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THE EFFECT OF FINANCIAL INNOVATIONS ON MARKET CAPITALIZATION OF LISTED COMMERCIAL BANKS IN KENYA

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Abstract*: In the recent years, the Kenyan Financial sector has been experiencing a significant change. Quite a number of financial products have been made using new efficient processes. The general objective of the study was to examine the effect of financial innovation, on Market capitalization of listed Commercial Banks in Kenya with specific objectives to determine the effect of Agency banking, internet banking and mobile banking on market capitalization of listed commercial banks, Agency banking to be specific has been very successful in propelling the performance of banks in many developing countries. The study targeted all the Nairobi Security Exchange listed commercial banks in Kenya as at 31st December 2018. The study will provide insights on the possible approaches that can enhance the sector's growth, performance and monitoring, and hence guide in regulation and policy formulation. The findings revealed that financial innovation specifically Agency banking and mobile banking had a statistically significant effect on the market capitalization of the listed commercial banks in Kenya. It is therefore recommended that listed banks should embrace financial innovation specifically agency banking through increasing the number of agents and should cover all regions in Kenya and encourage customers to be regular users of the agents so as to increase the number of transactions as this would increase the market share.*

Keywords*: Agency Banking, Commercial Bank, Financial Innovation, Market Capitalization*

1. Background of the study

Over the last decade, the role of banking in the process of financial intermediation has been undergoing a profound transformation, owing to changes in the global financial system. Kenya's banking system has seen some major financial innovations in the past decade as well as steps to promote financial inclusion. Financial innovations arise due to several reasons. Gorton and Metrick (2010) summarize the reasons for the growth of modern financial innovation as; reduction in bankruptcy costs, tax advantages, reduction in moral hazard, reduced regulatory costs, transparency and customization. A highly turbulent environment leads to successful innovation creating a unique competitive position and competitive advantage and lead to a superior performance (Roberts and Amit, 2003). This can only be maintained by ceaseless innovation and improvement of the product and the process (Porter, 2004). According to Ignazio (2007), financial innovation has not only opened up new opportunities for the sector participants, but also increased new market players arising with a range of new and innovative products in the financial market.

Today banking is known as innovative banking. Financial innovation associated with technological change has totally changed the banking philosophy and that is further tuned by the competition in the banking industry in Kenya. Challenging business environment within the banking system has created more innovation in the fields

of product, process and market. Information technology has given rise to new innovations in the product designing and their delivery in the banking and finance industries. Customer services and customer satisfaction are their prime work. Current banking sector has come up with a lot of initiatives that oriented to providing a better customer services with the help of new technologies. Banking through internet has emerged as a strategic resource for achieving higher efficiency, control of operations and reduction of cost by replacing paper based and labour intensive methods with automated processes thus leading to higher productivity and profitability.

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. The Central Bank of Kenya launched a Real Time Gross Settlement (RTGS) system known as the Kenya Electronic Payments and Settlement System (KEPSS) in July 2005 in an effort to modernize the country's payment system in line with global trends. E credit services e.g MSHWARI has revolutionized the banking sector. Developing nations like Kenya are progressively holding onto agency banking as a method for conveying banking services to numerous unreached individuals particularly families with low-pay. According to the 2009 National Financial Access Survey, 32 % of Kenya's bankable populace is still absolutely out of the money related administration circle. Difficulties in getting to monetary primary drivers are generally mindboggling expenses of getting banks services. Early encounters have appeared banks through agency's can fundamentally diminish set-up and conveyance costs, offering cash flow activities as it were or on the other hand a more extensive scope of budgetary administrations to clients who as a rule feel progressively good saving money at their nearby shippers than at customary bank branches (Lozano and Mandrile, 2009).

It has been found out that by December 2016, 18 commercial banks and 5 microfinance banks (MFBs) had contracted 53,833 and 2,068 agents spread all over the nation. This was in comparison with the earlier year, December 2015, where the number of operators shrunk by business banks and MFBs were 40,592 and 1,154 respectively. The change infers a 33 percent (expansion by 13,241 agents) and 79 percent (expansion by 914 operators/agents) development of number of operators shrunk by business banks and microfinance banks, respectively. More than 87 percent of the endorsed business bank agents were amassed in 3 banks with the biggest physical branch present namely: Equity Bank Ltd. with 25,428 operators, Kenya Commercial Bank Ltd. with 12,883 and Cooperative Bank Ltd. with 8,856. The general increment in the number of operators is ascribed to the developing certainty and adequacy of the agency banking model by the public and banks as an alternative of doing a banking business (CBK, 2016).

According to Cytonn Investments (2015), with the growth of mobile and agency banking, penetration in the market has increased and this led to a greater number of transactions as well as offer loan products to the mass market From the research findings of effect of Financial Innovations on financial performance of Savings and Credit Co-operative Societies in Kenya, a case of Kakamega Teachers Co-operative Society Limited by Songoro *et al.,* (2015) the results revealed that financial innovation factors do not account for 100% change in financial performance. The study examined effect of Process innovations specifically, Automation, Computerization and ATMs on Dividends per share and profitability.

The agency banking model is an innovative way which commercial banks use to reach the unbanked population. The model uses non-bank entities like shopping arcades, postal services offices, fuel stations, and internet cafe's, pharmacist, eateries and retail markets. According to CBK (2013), the agency banking approach which was inaugurated in year 2010 has continued to lead to improved access to banking services. By 2013, 13 commercial banks had been contracted by CBK to provide banking services through other third parties other

than the bank called bank agents. As at September 2013, 21,816 agents had been contracted by CBK translating to over 69.2 million transactions valued as Ksh. 366.8 billion. By June 2013, 13 banks had been accredited and 19,649 active agents had been contracted which translated to over 58.6 million transactions valued at Ksh. 310.5 billion. The number of banking transactions launched through agents raised from 10.2 million registered in the quarter ending June 2013 to 10.6 million transactions registered in the quarter ending September 2013. However, the value of banking transactions launched through agents declined from Ksh. 60.4 billion to Ksh. 56.3 billion over the same period. However, not all banks in Kenya have embraced agency banking.

The advocacy towards agency banking was the need to reach the un-banked population who could not be able to access banking services. The number of commercial banks that had embraced the model remain low (29% of the 43 banks) while some of the banks which have registered for agency banking are yet to roll out the operations (CBK, 2014). Three groups to a transaction exist in interpreting agency and these include: the customer, operator of the POS (Point of Sale) device who is also the agent and the bank. Before launching any transaction, each of the groups above should validate the transactions with two factors of security. Some of the security features to check would include a private card and a secret PIN. A bank can as well provide a unique secret key to each of its customers to avoid fraudulent POS terminals, upon which the bank would confirm to its clients before the transaction (Ivatury, 2008).

In the Kenyan context, Kimingi (2010) conducted an enquiry to examine effect of technological innovations on financial performance of commercial banks in Kenya. In his study, he adopted descriptive survey with the study population being commercial banks in Kenya. He used descriptive and content methods of data analysis because both qualitative and quantitative data was collected which was both primary and secondary data. To analyze the qualitative data content analysis was used where as to analyze the quantitative data, descriptive methods were utilized. Technological innovations for example ATM services, internet-based banking services, mobile phone were found to have been adopted by the commercial banks. Consequently, these technological innovations had contributed to improved bank sales, profits and return on equity hence increased financial performance of banks in Kenya through. The study determined that modem technological innovations are recommended for banks to remain highly competitive in the banking industry.

A similar study in commercial banks in Kenya by Njoki and Aloko (2015) entitled correlation between financial innovations and financial performance determined that out that financial performance of commercial banks was positively influenced by various financial innovations such as agency banking, online banking, mobile phone banking and ATM banking in a period of 5 years between 2009 and 2013. Similarly, financial performance of the banks in Kenya was found to be affected significantly and positively by financial innovativeness and innovativeness dimension. Contrary, a study by Korir and Sang (2015) on effect of financial innovation on bank performance of Kenyan commercial banks determined that an improvement in innovation level results to improved firm performance. An enquiry influence of innovation orientation on financial performance of Kenyan commercial banks by Koech and Makori (2014) on which they investigated the effect of market value, Technology and process innovations on financial performance of commercial banks concluded that technology innovation leads to higher market value of commercial banks in Kenya.

The significance of financial innovation is widely recognized. Many leading scholars, including Miller (1986) and Merton (1992), have highlighted the importance of new products and services in the financial arena. Empirically, Tufano (2002) showed that of all public offerings in 2000, 18% (on a dollar-weighted basis) consisted of securities that had not been in existence in 1994. These innovations are not just critical for firms in the financial services industry, but also impact other companies: for instance, enabling them to raise capital

in larger amounts and at a lower cost than they could otherwise. Nader (2011) analyzed the profit efficiency of the Saudi Arabia Commercial banks during the period 1998- 2007. The results of his study indicated that availability of phone banking, number of ATMs and number of branches had a positive effect on profit efficiency of Saudi banks. On the contrary he found that the number of point of sale terminals (POSs), availability of PC banking and availability of mobile banking did not improve profit efficiency.

Mwangi (2013) carried out a research on Innovations and financial performance in the financial industry in Kenya. The findings revealed that bank innovations had statistically significant influence on income, return on assets, profitability and customer deposits of commercial banks in Kenya and tests for significance also showed that the influence was statistically significant. The findings also revealed that mobile phones had a higher moderating effect than internet services on the bank innovations when influencing financial performance of commercial banks in Kenya. Based on the findings of the study, the researcher concluded that bank innovations influence financial performance of commercial banks in Kenya positively.

2. Statement of the Problem

Financial services market in Kenya has been subject to radical transformation since Kenya started to register economic growth in early 2003. Banks in Kenya started to compete for Kenya's hugely untapped and unbanked population. The distribution of retail financial services received growing attention in academic and professional literature as it has been hailed as an increasingly important factor in determining whether banks compete effectively in their chosen market Pasha (2009).The rapid rate of innovation in the financial sector as well as the rising importance of the sector in modern economics has generated a research question, what is the relationship between financial innovation and financial performance of commercial banks in Kenya? Motivated by this knowledge gap, this study seeks to determine the relationship between financial innovation and market capitalization of commercial banks in Kenya.

3. Research Hypothesis

This study sought to address the following pertinent research hypothesis;

H01: Agency banking innovation has no significant effect on the market capitalization of listed commercial banks in Kenya.

H02: Internet banking has no significant effect on market capitalization of listed commercial banks in Kenya.

H03: Mobile banking has no significant effect on market capitalization of listed commercial banks in Kenya.

4. Scope of the study

The banking sector in Kenya is comprised of 44 commercial banks, two mortgage finance companies, 130 foreign exchange bureaus and fifteen micro finance institutions (CBK, 2012). The companies Act, the Central Bank of Kenya Act Cap 491, the banking Act Cap 488 and the micro finance Act 2006 are the main regulators and governors of the banking industry in Kenya. The Acts are used along with prudential guidelines that are issued by the central bank of Kenya. In 1995 the exchange controls were lifted after liberization of the banking in Kenya. The study concentrated on the effects of financial innovation on market capitalization of listed commercial banks in Kenya. The choice of the banking industry was because it has been earmarked as a key pillar to the achievement of Kenya Vision 2030 and makes a significant contribution to the gross domestic product (GDP). The study will be limited agency banking as a form of financial innovation. The period of study will be from 2012 to 2018.

5. Research Methodology

The study targeted all the Nairobi Security Exchange listed commercial banks in Kenya as at 31st December 2018 a census was be carried out. Data on market capitalization and financial innovation were obtained from the banks' annual published financial statements available at NSE website and CBK quarterly reports. The data was cleaned, coded and statistical outputs generated using STATA statistical package. Descriptive and inferential analysis was employed to analyze the data where Panel data analysis was performed.

6. Descriptive statistics

Data from secondary sources was obtained on Market capitalization and Agency banking. The data was transformed using natural logarithms in order to work with smaller figures. Descriptive statistics were then performed which comprised of mean, median, range, standard deviation, skewness and kurtosis. Again Jarque-Bera test of normality was conducted to test for the normality of the data. The results were presented in Table 1.

Table 1 Descriptive Statistics

	LNAB	LNMC
Mean	7.552675	10.65472
Median	7.345000	10.80160
Maximum	10.14820	13.87850
Minimum	5.671400	7.600900
Std. Dev.	1.059247	1.228532
Skewness	0.671944	-0.476833
Kurtosis	2.924228	3.562229
Jarque-Bera	4.151986	2.808624
Probability	0.125432	0.245536
Sum	415.3971	586.0094
Sum Sq. Dev.	60.58822	81.50164
Observations	55	55

The results showed the mean values, median, range which contained the maximum and the minimum values, the standard deviation, skewness and kurtosis and Jarque Bera test of normality. Agency banking was found to have a mean of 7.55, a median value of 7.35 and a standard deviation of 1.059. While market capitalization was found to have a mean value of 10.654, a median value of 10.802 and a standard deviation of 1.223. The results also indicated that the data was not normally distributed which is the case in most financial time series data.

The plotted graphs showed the trend of the agency banking and also market capitalization over the years from 2013 to 2017. showed that there was an upward trend in Agency banking from 2016 to 2017 December which was not the case before 2016. This show that many banks adopted agency banking in 2016 despite it coming to existence in 2010.

Panel data Diagnostic tests

Various tests were performed to determine the suitability of the panel data analysis. The tests that aimed at establishing if the panel data fulfilled the cardinal requirements of classical linear regression analysis included: heteroscedasticity test, test for multicollinearity among independent variables and serial correlation test. Where violation to these assumptions was detected, appropriate remedies were employed.

Heteroscedasticity Test

To test for panel level heteroscedasticity, the study adopted Breusch-Pagan/Cook-Weisberg test for heteroscedasticity. This involved first estimating the specified empirical model by OLS and then running the test against the null hypothesis of homoscedastic (constant) error variance (Torres Reyna, 2007). Table 2 shows the LM test

Table 2 Breusch Pagan LM test

Estimated results:	**Var**	**sd=sqrt (Var)**
lnMC	0.50929	0.329
E	0.0184	0.1816
U	0.04954	0.1867

Test: Var (u) = 0 chibar2 (01) = 15.64
Prob > chibar2 = 0.000

The tests results provided chi-square distribution value of 15.64 with a corresponding p-value of 0.0000. The results show that the chi-square statistic was significant at 5 percent level and hence the null hypothesis of constant variance was rejected. Therefore, panel-level heteroscedasticity was present The results confirmed that pooled effects model was not appropriate for the study, as a result, the current study will adopt either the random effects model (REM) or the fixed effects model (FEM).

Serial Correlation Test

To detect presence of autocorrelation in panel data, the study used Wooldridge test for autocorrelation against the null hypothesis that there was no first order autocorrelation. The test results provided F-statistic value of 14.95 at 1 and 54 degrees of freedom. The F-statistic value had a corresponding p-value of 0.003 indicating that the null hypothesis of no first order autocorrelation was strongly rejected at 5% significance level. The result therefore concluded that the panel data suffered from the problem of first-order autocorrelation. The study remedied this violation of classical linear regression model assumption by employing FGLS estimation technique (Mwangi *et al.,* 2014).

Bivariate correlation analysis

A bivariate correlation between variables was performed to examine significance of the relationships between market capitalization and the financial innovations. The results were presented in Table 3 next page.

Table 3 Bivariate Correlation

Correlation		
Probability	LNAB	LNMC
LNAB	1	

	0.0000	
LNMC	0.431582	1.
	0.0010	-----
	0.0051	0.0000

The results in Table 3 depicted a significant relationship and effect between Market capitalization and the financial innovations. This was indicated by significant p-values of less than 0.05 at 5% level of significance.

Panel Model Regression Results and Hypothesis Testing

The initial tests were performed to help in identifying the best model in this study. Under Panel data analysis there are two main methods that can be performed namely: fixed effects model and random effect model.

Random Effect Model or Fixed Effect Model

The study fitted the two models known as fixed effect and random effect. Hausman test, which examines correlation effect between errors and repressors, was used to find the most appropriate model to adopt. The results were then shown in Table 4 below.

Table 4 Hausman Test

	(b) fixed	(c) Random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
LnAB	0.022711	0.4092	0.3865	0.002

Chi2 = (b-B)'[(V_b-V_B)^(-1)](b-B) = 10.50, Prob>chi2 = 0.0328

From Table 4, it was found that the chi-square statistic for the test was 10.50 with a significant p value of 0.0328 compared to a significance level (α= 0.05). This implies that the fixed effect model is more satisfactory than the random effect model and was therefore adopted.

Fixed effects Model

The results in Table 5 depicts the summary of the fixed effect model which was adopted as seen in the previous subsection. The panels were shown to be strongly balanced in the 11 listed commercial banks. The panel data was strongly balanced as the lowest, average and highest number of observations per groups was all equal to 5. The coefficient of determination values (R^2s) within, between and the overall were found to be 0.0362, 0.7822 and 0.3891, respectively. The coefficient of determination (R^2) generally shows the change of the dependent variable, market capitalization in this study that is explained by the change of the independent (financial innovations). R^2 within is the measure of the goodness of fit for the distinct mean de-trended data which ignores all the evidence between groups. The analysis of variance (ANOVA) on the other hand measures general significance of a model using F-statistic and p-value. In this study, the pvalue of the F statistic to the model was 0.000. This implied significance as the value was less than the significance level (α=0.05). This

implied that the predicted parameters in the model are not equal to zero. This implies that the model is generally significant and at least one of the predictors is not equal to zero.

Table 5 Fixed effects model

Fixed-effects (within) regression				Number of obs =	55
Group variable: bank				Number of groups =	11
R-sq: within =	0.0362			Obs per group: min =	5
between =	0.7822			avg =	5.0
overall =	0.3891			max =	5
				F(4,4) =	3.812
corr(u_i, Xb) =	0.1044			Prob > F =	0.000

	Coef.	Std. Err.	T	P>t	[95% Conf.	Interval]
lnAB	0.02271	0.365908	1.610	0.015	0.71682	0.762238
_cons	14.79697	13.54164	2.191	0.001	12.5717	42.16566
sigma_u | 1.6293007		sigma_e | .16156474				
rho | .74311469 (fraction of variance due to u_i)						

F test that all u_i=0: F(10, 40) = 3.12 Prob > F = 0.0050

Table 5 presents the model coefficients from the fixed effect model fitted. The coefficient of agency banking was found to be significant which 0.02271 was. The p-value of the t-statistics for the coefficient estimated was found to be 0.015 hence less than the significance level (α= 0.05) implying that all the agency banking a form of financial innovation have a significant effect on market capitalization of listed commercial banks in Kenya. The constant term for the analysis was also found to be significant with a p-value less than 0.05. A shown in the table, the intra-class correlation is 0.743 implying that 74.3% of the variance is due to the differences across panels.

These discoveries corroborated with those by Njoki and Aloko (2015) who argued that the recognized bank innovations particularly mobile banking, internet banking, agency banking and ATM banking had decidedly affected on the performance of business banks in Kenya over the 5year time span somewhere in the range of 2009 and 2013. Again, an investigation by Korir and Sang (2015) on financial innovations and performance of business banks in Kenya affirmed that an expansion in the development level outcomes to expanded financial execution. However, these results contradicted the findings in a study on the effect of Financial Innovations such as Agency banking and Mobile banking on financial performance of Savings and Credit Co-

operative Societies in Kenya, a case of Kakamega Teachers Co-operative Society Limited by Songoro *et al.*, (2015) where the results revealed that financial innovation factors such as Agency banking were not significant and do not account for 100% change in financial performance.

Correlation and the Coefficient of Determination

The table below presents the correlation (R) and the coefficient of determination between financial innovation of banks (dependent variable) and the independent variables (agency banking, internet banking and mobile banking) From the findings, the study found that there was a positive relationship between the dependent variable and the independent variables of all the four independent variables, agency banking had the highest relationship with the financial innovation of banks of 0.475 followed by mobile banking with 0.430. internet banking came third with a correlation value of 0.428.

The study sought to find out the extent that the bank focused its financial innovations strategy on the areas. According to the findings, the bank focused its financial innovations strategy on agency banking to a great extent as shown by a mean of 4.05, the bank focused its financial innovations strategy on mobile banking to a great extent as shown by a mean of 3.9, the bank focused its financial innovations strategy on internet banking to a great extent as shown by a mean of 3.5.

The institution can employ more innovations on customer care and technology. The bank can put in place measures to improve its operations and become more competitive by training its staff, investing in high technology and listening to the needs of its clients. As aforementioned, of all four predictors to financial innovation of banks, agency banking had the highest coefficient of determination (strength of relationship between technology and the banks financial innovation) of 0.226 while mobile and internet banking had the value of 0.185, 0.183 respectively.

Table 6: Correlation and the Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Internet banking	0.430	0.185	0.151	0.8825
Mobile Banking	0.326	0.106	0.069	0.8825
Agency Banking	0.475	0.226	0.194	0.8201

Coefficient of Determination (R^2)

Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (bank's financial innovation) that is explained by all the three independent variables (agency banking, mobile and internet banking).

The correlation and the coefficient of determination of the dependent variables when all independent variables are combined can also be measured and tested as in the table below. From the findings 46.3% of bank's capitalization is attributed to combination of the four independent factors. A further 53.7% of banks market capitalization is attributed to other factors not investigated in this research.

Table 7: Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig.
1	.681(a)	0.463	0.361	0.752	0.04

Multiple Regression Analysis

The researcher conducted a multiple regression analysis so as to determine the relationship between the bank's financial innovation and the three attributes investigated. The regression equation ($Y = \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$) was: $Y = 0.853 + 0.205X_1 + 0.169X_2 + 0.156X_3 + 0$

Whereby Y = financial innovation of the bank

B_0 = Regression constant

X_1 = Agency Banking

X_2 = Mobile Banking

X_3 = Internet Banking

e = Error term

According to the regression equation established, taking all factors (technological, market, process and product) constant at zero, the market capitalization of the bank as a result of these independent factors (innovation) will be 0.853. The data findings analyzed also shows that taking all other independent variables at zero, a unit increase in agency banking innovation will lead to a 0.205 increase in market capitalization of the bank. A unit increase in mobile banking innovation will lead to a 0.169 increase in the market capitalization of the bank; a unit increase in internet banking innovation will lead to a 0.156 increase in market capitalization of the bank .This therefore implies that all the three variables have a positive relationship with agency banking innovation contributing more to the market capitalization of the bank, while internet banking innovation contributes the least to the market capitalization of the commercial banks of Kenya as illustrated in table 8 below.

Table 8: Multiple Regression Analysis

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.853	1.068		0.799	0.043
Internet Banking	0.156	0.203	0.135	0.619	0.048
Mobile Banking	0.169	0.193	-0.08	-0.358	0.042
Agency Banking	0.205	0.16	0.346	1.284	0.021

7. Summary of Findings

The current study stemmed from the realization of the research problem in literature role of financial innovation and the past empirical findings. Empirically most of the studies on the effects innovation have been skewed towards the use of primary data and individual aspect of banking innovation has been evaluated. Among the several studies which had been done in the Kenyan perspective majority have not used panel data analysis approach thus the appropriate choice of model to examine the relationship between innovation and commercial banks performance have not been considered. Consequently, the researcher's primary purpose was to examine the relationship between innovation and commercial banks performance panel evidence from Kenya. Further, the researcher aimed at answering three research questions which were: How does agency banking has impacted on market capitalization in Kenya, Does internet banking influence commercial banks performance in Kenya.

The study concluded that there was a statistically significant impact of agency banking financial innovation on market capitalization of Kenyan commercial banks listed in the Nairobi stock exchange. This emphasized on the need for listed banks to embrace agency banking through increasing the number of agents and encouraging deposits and withdrawals.

8. Conclusions

The study concludes that there is a positive relationship between financial innovation and market capitalization of commercial banks in Kenya. Competition among banks has led to continuous innovations. Improved financial performance has been realized as result of reduced cost of financial transactions that can be attributed to financial innovation Commercial Banks have adopted process innovation which included agency, mobile banking and internet banking. Product innovation strategies adopted by the commercial banks were Credit cards, business club and unsecured loans. Institutional innovations adopted were Insurance services, credit reference bureau and Islamic banking. Adoption of these financial innovations resulted in the increase of market share and higher financial performance of commercial banks as evidenced by high capitalization. Financial innovations also resulted in improvement of the banks products and services. The banks can employ more innovations on customer care and technology. The bank can put in place measures to improve its operations and become more competitive by training its staff, investing in high technology and listening to the needs of its clients.

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