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# Financial Innovation Strategies and Performance of Commercial Banks in Kenya

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#### Abstract

**Purpose:** The purpose of the study was to establish the impact of financial innovation strategies on performance of commercial banks.

**Methodology:** The study used census approach and targeted all the 41 commercial banks in Kenya. This is because the population is small. Senior Operations and the Senior Finance managers working in the headquarters of the commercial banks were targeted. This was therefore a total of 82 respondents. The research adopted cross-sectional survey. The study used both primary and secondary data. Primary data was collected using questionnaires while Secondary information was acquired from the commercial banks' audited financial statements. After quantitative data was obtained through questionnaires, it was prepared in readiness for analysis and keyed into statistical package for social sciences (SPSS) computer software (version 22) for analysis.

**Findings:** Results from both primary and secondary data showed that financial innovation strategies had a positive and significant effect on performance of commercial banks.

**Recommendation:** Policy makers have to be wary about increasing level of competition in the banking industry and put in place appropriate competitive strategies to mitigate the challenges that come with the competition. These competitive strategies will enhance their performance and eventual survival in the industry.

Keywords: Financial innovation strategies, performance, commercial banks.



#### **1.0 Introduction**

#### **1.1 Background of the Study**

Financial innovation is a conduct in which new fiscal tools and new financial technology, organizations and markets are being created and popularized (Tufano, 2015). It is designing, developing and implementing innovative financial tools and methods as well as formulating practical answers to finance problems. Financial innovations are among the most crucial competitive weapons, according to Sandvik (2003), and are usually seen as the fundamental capability of a company. Because of the investment limitation facing a firm, it is regarded as an efficient way of improving productivity of the firm. According to Ignazio (2017) financial innovations are new products such as debit cards, credit cards, prepaid cards, Mpesa, new production processes such as electronic record keeping for securities and credit scoring. In addition, Ignazio (2017) found out that banks have been able to boost their revenue through the use of POS terminals. The bank terminals enable the payment of goods and services at merchant outlets with modes other than cash, for example, Mobile Wallet (M-Wallet) which are faster. Makur (2017) professes that Kenyan banks have obligation to constantly invent new goods, services and governance in order to improve their financial performance.

Banking is in a new golden age. At this new time, banks world-wide face fierce competition and unending volatility from many other financial players. They are paving the way for a climate of tremendous economic productivity and changing consumer behavior, expectations and population conditions (Nyamongo & Temesgen, 2015). Further complexities are added to the selection process by conflicting aspirations of investors, buyers, regulatory bodies and central banks (Central Bank of Kenya, 2015).

Due to its firmness during the current financial crisis, the Canadian banking industry is detained in great favor by its global complements (Canadian Banks, 2016). However, Canada's banks, which gained admiration around the world for their performance throughout the financial catastrophe of 2008, are not insusceptible to these forces. Through their resilient capital ranks and track record through the financial catastrophe, banks in Canada are well situated within the worldwide financial services municipal (Canadian Banks, 2016). In addition, there has been long lasting commitment to the financial innovation strategies through in house initiatives and partnerships in innovation and technology programs. There has also been increasing active role of the Canadian banking industry management in supporting financial innovation (Canadian Banks, 2016).

The performance of Banks in Nigeria has been declining (Obamuyi, 2018). The overall revenue of the banks in Nigeria declined by 13% from 2012 to 2017. The declining performance was associated with declining investments in value innovation strategies. Most banks could not be able to invest in innovation programs. This might have been triggered by the international economic upheavals and the assumption that most of the parameters used to estimate banks' achievements have been threatened. However, some banks have been hastily internationalizing; a tendency most evidently confirmed by the number of banks in Nigeria opening new branches through West Africa while new actors, particularly foreign banks might soon arise. Many banks have resumed to the capital market to shore up their investors' funds past the essential minimum level, to allow them play more vigorously in the international arena (Oluwatolani et al., 2014).

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However, the banks that have excelled in origination, servicing, distribution or making markets have been considered to have first succeeded in implementing value creation strategies. The unique resources held by a firm in Kenyan banks helped in value creation for the customers. In addition, bog banks were able to invest more in innovation and thus enabling them to perform better (Oloko, 2012). Sia et al., (2016) further added that for banks to gain the value creation, they will have to transform the way they bank their processes and the way they operate.

# **1.2 Statement of the Problem**

Incorporation of financial innovation strategies will go a long way in ensuring that banks remain efficient in their operations. One way Kenyan commercial banks have attempted to wither competition is the adoption of market expansions strategies to realize larger customer base like opening new branches and operating beyond Kenyan borders (Kungu, Desta, & Ngui, 2014). However, World Bank (2017) reported a steady decline in banks' financial results over the ages as reflected in their profit margins (ROE) from 23.10 percent in 2011 to 21.99 percent in 2012, 20.94 percent in 2013, then to 20.88 percent in 2014 and further decline to 17.39 percent in 2015. The ROE of Kenya's commercial banks too far decreased in 2016, essentially attributable to Kenya's implemented capping bill of 2016. Likewise, in its 2017 Cooperative Bank reported a downturn in revenue by 10.4 percent from the previous year. Similarly, in the year 2018, Diamond Trust Bank posted a decline of 10.1% in full year 2017 profit after tax to Kshs 6.4 Billion. From the earnings report, there was a steep increase in gross non-performing loans by a massive 97% to Kshs 14.8 Billion (CBK, 2017). This is a clear indication of poor performance of most commercial banks in Kenya.

The poor performance of commercial banks has been associated with the stiff competition that the Kenyan banking industry is experiencing from new entrants like mobile phone companies and international banks (CBK, 2015). In addition, the increasing number of SACCOs in the country has shifted customer focus from the commercial banks. This could be due to the fact that SACCOs have friendlier services which are less costly. The dominant mobile service provider, Safaricom and Airtel are also a threat to the banking industry. Many people consider saving money with these telecommunication firms as opposed to banks.

# 1.3 Objectives of the Study

To establish the impact of financial innovation strategies on performance of commercial banks.

# 2.0 Literature Review

# 2.1 Theoretical Review

# **2.1.1 Theory of Innovation**

The hypothesis was projected by Lieberman and Montgomery (1988). The hypothesis contends the organization that generates a higher income for their corresponding industry will thrive whereas the contenders acquired whatever is left to them. Reutilizing this value disparity every year will be continuously linked to the originating institution. Only if a firm consistently develops value propositions that are acknowledged by the industry will the desired outcome of generating excellence be achieved. Innovation is a reinvestment task that requires altering the dynamics of a range of parameters that describe a system. Therefore, the hypothesis of origination is considered



valid towards the current research paper. This is due to the fact that it tells the value-creation tactics of the independent variable.

This theory further argues that there are first, second and late movers. According to Rogers (2010) first movers are movers that aim on a certain invention. They assume no firm has yet presented the invention and thus they are different and new. Second movers focus on fairly early inventions. They are close to first movers than late movers. Late movers present invention that participants already know. Besides, the point of technological discovery is occasionally very diverse from the effect of an invention. Inventions that are derived technologically can occasionally have truly innovative effects; equally, inventions that need extreme technology can bring forth very minimal change. The highest level of technology to project and produce in each and every group is very costly (Tushman & Anderson, 1986).

As per this theory, organizations could create savings and jobs through the findings of the originators and the investors. Innovative organizations therefore create new ways to generate more revenues. Soon, an advancement is viewed in the market place, as a new product that followers and competitors imitate as a result of supernormal profits the originator enjoys. The theory seeks to distinguish businesses with revolutions that create profitable conditions for modern enterprises and business owners who generate loan for the financing and growth of new enterprises (Schumpeter, 1939). The theory is relevant to the study as it shows the value of technologically innovating an organization. It showed how the banks influence their products and processes technological innovations to a competitive advantage.

# **2.2 Empirical Review of Literature**

Matheka (2016) established that 64.9 percent of the variety in Kenya's microfinance establishments' competitive advantage was explained by separation, minimal effort technique, uncontested market space, opportunities and hazards, and appreciated the development system. The study recommended that operating chiefs in MFIs should give due consideration to customer allegiance, as existence in this volatile environment is extremely subject to the ability to hold a larger clientele in comparison to rivals. The scholars recognized that the factors influencing the implementation of Blue Ocean tactics in banks were the necessity to develop and seize new demands (84 percent), break the value of cost replacement (72 percent), and integrate the organization's overall system operations (60 percent).

Kiiyuru (2014) showed that practices for innovation are essential to the long term growth and sustainable development of the bank. Financial institutions have been improving their profits with profound development strategies. The survey prescribed that financial institutions should embrace the enactment of innovative tactics to include expansion of the product range, product replacement, product improvement, product repositioning as well as unique product creation in order to be more profitable, grow quickly, invest more and also gain more revenue in the short term and in the future.

Mabrouk and Mamoghli (2014) conducted a research on Financial Innovation Dynamics and Banking Companies Performance with focus on emerging banks in Nigeria. The research examined the influence on bank performance, the result of adopting two types of financial innovations, that is, item innovation and system innovation. Two adoption patterns were included in the analysis, the first mover in adopting financial advancement and the first mover's follower.



The results exposed that first moving item innovation initiative boosts attractiveness whereas process invention has a positive outcome on cash flow and productivity. Banking institutions emulating are less successful than first movers and less efficient.

Githakwa (2014) did a study on performance and organizational innovations in Kenyan commercial banks. The study examined the 44 Central Bank of Kenya's registered banks. In the assessment of the connection between financial innovation and profitability, both internal and external environmental factors were considered as indicators of the productivity of Kenyan commercial banks. The results deduced that banks conceived financial innovation as a way of having an impact on revenue results. Moreover, the research indicated that implementing financial innovation needs more banks to have a lot more resources and minimize operating costs, lower costs per transaction, and profoundly make it possible for banks to meet client's needs. Implementation of products, processes and organizational innovation makes business banks more responsive and contributes to acquiring of competent bank staff, innovative products and bank growth.

Munywoki (2016) carried out a research on the profitability implications of technological development on Kenya's commercial banks. Secondary data displayed that the independent variables explained 78 per cent of variation in the dependent variable. Further, a p-value of + 0.12 was recognized, establishing a clear relationship between the determinant variables and the income level. Innovations and profitability were concluded to be having a strong positive relationship. Kiptoon (2014) findings showed that value innovations put into place eleven years previously actually propelled the firm to new levels of performance. The research found that the assertive application of unique value innovations strengthened the strategic standpoint of the organization. However, it was also found that while the blue ocean strategy improved the growth prospects of the organization, it was inadequate when used in a fast-changing, competitive environment.

# 3.0 Research Methodology

In Kenya, there are 41 commercial banks which were targeted by the study. The study used census approach and targeted all the 41 commercial banks in Kenya. This is because the population is small. Senior Operations and the senior Finance Managers working in the headquarters of the commercial banks were targeted. This was therefore a total of 82 respondents. The research adopted cross-sectional survey. The study used both primary and secondary data. Primary data was collected using questionnaires while secondary information was acquired from the commercial banks' audited financial statements. After quantitative data is obtained through questionnaires, it was prepared in readiness for analysis and keyed into statistical package for social sciences (SPSS) computer software (version 22) for analysis.

#### 4.0 Results and Discussions

# 4.1 Descriptive Results

# 4.1.1 Descriptive Results for Primary Data

Descriptive results for financial innovation Strategies were shown in table 1.



#### Table 1: Descriptive results for financial innovation strategies

Statement	Strongly	Dicograc	Noutral	Agnoo	Strongly	Maan	Std.
Statement	Disagree	Disagree	neutrai	Agree	Agree	Mean	Dev
Use of ATMs have expanded the income generating potential of the bank	14.10%	4.20%	11.30%	59.20%	11.30%	3.49	1.19
The bank has been continuously launching new services to meet customer requirements	7.00%	15.50%	21.10%	38.00%	18.30%	3.45	1.17
Adoption of real time transactions enables the bank effectively serve the customers	4.20%	5.60%	5.60%	49.30%	35.20%	4.06	1.01
POS terminals have had a positive effect of increasing commission based income	5.60%	21.10%	15.50%	1.40%	56.30%	3.82	1.44
Electronic funds transfer has had a positive effect of increasing commission fee based income	8.50%	7.00%	5.60%	36.60%	42.30%	3.97	1.24
Average						3.76	1.21

The results revealed that majority of the respondents who were 70.5% agreed with the statement that use of ATMs have expanded the income generating potential of the bank (Mean = 3.49). The results were varied from the mean with a standard deviation of 1.19. The results further showed that majority of the respondents who were 56.3% agreed with the statement that the bank has been continuously launching new services to meet customer requirements (Mean = 3.45). The results were varied from the mean with a standard deviation of 1.17. These findings agreed with Makur (2017) who professes that, Kenyan banks have obligation to constantly invent new goods, services and governance in order to improve their financial performance.

In addition, the results showed that majority of the respondents who were 84.5% agreed with the statement that adoption of real time transactions enables the bank effectively serve the customers (Mean = 4.06). The results were varied from the mean with a standard deviation of 1.01. The results further showed that majority of the respondents who were 57.7% agreed with the statement that POS terminals have had a positive effect of increasing commission based income (Mean = 3.82). The results were varied from the mean with a standard deviation of 1.44. The results further showed that majority of the respondents who were 78.9% agreed with the statement that electronic funds transfers had had a positive effect of increasing commission fee based income (Mean = 3.97). The results were varied from the mean with a standard deviation of 1.24. These findings agreed with Kiiyuru (2014) who prescribed that financial institutions should embrace the enactment of innovative tactics to include expansion of the product range, product replacement, product improvement, product repositioning as well as unique product creation in order to be more profitable, grow quickly, invest more and also gain more revenue in the short term and in the future.



Descriptive results for bank performance were shown in table 2.

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
The return on assets have been increasing for the last five years	12.70%	2.80%	16.90%	53.50%	14.10%	3.54	1.17
The banks market share have increased over the last five years	11.30%	7.00%	16.90%	43.70%	21.10%	3.56	1.23
Return on investment has been increasing to a great extent for the last five years	12.70%	4.20%	7.00%	52.10%	23.90%	3.70	1.25
The return on equity has been increasing for the last five years	8.50%	21.10%	22.50%	31.00%	16.90%	3.27	1.22
The bank has managed to open new branches over the last five years	8.50%	18.30%	14.10%	28.20%	31.00%	3.55	1.33
Average						3.52	1.24

The results showed that majority of the respondents who were 67.6% agreed with the statement that the return on assets have been increasing for the last five years (Mean=3.54). However, the answers were varied from the mean with a standard deviation of 1.17. The results further showed that majority of the respondents who were 64.8% agreed with the statement that the banks market share have increased over the last five years (Mean=3.56). However, the answers were varied from the mean with a standard deviation of 1.23.

In addition, the results displayed that majority of the respondents who were 76.0% agreed with the statement that return on investment has been increasing to a great extent for the last five years (Mean=3.70). However, the answers were varied from the mean with a standard deviation of 1.25. The results further showed that majority of the respondents who were 47.9% agreed with the statement that the banks market share have increased over the last five years (Mean=3.27). However, the answers were varied from the mean with a standard deviation of 1.22. The results further showed that majority of the respondents who were 59.2% agreed with the statement that the bank has managed to open new branches over the last five years (Mean=3.55). However, the answers were varied from the mean with a standard deviation of 1.33. The study findings agreed with Mumbi (2016) who indicated that there was a general increase in performance of most banks in Kenya.

The results showed that the average mean for bank performance was 3.52 implying that majority of the respondents agreed with the statements on bank size. However, the answers were varied from the mean with a standard deviation of 1.24. The respondents were further asked to propose one change on their bank performance. Most of the respondents indicated that their bank should not only focus on increase in profits but also on giving back to the society. Some of the programs that were mentioned that banks should involve in included; educating the poor, giving food to the



needy in the society. This will enable people to identity more with them and thus attract more customers.

## 4.1.2 Descriptive Results for Secondary Data

The descriptive results for secondary Data are presented in table 3.

#### Table 3: Descriptive results for secondary data

	Minimum	Maximum	Mean	Std. Deviation
ROA	4.21	22.67	12.2277	3.02685
Number of new products	1	55	11.37	8.668

The results showed that the mean of ROA was 12.228 in the commercial banks between the year 2015 and 2019. The minimum ROA was 4.21 while the maximum ROA was 22.67. The results also showed that the ROA was varied from the mean of all banks with a standard deviation of 3.027. The results showed that the mean number of new products was 11 in the commercial banks between the year 2015 and 2019. The minimum number of new products was 1 while the maximum was 55. The results also showed that the number of new products were varied from the mean of all banks with a standard deviation of 8.668.

#### **4.2 Correlation Results**

## 4.2.1 Correlation Results for Primary Data

Correlation results for the association between the independent variables and the dependent variables were presented in table 4.

#### Table 4: Correlation results for primary data

		Performance	Financial Innovation strategies
Performance	Pearson Correlation	1	
	Sig. (2-tailed)		
Financial Innovation			
Strategies	Pearson Correlation	.700**	1
	Sig. (2-tailed)	0.000	

The results revealed that financial innovation strategies had a strong positive and significant association with performance of commercial banks (r=0.700, p=0.000). This implied that financial innovation strategies would lead to improvement in performance.

#### 4.2.2 Correlation Results for Secondary Data

Correlation results for the association between the independent variables and the dependent variables were presented in table 5.



		ROA		Financial Innovation strategies	;
ROA	Pearson Correlation		1		
	Sig. (2-tailed)				
Financial innovation					
strategies	Pearson Correlation	.638**		]	l
	Sig. (2-tailed)	0.000			

## Table 5: Correlation results for secondary data

The results revealed that financial innovation strategies had a strong positive and significant association with performance of commercial banks (r=0.638, p=0.000). This implied that financial innovation strategies would lead to improvement in performance.

#### **4.3 Regression Results**

#### **4.3.1 Primary Data Regression Results**

# Table 6 shows the model summary results. **Table 6: Model summary for financial innovation strategies**

Model		R	R Square	Adjusted R Square	Std. Error of the Estimate
	1	.700 <sup>a</sup>	0.489	0.482	0.66386

The results showed that the R was 0.700 while the R squared was 0.489. This means that financial innovation strategies explain 48.9% of the variations in the dependent variable which is performance. This also implies that 51.1 % of the variation in the dependent variable is attributed to other variables not captured in the model.

The results for ANOVA were presented in table 7.

Table 7: ANOVA results for financial innovation strategies

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	29.14	1	29.14	66.121	.000 <sup>b</sup>
Residual	30.409	69	0.441		
Total	59.549	70			

Table 7 showed F statistic of 66.121 and a p value of 0.000. This showed that financial innovation strategies had a significant effect on performance of commercial banks. The regressions of coefficient results were presented in table 8.



	Unstandardiz Coefficients	ed	Standardized Coefficients		Sig.	
	β	Std. Error	Beta			
(Constant)	0.673	0.359		1.874	0.065	
Financial innovation strategies	0.759	0.093	0.7	8.132	0.000	

#### Table 8: Regression of coefficient results for financial innovation strategies

Table 8 showed that financial innovation strategies have a regression of coefficient of 0.759 and a p value of 0.000. This means that financial innovation strategies had a positive and significant effect on performance of commercial banks. These findings agreed with Makur (2017) who professes that, Kenyan banks have obligation to constantly invent new goods, services and governance in order to improve their financial performance. These findings also agreed with Munywoki (2016) who concluded that innovations and profitability have a strong positive relationship.

#### $Y = 0.673 + 0.759 X_4$

Where Y is performance while X<sub>4</sub> is financial innovation strategies

#### **4.3.2 Secondary Data Regression Results**

Table 9 shows the model summary results for secondary data. **Table 9: Model summary for financial innovation strategies** 

Model		R	R Square	Adjusted R Square	Std. Error of the Estimate
	1	.638	0.407	0.404	2.33643

The results showed that the R was 0.638 while the R squared was 0.407. This means that financial innovation strategies explain 40.7% of the variations in the dependent variable which is performance. This also implies that 59.3% of the variation in the dependent variable is attributed to other variables not captured in the model. The results for ANOVA were presented in table 10.

	Sum of Squares	df	Mean Square	$\mathbf{F}$	Sig.
Regression	686.794	1	686.794	125.812	.000
Residual	998.979	183	5.459		
Total	1685.773	184			

Table 10: ANOVA results for financial innovation strategie	ilts for financial innovation strategies	fina	for	results	VA	ANO	10:	Table
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Table 10 showed F statistic of 125.812 and a p value of 0.000. This shows that financial innovation strategies had a significant effect on performance of commercial banks. The regressions of coefficient secondary data results were presented in table 11.



	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	9.693	0.284		34.144	0.000
Financial innovation strategies	0.223	0.02	0.638	11.217	0.000

#### Table 11: Regression of coefficient results for financial innovation strategies

Table 11 showed that financial innovation strategies have a regression of coefficient of 0.223 and a p value of 0.000. This means that financial innovation strategies had a positive and significant effect on performance of commercial banks. These findings agreed with Makur (2017) who professes that, Kenyan banks have obligation to constantly invent new goods, services and governance in order to improve their financial performance. These findings also agreed with Munywoki (2016) who concluded that innovations and profitability have a strong positive relationship.

#### $Y = 9.693 + 0.223 X_4$

Where Y is performance while X<sub>4</sub> is financial innovation strategies

# 4.4 Hypothesis Testing

The hypothesis stated that financial innovation strategies do not have a significant influence on performance of commercial Banks. From the primary data regression results Table 7 the p value was 0.000 which was less than 0.05. Therefore the null hypothesis financial innovation strategies do not have a significant influence on performance of commercial Banks was rejected. From the secondary results Table 10 the p value was 0.000 which was less than 0.05. Therefore the null hypothesis financial innovation strategies do not have a significant influence on performance of commercial Banks was rejected. From the secondary results Table 10 the p value was 0.000 which was less than 0.05. Therefore the null hypothesis financial innovation strategies do not have a significant influence on performance of commercial Banks was rejected. Therefore, the researcher concluded that financial innovation strategies have a significant influence on performance of commercial Banks. These findings also agreed with Munywoki (2016) who concluded that innovations and profitability have a strong positive relationship.

# **5.0** Conclusions

The study also concluded that financial innovation strategies have a positive and significant effect on performance of commercial banks. The study also concluded that expansion of income generating activities enhances performance of commercial banks. Launching of new services and products that meet customer requirements enhances their performance. In addition, adoption of real time transactions enhances commercial banks to effectively serve their customers. In addition, electronic funds transfer has had a positive effect of increasing commission fee based income.

#### **6.0 Recommendations**

Policy makers have to be wary about increasing level of competition in the banking industry and put in place appropriate competitive strategies to mitigate the challenges that come with the competition. These competitive strategies will enhance their performance and eventual survival in the industry. Another recommendation from this study is that commercial banks ought to continuously launch new services to meet customer requirements. Commercial banks should adopt



real time transactions since they enable the bank to effectively serve the customers. The study also recommends that banks and other financial institutions ought to invest more on assets since this will help in improving their performances. Banks also ought to increase the products and services they offer to customers since this will boost their performance.

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