is statistically significant (innovation and performance: $r = .634$, $p<0.01$).

Table 4: Correlations

		Performance	Innovation
Performance	Pearson Correlation	1	.634**
	Sig. (2-tailed)		.000
	N	32	32
Innovation	Pearson Correlation	.634**	1
	Sig. (2-tailed)	.000	
	N	32	32
**. Correlation is significant at the 0.01 level (2-tailed).			
*. Correlation is significant at the 0.05 level (2-tailed).			

C. Regression Analysis

A simple linear regression analysis was carried out and the results are shown in Tables 5(a) and 5(b). The results in Table 5(a) show that innovation has a significant and positive effect on organizational performance ($R^2 = 0.402$ and F = 20.202). The value of R^2 of .402 implies that innovation accounts for 40.2%

of the variation in organizational performance. The standardized beta coefficient (Beta = 0.634, t = 4.495, p< 0.01) indicates that innovation makes significant contribution to organizational performance. Therefore, innovation is a good predictor of organizational performance. These results are consistent with the reported correlation (R = 0.634) between innovation and performance. The model is highly significant based on the ANOVA results as shown in Table 5(b). The F value for the model was statistically significant (p-value < 0.01) which shows a strong fit of the regression model.

Table 5(a): Simple Linear Regression Results for Innovation and Performance

Model	Coefficients[a]			t	Sig.	R	R^2	F
	Unstandardized Coefficients		Standardized Coefficients					
	B	Std. Error	Beta					
(Constant)	2.453	.308		7.956	.000			
Innovation	.058	.013	.634	4.495	.000	.634	.402	20.202
Dependent Variable: Performance Predictors: (Constant), Innovation								

Table 5(b): Simple Linear Regression Results for Innovation and Performance

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.699	1	8.699	20.202	.000b
	Residual	12.918	30	.431		
	Total	21.617	31			
a. Dependent Variable: Performance						
b. Predictors: (Constant), Innovation						

These results confirm H$_1$ and lead to conclusion that innovation has a statistically significant direct effect on organizational performance. The estimated model can be expressed in equation format:

$$PERF = 2.453 + 0.634INN$$

IV. Conclusion

The objective of the study was to establish the effect of innovation on performance of Commercial Banks in Kenya. The study had predicted that innovation is directly related to organizational performance. The simple regression results indicate that innovation has indeed a significant and positive effect on organizational performance. This led the researcher to accept the hypothesis that innovation is directly related to organizational performance.

These findings are in line with various studies that have found a significant positive relationship between innovation and performance (Aliyu & Tasmin, 2012; Marques & Ferreira, 2009; Baba, 2012; Damanpour et al., 2009). On the other hand, the findings are contrary to results obtained by Cho and Pucik (2005) who established an insignificant relationship between innovation and performance. In addition, the findings do not support Geroski et al. (1993) study which found a rather modest effect of innovation on performance.

The significant and positive effect of innovation on organizational performance in the banking industry can be attributed to the ability of innovations to bring down the operational costs of organizations, to improve the quality and variety of banking services, and to improve organizational productivity.

V. References

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