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EFFECT OF INNOVATION STRATEGIES ON FINANCIAL PERFORMANCE OF THE BANKING INDUSTRY IN KENYA

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Abstract:

Globalization and increasing market competitiveness have driven financial institutions toward innovativeness in their operation to gain sustainable competitive advantage and improve their financial performance. Financial institutions are not only competing on the basis of services but also on the basis of physical products as it is hard to distinguish between products of competing brands in a given product category. The increased competition in the banking industry in Kenya has led to the players in the industry to find alternative ways of surviving and performing well such as adopting innovative strategies. This study sought to establish effect of innovation strategies on financial performance of firms in the banking industry in Kenya. The study specifically focused on product innovation and organizational innovation and its effect on financial performance in the banking industry in Kenya. This study adopted a descriptive survey as the research design for the purposes of data collection. The population targeted 153 managers in ICT department, retail banking department and corporate banking departments from the 51 financial institutions headquarter in Nairobi. The study made use of both secondary and primary data that was obtained from the study respondents using a structured questionnaire. The study used both descriptive statistics such frequency distributions, percentages, frequency tables and pie charts to summarize and relate variables obtained from the administered questionnaire as well as inferential

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statistics of correlation and regression for analysis. Findings revealed that product innovation and organizational innovation strategies positively and significantly affect the financial performance of firms in the banking industry in Kenya. The study recommends the banking industry in Kenya to introduce new products and services, improvement of existing products and services since it improves their financial performance. There is also need for the banking industry in Kenya to offer a wide range of products than their competitors. The study recommends the banking industry in Kenya to adopt E-customer information data base as well as call centres and floor management. There is also a need for the firms in the banking industry to adopt computerized loan document generation, automated voice response, and automated cheque reconciliation systems as it increases the financial performance. The study further recommends the firms to centralize their loan application system and Electronic trading of shares so as to increase their competitive advantage.

Keywords: product innovation, organizational, innovation, financial performance, banking industry in Kenya

JEL: G21, L23, M21

1. Introduction

Financial institutions play a significant role in the economy. However, they have recently faced fluctuations in performance. Some of the determinants are internal and external factors. Since most financial institutions offer similar products and services, they continually search for a competitive advantage that will attract new customers and retain the existing ones so as to enhance their performance (Porter, 2008). Much emphasis has been placed on building innovative organizations and the management of the innovation process, as essential elements of organizational survival and better performance (Rhee *et al.*, 2010). Porter (2008) contended that higher performance can be attained in a competitive industry through the pursuit of best strategies. According to Thompson and Strickland (2010), a company is competitive if it has an edge over the rivals in safeguarding the consumers and countering competitive pressure. Competitive advantage has in turn led to better performance.

If an organization generates enough returns or as much as what is being generated by the industry, that organization is in competitive parity to the industry. If an organization is making losses, it will find the shareholders withdrawing the capital and that organization will find it hard to survive. The ability for a company to

constantly make profit is key to its survival (Thompson & Strickland, 2010). Scholars have linked innovative strategies to competitive advantage and better performance. Terziovski (2010) argued that the ability to innovate is increasingly viewed as the single most important factor in developing and sustaining competitive advantage in order to achieve better performance (Terziovski, 2010). This makes it important to not just stick with doing things better but also doing new things better. Banks all over the world are experiencing stiff competition from competitors. To gain a competitive edge and improve performance, they need to be innovative in their modes of operations (Mohapatra & Patra, 2017).

The financial institutions in Kenya have realized that increased competition in the banking industry dictates the development of strategies to compete so as to enhance performance. The strategies developed will also lead to the bank survivals. Banks without clear strategies will find it hard to survive in this industry. The banking environment in Kenya has drastically changed due to government regulations and stiff competition. According to Dulo (2006), each bank should know how to venture into the market and thereafter form, guard and uphold its competitiveness in order to perform well and survive. With the increased competition in the industry, this study sought to establish whether the product and organizational innovative strategies adopted by the firms in the banking industry have an effect on their financial performance and if so, what effect do they have.

1.1 Statement of the Problem

Financial institutions operate in heavily regulated environment and highly volatile environment (Quinn, & Connolly, 2017). The environment is characterized by continuous change, hyper competition, changing demographics and customer needs that demand adoption of counter strategies in order to perform better and survive (Quinn & Connolly, 2017; Kiiyuru, 2014). The Kenyan banking sector is likewise experiencing very stiff competition that has resulted in their mixed performance and seen the contribution of the sector to the gross domestic product in terms of their assets reduce from 88.41% in the year 2014 to 83.27% in the year 2015. In terms of capital adequacy, the banking industry's overall capital adequacy ratio averaged 19% against a statutory minimum of 14.5% which is also an indicator of poor operational performance in the industry (Kenya Financial Sector Stability Report, 2017). Furthermore, high competition in the industry has seen 2 banks placed under receivership in August and October 2015, of which one was subsequently liquidated.

In order to enhance performance in new competitive landscape, Kenyan banks have embraced new ways of doing business that not only add value to customers but

earn them premium. Innovation strategies are adopted both for survival and sustenance (Heisterberg & Verma, 2014). The Central Bank of Kenya report (2016) indicated that adoption of innovation strategy has led to a reduction in operation costs among commercial banks since there has been a reduction in the physical branches across all the counties. Further statistics also revealed that innovation strategies led to an increase in the customer deposits by 4.80% in the year 2016 only from Kshs. 2.49 trillion in 2015 to Kshs. 2.61 trillion in 2016. Furthermore, the number of banking transactions undertaken through bank agents and mobile technology increased by 30.9% from 79,620,211 transactions recorded in 2011 to 104,193,459 in 2015 among the MFIs (CBK, 2016). These statistics reveal the importance of innovation strategies to enhancing performance of financial institutions in Kenya. While this is the case, studies have nonetheless revealed that these innovation strategies have come with their share of societal problems. According to CBK report (2016), new innovations in the financial sector has resulted to a 15% rise in the cyber-crimes where criminals gain unauthorized access to institutions' computer programs and data thus increasing the operational costs and affecting performance negatively. It is therefore against the backdrop of these mixed results that this study has been carried out with a view to link product and organizational innovation strategies to financial performance of banking industry in Kenya.

1.2 Objectives of the study

This study will be guided by the following specific objectives:

- i. To establish the effect of product innovation strategy on financial performance of the banking industry in Kenya
- ii. To assess the effect of organizational innovation strategy on financial performance of the banking industry in Kenya

1.3 Literature Review

1.3.1 Theoretical Review

A. The McKinsey 7S Framework

The McKinsey 7S Framework was developed by Peters and Waterman (1980) to link seven key factors that is strategy, structure, systems, shared values, style, skills and staff to organizational performance (Peters & Waterman, 1980). The framework argues that correct alignment and reinforcement of these 7 aspects can give a firm an added advantage and it leads to an improvement in their performance. One of the factors is strategy thus the relevance of the framework to the study. The theory contends that

before a strategy yields the desired results and be competitive, it needs to be implemented well and that relies on the 7s. The framework can be used to understand how the organizational elements such as innovation strategies can be linked and realigned alongside other policies in order to achieve good organizational performance. The theory is relevant to the study as it highlights the link between strategy formulation and implementation to the overall organizational performance.

B. Porter's 5 Forces Model

According to Porter (1991), the essence of formulating competitive strategy is relating a company to its environment. Industry structure has a strong influence in determining the competitive rules of the game as well as strategies potentially available to a firm. The state of competition in an industry depends on five basic competitive forces: Threat of new entrants as exemplified by possibility of new companies entering the market and barriers to entry; Power of suppliers which concerns how much bargaining power suppliers have; Power of buyers – how much bargaining power buyers have; Threat of substitutes - how easily product and service can be substituted; and Rivalry among existing competitors. According to the Tidd, Besant and Pavitt (2011), understanding industry structure is equally important for investors as for managers. The five competitive forces reveal whether an industry is truly attractive, and they help investors to anticipate positive or negative shifts in industry structure before they are obvious. The five forces distinguish short-term blips from structural changes and allow investors to take advantage of undue pessimism or optimism. In the present study, Porter's 5 Forces Model underpin product innovation variable. The banking sector is under threat of upcoming financial institutions including Savings and Credit Cooperative (SACCO) organizations and Microfinance Institutions (MFIs). These institutions have developed products and services that mostly appeal to the masses, proving a significant threat to the commercial banks, which are forced to continually carry out market and product innovations.

C. Resource Dependence Theory

The Resource Dependence Theory was developed in the 1970s by Davis and Cobb. The theory is based on the premise that organizations acquire power when they possess resources that are valued by other organizations. The resource dependency theory draws attention to the firm's internal environment as a driver for organizational performance and emphasizes the resources that firms have developed to compete in the environment. Furrer *et al.* (2008) changed the focus of inquiry from the structure of the industry, to Structure-Conduct-Performance (SCP) paradigm and the Porter's five

forces model to the firm's internal structure, with resources and capabilities. Researchers subscribing to the resource dependency theory argue that only strategically important and useful resources and competencies should be viewed as sources of good organizational performance (Hessels & Terjesen, 2010). Previous scholars such as Prahalad and Hamel (1994) as cited in Bryant and Davis (2012) have used terms such as core competencies, distinctive competencies and strategic assets to indicate the strategically important resources and competencies, which provide a firm with a potential competitive edge.

Strategic assets are, 'the set of difficult to trade and imitate, scarce, appropriable and specialized resources and capabilities that bestow the firm's competitive advantage. Distinctive competencies refer to all the things that make the business a success in the marketplace. According to the theory, resources generally include various assets, capabilities, organizational processes, information, and knowledge that contribute to improved organizational efficiency and effectiveness (Hofer, Jin, Swanson, Waller & Williams, 2012). The theory is relevant to the study in linking innovation strategy as a rare resource to financial performance of a firm. It argues that when a firm possesses rare resources which cannot be imitated by other firms, it has potential to perform better than the other firms. The same can apply to unique strategies which other firms cannot imitate.

1.3.2 Conceptual Framework

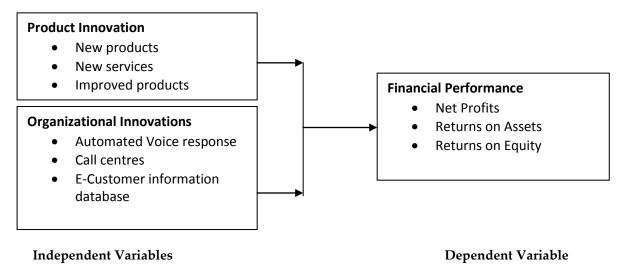


Figure 1: Conceptual Framework

1.4. Product Innovation

Product innovation is about making beneficial changes to physical products (O'sullivan, & Dooley, 2009). Related terms that are often used interchangeably include product

design, research and development and new product development (NPD). Each of these terms offers a particular perspective on the degree of changes to products. The degree of change could include the following: incremental improvements, additions to product families, next – generation products and new core products. The product development process for next-generation and new core products followed a familiar cycle in most organizations: ideation, preliminary investigation, detailed investigation, development, testing and validation, market launch and full production. Each of these steps involves interaction with customers, who may participate in idea generation and feature recognition (Brodie, Ilic, Juric & Hollebeek, 2013).

Different terminologies have been used to categorize and describe product development. Meyer () categorized product development into primary and secondary innovations. Primary innovations were broadly concerned with the development of new markets and relate to instances where there is a high degree of technical originality and a commensurate change in consumer behaviour. Secondary innovations, on the other hand, are basically business or company focused and typically involve improvements to an existing market (Hoyer, Chandy, Dorotic, Krafft & Singh, 2010). Product innovation can be either incremental or disruptive (Bharadwaj, Varadarajan, & Fahy, 2015). Incremental product innovation will seek to enhance the quality, and functionality of existing products, whereas disruptive product innovation will seek to completely change the existing product by replacing it with a new product (De Medeiros, 2014). In the banking sector, one bank can start off innovation that becomes that standard bearer for other banks. In this relationship, the innovation output of one company becomes part of the innovation input to another (Carlborg, Kindström, & Kowalkowski, 2014). Successful innovation results in new products and services, gives rise to new markets, generates growth for enterprises, and creates customer value. Innovation improves existing products and processes, thereby contributing to higher productivity, lower costs, increased profits and employment (Al-Ansari, Pervan, & Xu, 2013).

1.5 Organizational Innovation

Organizational innovation entails how organizations handle work procedures for example client relationships both internally as well as externally in ways that promote competitive advantage (Mairesse, & Mohnen, 2010). Organizational innovations can contribute to productivity via a more rational organization of production but it can also contribute to improve the customers' perception of the firm's products for example by the way and where services related to the products are organized (Mairesse, & Robin, 2009). Organizational innovation is widely proclaimed as being of vital importance to

achieve and maintain competitive advantage. At the same time, successfully internalizing new technology is seen as essential for maintaining competitive positioning and adapting to changes in the external environment (Hashi, & Stojčić, 2013). However, documented evidence suggests that the successful adoption of new technology poises extreme challenges to managers.

Key issues hindering successful adoption of technological innovations include: resistance to change organizational structure, cultural inertia, internal politics, fear of cannibalizing existing products, fear of destroying existing competencies, satisfaction with the status quo, and in general, a lack of incentives to abandon the certainty of the current way of doing things to embrace the uncertainty of future rewards. Moreover, a widening gap between managers' discourse and their ability (or lack of ability) to implement innovations and between normative and prescriptive contributions by academics and what managers actually do (Mairesse *et al.*, 2010).

1.6 Financial Performance

Daft and Marcic (2013) describes organizational performance as an organization's ability to achieve its goals effectively and efficiently with available resources. Performance is the record of results achieved on a given action during a given period of time. According to Majeed (2011) there are various ranges of organizational performance from monetary, market as well as shareholder returns. He argues that some of the monetary performance indicators are profits of an organization and the returns on assets, equity as well as investments. Some of the indicators of market performance are changes in sales and the market share while some of the indicators of shareholder return are earnings per share. Other scholars such as Fahey and King (2010) have argued that the performance of the firm can be captured from the point of efficiency, effectiveness and relevance. Richard, Devinney, Yip and Johnson (2009) agree that performance refers to the efficiency in which various activities are run in the firm. In terms of effectiveness, it has been referred to as the various unique capabilities which a firm has to enable it achieve results.

Hubbard (2009) argues that there has been an increase in complexity of performance in organizations. However, he also states that performance can be measured in terms of financial or non-financial approaches. Financial approaches involve indicators such as profits, liquidity, returns, sales and market share. Non-financial measures of profitability range from customer satisfaction indicators, production efficiency, timely delivery as well as internal and external corporate social responsibility. Hubbard (2009) also asserts that there are many other aspects of organizational performance measurement. One of these aspects includes the use of

financial measures such as profitability of the organization. Under this measure the outcome to input ratio is determined using ration such as the Return on Assets (ROA). An organization can also use quality in measuring performance. In this case the actual quality and its timeliness are measured against the expected outcome. The level of productivity and innovation of an organization can also be used to measure performance. Innovation measures the ability of the organization to create change whereas productivity focuses on the ratio of output to input (Richard, Devinney, Yip & Johnson, 2009).

2. Research Methodology

The study used cross-sectional descriptive survey as the research design for the purposes of data collection. The technique was used since it is more exact and precise. The population of this study comprised of top managers in ICT Department, retail banking department and corporate banking departments of the 51 financial institutions - 39 commercial banks and 12 Deposit Taking Micro Finance Institutions. These departments are purposively sampled because they are involved in innovation strategies formulation. The study adopted a census technique with respect to the unit of analysis which is 51 financial institutions operating in Kenya. Both primary and secondary data was adopted for the study. Secondary data on net profits, returns on assets and returns on equity were collected on the on a five year period (2013-2017). Primary data was collected on the independent variables of the study. The study used primary data that was obtained from the study respondents by use of structured questionnaires and captured through a 5-point Likert scale type. The quantitative data was analyzed using descriptive statistics where the responses from the questionnaires were tallied, tabulated and analyzed in percentages, frequencies, mean and standard deviation using SPSS V 21. Frequency tables, graphs and pie charts were used to present the data for easy comparison. Further, multiple regression analysis was conducted to establish the relationship between the innovation strategies and competitive advantage of the banking industry. To determine the effect of innovation strategies on financial performance of the banking industry, the following multiple regression model was used:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon_1$$
 (1)

Where: Y is the dependent variable (Financial performance), X_1 is Product Innovation, X_2 is Organizational Innovation, ε is the Error term, β 0 the regression Constant, β 1 & β 2, are the regression coefficients of independent variables.

3. Results and Discussions

The total number of questionnaires that were administered to the managers in ICT Department, retail banking department and corporate banking department was 153. A total of 138 questionnaires were duly filled and returned. This represented an overall successful response rate of 90.19%.

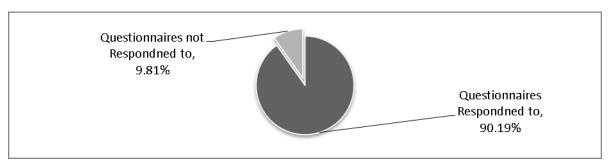


Figure 2: Response Rate

3.1 Respondents Demographic Information

Category Demographic characteristics Percentage Respondents' Department IT Department 32.6% Retail Banking 32.6% 34.8% Corporate banking Respondent's working experience in the Banking industry Less than 10 years 45.7% 34.8% 10-20 years 19.5% Above 20 years

Table 1: Respondent Demographic Information

3.2 Descriptive results of the study

A. Product Innovation

Table 2 revealed that a very high extent there is an introduction of new products in their organization, there is an introduction of new services in their organization, there is an improvement of existing services in their organization (mean 3.91, 3.54 and 3.35 respectively). The findings of the study also showed that respondents agreed to a high extent that their organization is offering wide range of products than competitors. On average, the findings of the study showed that majority of the respondents indicated

that their organization has adopted product innovation strategies to a high extent (mean 3.58).

Table 2: Product Innovation

Statements	Mean	Std Dev
Introduction of new products	3.91	1.26
Introduction of new services	3.54	1.28
Improvement of existing products	3.35	0.90
Improvement of existing services	3.28	1.11
Offering wide range of products than competitors	3.80	0.91
Average	3.58	1.09

B. Organisational Innovation

The findings of the study revealed that respondents indicated that their organization have adopted e-customer information data base to a very high extent, the organization has adopted call centers (mean 4.57 and 4.61 respectively). Moreover, the results revealed respondents indicated that their organization has adopted floor management to a high extent (4.37). The findings further showed that respondents indicated that their organization has adopted computerized loan document generation to a very high extent (4.22). Furthermore, the results of the study showed that respondents indicated that their organization has adopted automated voice response, automated cheque reconciliation systems and centralized loan application system to a very high extent (mean 4.24, 3.91 and 3.85 respectively). Finally, the results of the study revealed the respondents indicated that their organization has adopted electronic trading of shares to a very high extent (mean 4.33). On average, the results of the study showed that majority of the respondents indicated that organizational innovation strategies have been adopted in their organization to a high extent (mean of 42.6).

Table 3: Organisational Innovation

Statements	Mean	Std Dev
E-customer information data base	4.57	0.81
Call centres	4.61	0.68
Floor management	4.37	0.61
Computerized loan document generation	4.22	0.94
Automated voice response	4.24	0.71
Automated cheque reconciliation systems	3.91	1.24
Centralized loan application system	3.85	1.35
Electronic trading of shares	4.33	0.67
Average	4.26	0.88

3.3 Financial Performance of Commercial Banks

The study sought to establish the financial performance of the firms in the banking industry in terms of profitability, ROA and ROE. The trend analysis of the mean annual ROA as well as mean annual ROE for the firms was established. The trend analysis for mean ROA is as presented in Figure 3.

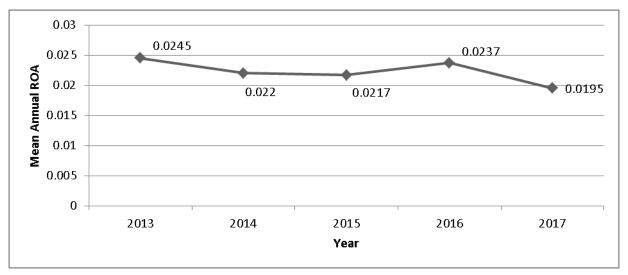


Figure 3: Trend Analysis of Returns on Asset

The study findings depict unsteady trends in the financial performance of the firms in the banking industry in Kenya in the study period (2013 to 2017) in terms of ROA. The mean ROA for all the firms in the year 2013 was 2.45%. The mean ROA decreased to 2.2% in the year 2014 before decreasing further to 2.17% in the year 2015. The highest mean ROA recorded within the study period was in the year 2016 where 2.37% was recorded and in the year 2017, a mean ROA of 1.95% was recorded on average, by the firms in the banking industry. This was an indication of unsteady trends in the ROA across the industry in the study period thus revealing unsteady performance. The findings are consistent with Onuonga (2014) who revealed that the performance of the banking sector in Kenya over the last decade has been unsteady. The study also established the trends of average returns on equity for the banking industry in Kenya in the study period and five years back. The findings are presented in Figure 4.

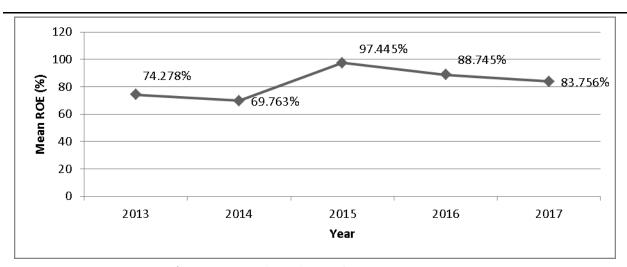


Figure 4: Trend Analysis of Returns in Equity

Unsteady trends in the financial performance of firms in the banking industry in Kenya in the study period in terms of Returns in Equity were also observed. The mean ROE for all the firms in the year 2013 was 74.27% which was higher than the year 2014 which was 69.76%. The mean ROE in the year 2015 increased up to 97.44% which was the highest for the study period before showing a slight decrease to 88.74% in the year 2016. In the year 2017, there was a further drop in the mean ROE to 83.75% for the firms. The findings are also consistent with Onuonga (2014) who indicated unsteady trends in financial performance of the Kenyan banking industry.

4. Correlation Results

The findings of the study as shown in Table 4 indicated that product innovation had a positive and significant correlation with financial performance of the firms in the banking industry in Kenya as shown by a Pearson coefficient of 0.342 and significance level of 0.000. This implies that an increase in product innovation strategies such as the introduction of new products and services, improvement of existing products and services and offering of a wide range of products than competitors leads to a positive and significant improvement in financial performance of the firms in the banking industry in Kenya. The results also showed that there was a positive and significant correlation between organizational innovation and the financial performance of firms in the banking industry in Kenya as shown by a person correlation value of 0.425 and a significance level of 0.000. This implies that an increase in the adoption of organizational innovation strategies such as E-customer information data base, Call centres, Floor management, Computerized loan document generation, Automated voice response, Automated cheque reconciliation systems, Centralized loan application

system and Electronic trading of shares leads to a positive and significant improvement on the financial performance of firms in the banking industry in Kenya.

Table 4: Correlation Results

			Organizational	Financial	
Correlations		Strategy	Innovation Strategy	Performance	
Product Innovation	Pearson				
Strategy	Correlation	1			
	Sig. (2-tailed)				
Organizational	Pearson				
Innovation Strategy	Correlation	.226	1		
	Sig. (2-tailed)	0.000			
	Pearson				
Financial Performance	Correlation	.342	.425	1	
	Sig. (2-tailed)	0.000	0.000		
	N	138	138	138	

5. Regression Results

The results of the study showed that product innovation and organizational Innovation account for 58.4% of the variation in the financial performance of firms in the banking industry in Kenya. This is shown by a by an R-square value of 0.584. The regression results show that R was 0.764 which shows that the correlation between the independent variables and the dependent variable was positive and strong.

Table 5: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.764	0.584	0.544	0.2716

The results of the study also showed that the overall regression model linking product innovation and organizational Innovation to financial performance of the firms in the banking industry in Kenya was significant as indicated by a significant F (2, 133) statistic as indicated by (0.000) significance level which was less than 0.05 at 5% level of significance. The results of the study are as shown in table 6.

Table 6: Analysis of Variance (Model Significance)

	Sum of Squares	df	Mean Square	F	Sig.
Regression	4.253	2	1.063	14.415	.000
Residual	3.024	135	0.074		
Total	7.277	137			

The results of the study indicated that product innovation had a positive and significant effect financial performance of firms in the banking industry in Kenya (β =0.210, Sig=0.000). This implies that an increase in product innovation strategies such as the introduction of new products and services, improvement of existing products and services and offering of a wide range of products than competitors leads to 0.210 unit increase in financial performance of the firms in the banking industry in Kenya. The findings of the study also showed that organizational innovation had a positive and significant effect on the financial performance of firms in the banking industry in Kenya (β = 0.412, Sig = 0.000). This implies that an increase in the adoption of organizational innovation strategies such as E-customer information data base, Call centres, Floor management, Computerized loan document generation, Automated voice response, Automated cheque reconciliation systems, Centralized loan application system and Electronic trading of shares leads to 0.412 unit increase in the financial performance of firms in the banking industry in Kenya.

Table 10: Regression Coefficients

Independent Variables	В	Std. Error	Beta	t	Sig.
(Constant)	0.573	0.345		1.662	0.098
Product Innovation Strategy	0.210	0.049	0.209	4.307	0.000
Organizational Innovation Strategy	0.412	0.057	0.354	7.260	0.000

6. Conclusions

The study concluded that product innovation strategies positively and significantly affect financial performance of firms in the banking industry in Kenya. The study concluded that product innovation strategies such as the introduction of new products and services, improvement of existing products and services and offering of a wide range of products than competitors positively affect financial performance of firms in the banking industry in Kenya. The study also concluded that organizational innovation positively and significantly affects the financial performance of firms in the banking industry in Kenya. The study established that E-customer information data base, Call centres, floor management, computerized loan document generation, automated voice response, automated cheque reconciliation systems, centralized loan application system and Electronic trading of shares positively affects financial performance of firms in the banking industry in Kenya.

6.1 Recommendations of the Study

The study recommends the banking industry in Kenya to introduce new products and services, improvement of existing products and services since it improves their financial performance. There is also need for the banking industry in Kenya to offer a wide range of products than their competitors. The study recommends the banking industry in Kenya to adopt E-customer information data base as well as call centres and floor management. There is also a need for the firms in the banking industry to adopt computerized loan document generation, automated voice response, and automated cheque reconciliation systems as it increases the financial performance. The study further recommends the firms to centralize their loan application system and Electronic trading of shares so as to increase their competitive advantage.

References

- 1. Aarikka-Stenroos, L., & Jaakkola, E. (2012). Value co-creation in knowledge intensive business services: A dyadic perspective on the joint problem solving process. *Industrial marketing management*, 41(1), 15-26.
- 2. Baker, W. E., & Sinkula, J. M. (2007). Does market orientation facilitate balanced innovation programs? An organizational learning perspective. *Journal of product innovation management*, 24(4), 316-334.
- 3. Battisti, G., & Stoneman, P. (2010). How innovative are UK firms? Evidence from the fourth UK community innovation survey on synergies between technological and organizational
- 4. Chou, H., 2009. The effect of market orientation intention and superiority on new product performance. *The Journal of American Academy of Business*, 14(2), 93-97.
- 5. Daft, R. L., & Marcic, D. (2013). Building management skills: An action-first approach. Cengage Learning.
- 6. Dauda, Y. A., & Akingbade, W. A. (2011). Technology innovation and Nigeria banks performance: The assessment of employee's and customer's responses. *American Journal of Social and Management Sciences*, 2(3), 329-340.
- 7. De Brito Cruz, C., L. de Mello, 2006, Boosting innovation Performance in Brazil, OECD Economic Department Working Paper.
- 8. Desai, M. & Low, M. (1987). Measuring the opportunity for product innovation, in M.de Cecco (de.), Changing Money: Financial Innovation in Developed Countries. Basil Blackwell, Oxford, 1987.

- 9. Furrer, O., Thomas, H. & Goussevskaia, A. (2008). The structure and evolution of the strategic management field: a content analysis of 26 years of strategic management research. *International Journal of Management Reviews*, 10(1), 1–23.
- 10. Hofer, C., Jin, H., Swanson, R. D., Waller, M. A., & Williams, B. D. (2012). The impact of key retail accounts on supplier performance: A collaborative perspective of resource dependency theory. *Journal of Retailing*, 88(3), 412-420.
- 11. Hong, T. L., Cheong, C. B., & Rizal, H. S. (2016). Service Innovation in Malaysian Banking Industry towards Sustainable Competitive Advantage through Environmentally and Socially Practices. *Procedia-Social and Behavioral Sciences*, 2(6), 224, 52-59.
- 12. Hoyer, W. D., Chandy, R., Dorotic, M., Krafft, M., & Singh, S. S. (2010). Consumer cocreation in new product development. *Journal of service research*, 13(3), 283-296.
- 13. Hubbard, G. (2009). Measuring organizational performance: beyond the triple bottom line. *Business strategy and the environment*, 18(3), 177-191.
- 14. Kearns, G. S., & Lederer, A. L. (2003). A resource-based view of strategic IT alignment: how knowledge sharing creates competitive advantage. *Decision sciences*, 34(1), 1-29.
- 15. Kiiyuru, K. D. (2014). *Effects of innovation strategies on performance of commercial banks in Kenya* (Doctoral dissertation, School of Business, University of Nairobi).
- 16. Mairesse, J., & Robin, S. (2009). Innovation and productivity: a firm-level analysis for French Manufacturing and Services using CIS3 and CIS4 data (1998-2000 and 20022004). Paris: CREST-ENSAE
- 17. Majeed, S. (2011). The impact of competitive advantage on organizational performance. *European Journal of Business and Management*, 3(4), 191-196.
- 18. Musembi, D. M., Ali, B., & Kingi, W. (2016). Effect of Liquidity Risk Determinants on the Financial Performance of Commercial Banks Listed At the Nairobi Securities Exchange. *Imperial Journal of Interdisciplinary Research*, 2(11), 8-23
- 19. Muthoni, M. G. (2013). The effect of marketing innovation of financial performance of insurance companies in Kenya. Unpublished MBA Project, University of Nairobi
- 20. Njiffla, N. N. (2009). *Strategic responses of Kenya Commercial Bank limited to changes in the Kenyan banking industry* (Masters Dissertation, University Of Nairobi).
- 21. O'sullivan, D., & Dooley, L. (2009). Applying innovation. California: Sage Publications Inc

- 22. Oke, A. (2007). Innovation types and innovation management practices in service companies. *International Journal of Operations & Production Management*, 27(6), 564-587.
- 23. Patrick, D, (2011). Relationship between financial innovation and financial performance of commercial in Kenya, Unpublished MBA Project, Kenyatta University.
- 24. Porter, M. E. (1991). Capital disadvantage: America's failing capital investment system. Harvard Business Review, 70, 65-82.
- 25. Porter, M. E. (2008). The five competitive forces that shape strategy. *Harvard business review*, 86(1), 25-40.
- 26. Priem, R. L., & Butler, J. E. (2001). Is the resource-based "view" a useful perspective for strategic management research? *Academy of management review*, 26(1), 22-40.
- 27. Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of management*, 35(3), 718-804.
- 28. Shergill, G., and Nargundkar. R., 2005. Market orientation, marketing innovation as performance drivers: extending the paradigm. *Journal of Global Marketing*, 19(1), pp.27-44.
- 29. Smart, P. A., Maddern, H., & Maull, R. S. (2009). Understanding business process management: implications for theory and practice. *British Journal of Management*, 20(4), 491-507.
- 30. Tidd, J., Besant, J. & Pavitt, K.(2011). Managing Innovation; integrating technology, market and organizational change, 2nd edition, John Wiley & Sons Ltd. Westsussex, England.
- 31. Walumbwa, F. O., Avolio, B. J., & Aryee, S. (2011). Leadership and management research in Africa: A synthesis and suggestions for future research. *Journal of Occupational and Organizational Psychology*, 84(3), 425-439.
- 32. Zewdia, G. H. (2013). The Effects of Financial Innovation on the Financial Performance of Listed Commercial Banks in Kenya, Unpublished MBA Projects, University of Nairobi.

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