Effects of Product Design on Performance of Commercial Banks in Garissa County, Kenya

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Abstract: **An organization's superior performance mostly results from its strategic choice that provides the firm a better positioning in the industry structure. As a result of dynamic environment banks face arising from high competition posed by the other commercial and non-commercial banks. Therefore, in a highly uncertain and changing environment, strategic managers need to have the strategic flexibility to respond to problems speedily. Therefore, the study sought to determine the effect of product design on performance of commercial banks in Garissa County, Kenya. This study employed a descriptive survey research design. The population for this study was four commercial banks namely: Kenya Commercial Bank, Equity Bank, Cooperative Bank and National Bank in Garissa County, Kenya. The respondents were managers in top, middle and low level management employees. A census of 82 respondents was carried out. Primary data was collected using a structured questionnaire. Quantitative data was analyzed using descriptive statistics. The study further carried out multiple regressions to determine the effect between variables. The study found that product design had a positive and significant effect on the performance. The study concluded that the banks have a very effective product design implementation that has enhanced their performance by attracting more consumers, providing ease, and making services available to their customers. The study recommended that the commercial banks should create a solid understanding of their opportunities by looking at the entire market based on their customer to determine the actual potential.**

Key words**: Product Design, Organizational Performance, Organizational strategy**

I. INTRODUCTION

The primary objective of any organizations is to make profit, grow and survive in the environment in which it operates. The environment tends, shape the outlook, and goal of the organization by placing constraints on them (Derek, 2016). These constraints in the environment of organizations goal could be in the form of competition, this sets a limit on the goals specify by the organization. According to Kareem (2017) organizations performance depends on the appropriate strategy adoptions to a complex and ever changing environment. Therefore, performance of the organization relates to how an organization understands and responds strategically to certain environment changes.

George, Walker and Monster (2019) observe that organizations vary according to the relative influence of a number of factors related to both the objective of the organization and the instruments and strategies chosen to achieve them. George, Walker and Monster (2019) further observe that many organizations have attempted to manage organizational performance using the balanced scorecard methodology where performance is tracked and measured in multiple dimensions that include; financial performance, customer service, social responsibility and employee stewardship. Therefore, an organization will naturally function better when working towards a specific goal.

Pearce and Robinson (2012) indicate that for organizations to achieve their goals and objectives, it is necessary for them to adjust to their environment. The dynamism of the environment implies that the organization has constantly redesigned their strategies in order to remain competitive. According to Tebrani (2016) strategic responses have been identified as successful in allowing an organization to cope with environmental changes. Such responses are modifications that arise in due course to an organization's policies and goals. An organization thus needs to undergo and respond to changes for better performance.

Lee and Grewal (2014) observe that the intensity of Malaysian commercial banks' response to new technology represents the response magnitude. In addition, the speed at which these banks adopt the new technology can vary across banks, and timely responses should allow them to improve their performance. As a result of inherent differences in organizational routines, business processes and resources it can therefore be argued that organizations are expected to differ in their strategic response on performance.

Nzewi and Ojiagu (2015) observed that commercial banks in Nigeria faced many challenges such as increased competition and harsh economic conditions and most times experience failure and distresses in their profitability performance, probably not keeping pace with accelerating industrial change and organizations' strategic policies. Fakile (2017) noted that most distressed commercial banks in Nigeria were liquidated, resulting to loss of depositors holding, job losses by workers, and adverse effect on other sectors of the economy. In addition till date, some commercial banks could not maintain sustainable performance growth and have either been silently merged or acquired.

Lengwa (2014) indicate that most of the commercial banks in Kenya main competitive edge has been based on the huge un-bankable rural poor in Kenya as well as the most banks strong financial base and good reputation in the financial sector due to increased profitability. According to Ngaira (2018) business strategies in response to changing business environment should involve managers in the formulation of such strategies and give them adequate decision making authority in the implementation of the respective response strategies. Therefore, in order to stay ahead of competition banks should continuously scan the environment aggressively and also speed up implementation of its strategies.

Strategic responses are a sequence of actions and interventions resulting in the formulation and implementation of plans designed to attain the goals of a firm (Pearce & Robinson, 2015).These authors further argue that these plans and actions must be strategically adapted to the complexities and dynamism of a rapidly changing environment in order to achieve the company's objectives effectively. Ketchen and Palmer (2017) observe that companies are largely open systems with continuous interaction and external environment interfaces. Strategic responses are therefore the strategies which businesses follow and are generally triggered by continuous changes in the external environment.

Product design is a key strategic practice in many companies as new products make a significant contribution to sales revenue and if companies may create unique products, they have the option of commanding premium prices (Ittner & Larcker, 2015). Dirisu, Iyiola and Ibidunni (2016) indicate that product design is a key factor in increasing the organization as it defines the qualities, functionality and efficiency of the service or product that customers need. The goal of product design is to build good or service of outstanding practical functionality and revenues at an acceptable cost and within a reasonable period.

Kanno and Shibata (2013) Observe that having design divisions involved from an early stage contributes to the overall product development process, and separately preparing for organizational factors in design development is insufficient to create highly advanced and innovative designs. Dumas and Mintzberg (2016) argues that, in addition to making design a part of management strategy, design functions, policies, and programs must be put in place and executed in line with that strategy in order to create unique designs that differentiate from competitors. Therefore, it can be seen that executing a corporate design strategy carries significance from the corporate perspective.

The Banking industry in Kenya is governed by the Companies Act, the Banking Act, the Central Bank of Kenya Act and the various prudential guidelines issued by the Central Bank of Kenya. The banking sector was liberalized in 1995 and exchange controls lifted. The CBK, which falls under the Minister for Finance docket, is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system (PWC, 2012). In Kenya, The banks have come together under the Kenya Bankers Association (KBA), which serves as a lobby for the banking sector’s interests

Statement of the Problem

Organizations are facing exciting and dynamic challenges in the 21st century. In the globalized business, companies require strategic thinking; and only by evolving good business strategies can they become strategically competitive (Johnson & Scholes, 2014). According to Ansoff and McDonnell (2016) the competitive environment in the banking industry is changing rapidly to the extent that banks must change by crafting strategies to move the retail banking business forward or face the consequences of inability to fit in the turbulent environment. This requires that commercial banks should continuously learn, adapt and re-orient themselves to the changing environment which necessitates the need for response strategies on enhancing their performance.

Commercial banks in Garissa County have been ranked as the best performing bank in the banking industry in Kenya compared to other commercial banks in the banking industry that had consistent performance over the years (Koriyow & Karugu, 2018). However, the overall performance of commercial banks in Garissa County recorded KSh 20.9 billion in after-tax profit compared to 2018’s Ksh 19.03 billion. The decline is attributed to low interest rates, increased fees and commissions resulting from use of digital platforms, slowdown in economic activity and the political uncertainty experienced in the country. Therefore, commercial banks in Garissa County must look ahead for the various response strategies to be able to survive in this dynamic environment.

II. LITERATURE REVIEW

Theoretical Literature Review

The Ansoff matrix was invented by Igor Ansoff in 1965 and is used to develop strategic options for businesses. According to Ansoff (1965) there are four strategies. First, the market penetration strategy of existing markets occurs whenever an organization penetrates a market with its current products or offerings. Second, in the market development strategy the goal can either be to change an established product or change the customer segment of a more current product. Third, the product development strategy states that new products should be created so that the company can achieve growth and development. Fourth, diversification strategy involves moving simultaneously into new products and new markets.

Nwokah, Ugoji and Ofoegbu (2015) observe that product development facets of product quality and product lines/ product mix were positively and significantly correlated with the corporate performance facets of profitability, sales volume and customer loyalty. Similarly, Fong, Lo and Ramayah (2017) observe that firm image, brand strength, product innovativeness and new product quality were found to be positively related to new product performance. Ansoff (1965) observe that the firm develops a new product to cater to the existing market. The move typically involves extensive research, development, and expansion of the product range.

The product development strategy is employed when firms have a strong understanding of their current market and are able to provide innovative solutions to meet the needs of the existing market.

This theory is relevant to the study as it shows that an organization can invest in research and development to develop new products to cater to the existing market. In addition, acquire a competitor's product and merging resources to create a new product that better meets the need of the existing market and carry out strategic partnerships with other firms to gain access to each partner's distribution channels or brand.

Empirical Literature Review

A study by Fong, Lo and Ramayah (2014) examined new product design and performance in the banking industry. Two hundred and fifty banks' customers were selected using simple random sampling in this study. Partial Least Squares (PLS), was applied to test the hypotheses. The findings revealed that four types of new product development factors, namely, firm image, brand strength, product innovativeness and new product quality were found to be positively related to organizational performance. However, the study used simple random sampling which is limited to accessing a sample that is representative of the whole population

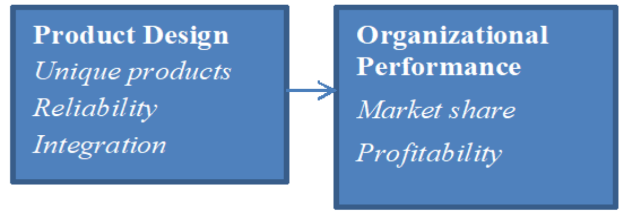
Kamakia (2014) study examined effect of product design on performance of commercial banks in Kenya. The population of the study comprised of (43) forty-three commercial banks. The study used both primary and secondary data. Primary data was collected with the aid of a self-administered semi-structured questionnaire. The study found that product design positively impacts performance of commercial banks and that the reputation in the market makes the bank stand out. However, diagnostic tests for the empirical model were not performed.

Mbithi, Muturi and Rambo (2015) study investigated the effect of product design strategy on performance in Sugar Industry in Kenya. A cross-sectional survey research design was used in carrying out the study. The target population of the research entailed nine sugar companies in Kenya. Purposive sampling method was used in selecting the respondents. Data was collected using questionnaires and analyzed using a combination of both descriptive and inferential statistics. The study established strong relationship between product design strategy and all aspects of performance. However, the study context was Sugar Industry in Kenya.

Kimamancha (2017) study evaluated factors that influence product design in commercial banks in Kenya. The researcher used descriptive research to understand the effect of strategy, research and resource availability on new product development. The research focused on a population of 79product development officers in tier 1 banks where a census was conducted. A questionnaire with 31 questions was used to collect data. The study findings revealed that strategy is positively and statistically significant to new product development in commercial banks in Kenya. However, research instrument only tested for validity but not reliability.

CONCEPTUAL FRAMEWORK

Independent Variable **Dependent Variable**



II. RESEARCH METHODOLOGY

This study employed a descriptive research design. According to Dulock (2014) descriptive research design is a scientific method which involves observing and describing the behavior of a subject without influencing it in any way. The target population for this study was four commercial banks namely: Kenya Commercial Bank, Equity Bank, Cooperative Bank and National Bank operating in Garissa County, Kenya. The respondents were managers who were ranked into top, middle and low-level management employees. This brought to the total target respondents to 82 respondents. A census of 82 respondents was carried out. The study used primary data that was collected using questionnaires. Questionnaires were piloted to 8 respondents and these respondents were not included in the final data collection process. Validity was ensured through content, criterion and construct validity to make sure that the instruments measures what they are intended for. Cronbach's alpha reliability coefficient was used to test the reliability of the questionnaire. Quantitative data was analyzed using descriptive statistics. Pearson product moment correlation coefficient and simple regression analysis to determine the effect between variables.

III. FINDINGS

The study sought to determine the descriptive statistics on product design measures on the performance of commercial banks in Garissa County, Kenya. The results are presented as follows.

Table 1: Product Design

Statements	M	SD
The bank offers unique products to its customers	4.08	0.92
The banks offers products that are accessible all the time	4.05	0.95
The services offered by the bank are available when the customers desire them	4.30	0.70
The bank offer products that can be differentiated from others	4.12	0.88
The banks offer product that have multiple transactions hence improve their market share	4.55	0.45
Aggregate Score	4.15	0.85

Source: Survey Data (2021)

The results in Table 2 show that the respondents agreed that product design affects the performance of commercial banks in Garissa County, Kenya as shown by aggregate of 4.15 and a standard deviation 0.85. This shows that the banks have a very effective of implementation of product design which improved their performance through getting more customers, convenience and making services available to their clients. A study by Fong, Lo and Ramayah (2014) examined new product design and performance in the banking industry and the findings revealed that four types of new product development factors, namely, firm image, brand strength, product innovativeness and new product quality were found to be positively related to organizational performance. In addition, Nwokah, Ugoji and Ofoegbu (2019) study that examined how performance of an organization is influenced by product development and indicated that there was no substantial association between product size, product design, profitability, sales volume, and consumer loyalty.

The respondents strongly agreed on the statement that the banks offer product that have multiple transactions hence improve their market share (M=4.55, SD=0.45). This is an indicator that banks improved their performance due to having a product that was used adopted by a large number of clients hence increasing their customer base. This is in agreement with Kamakia (2014) study that examined effect of product design on performance of commercial banks in Kenya and the study found that product design positively impacts performance of commercial banks and that the reputation in the market makes the bank stand out. Further, Liu, Lin and Huang (2014) study findings on how product design affects the operating performance in textile industry and showed that the unique design features of products significantly influenced the operating performance.

The respondents agreed on the statements that the services offered by the bank are available when the customers desire them (M=4.30, SD=0.70), the bank offer products that can be differentiated from others (M=4.12, SD=0.88), the bank offers unique products to its customers (M=4.08, SD=0.92) and that the banks offers products that are accessible all the time (M=4.05, SD=0.95). The banks enabled the banks to enjoy loyalty from its clients, customers' complaints are minimized, and time to market for new products and services is shortened. This is in line with Mbithi, Muturi and Rambo (2015) study that investigated the effect of product design strategy on performance in Sugar Industry in Kenya and established strong relationship between product design strategy and all aspects of performance. Furthermore, according to Roper, Micheli, Love, and Vahter (2016), design is closely connected with improved performance regardless of the type of role it plays in new product creation by Irish manufacturers

Correlation Analysis

Correlation analysis was done to quantify the association between the independent and dependent variables.

Table 2: Correlation Analysis

		Product design	Organizational performance
Product design	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	79	
Organizational performance	Pearson Correlation	.341**	1
	Sig. (2-tailed)	.002	
	N	79	79

Source: Survey Data (2021)

The results in Table 4.9 show that product design had a weak relationship with the organizational performance with a Pearson's r value of 0.341. This contradicts with Nwokah, Ugoji and Ofoegbu (2019) study that examined how performance of an organization is influenced by product development and indicated that there was no substantial association between product size, product design, profitability, sales volume, and consumer loyalty.

Regression Analysis

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.636a	.805	.772	.454

Source: Survey Data (2021)

Table 3 shows a model summary that provides information about the regression line's ability to account for the total variation in the dependent variable. R is a measure of the strength of the relationship between dependent and independent variables and it is represented by a factor of 0.805 which is closer to one meaning that both dependent and independent variable is strongly related. R^2 also called the coefficient of determination is the statistical measure of how close the data are to the fitted regression line. The higher the R-squared, the better the model fits study data. Therefore, at 0.805(80.5%) shows that best fit of study.

The adjusted R^2, also called the coefficient of multiple determinations, is the percent of the variance in the dependent explained uniquely or jointly by the independent variable. The result on adjusted R^2 indicates that product design, strategic planning, process design and employee empowerment variables explain a factor of 0.772(77.2%) of the performance of commercial banks in Garissa County, Kenya. This means that other variables not studied contribute 22.8% of performance.

Coefficient of Determination of the Variable

Table 3: Coefficient of Determination of the Variable

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.539	.490		6.610	.000
	Product design	0.729	.046	4.256	2.781	.001

Source: Survey Data (2021)

From the above regression model, holding the product design at constant, the performance of commercial banks in Garissa County, Kenya would be at a factor of 0.539. The study also revealed that product design affected the performance of commercial banks in Garissa County, Kenya to a very great extent at a factor of 0.729.

The resulting regression equation was $Y = 0.539 + 0.729X_1$

Where Y = Organizational performance

X_1 = Product design

The study observed that a 0.729 represented the amount by which performance of commercial banks in Garissa County, Kenya changes when product design is changed by one unit keeping strategic planning, process design and employee empowerment constant. The study established that product design had a positive and significant influence on the performance of commercial banks in Garissa County, Kenya as indicated by beta value ($\beta = 4.256$, $p < 0.05$). This is in line with Mbithi, Muturi and Rambo (2015) study that investigated the effect of product design strategy on performance in Sugar Industry in Kenya and established strong relationship between product design strategy and all aspects of performance. Dirisu, Iyiola and Ibidunni (2016) indicate that product design is a key factor in increasing the organization as it defines the qualities, functionality and efficiency of the service or product that customers need.

IV.CONCLUSIONS

The study concluded that the banks have a very effective product design implementation that has enhanced their performance by attracting more consumers, providing ease, and making services available to their customers. Banks enhanced their performance as a result of having a product that was widely embraced, resulting in an increase in their customer base. Customers' complaints are minimized, and time to market for new products and services is shortened.

V. RECOMMENDATIONS

The study recommended that the commercial banks should create a solid understanding of their opportunities by looking at the entire market based on their customer to determine the actual potential. The banks should have comprehensive parameters against which to screen new product and service ideas. Establish the elements that an idea must have to stay on the list. Obtain customers views when designing a products or the services to design an effective user-centered product and launch a successful product as this will enable them increase sales of their products or services, improve market position and boost customer loyalty. The banks should sharing development activities, design decisions that involve interdependencies between functional specialists can be made more quickly and more effectively.

REFERENCES

[1] Ansoff, H. I. (1965). *Corporate strategy: business policy for growth and expansion*. McGraw-Hill

[2] Derek, B. (2016). *The Changing Environment of Business*, 2nd Edition: Boston; Kent Publishing Company.

[3] Dirisu, J. I., Iyiola, O., & Ibidunni, O. S. (2016). Product differentiation: A tool of competitive advantage and optimal organizational performance (A study of Unilever Nigeria PLC). *European Scientific Journal*, *9*(34), 47 – 55

[4] Dulock, H. L. (2014). Research design: Descriptive research. *Journal of Pediatric Oncology Nursing*, *10*(4), 154-157

[5] Dumas, A., & Mintzberg, H. (1989). Managing Design, Designing Management. *Design Management Journal*, 1(2), 37 - 44.

[6] Fakile, S. A. (2017). Strategic Planning and Performance: Catalyst for Sustainability and Stability in the Nigerian Financial Sector. *European Scientific Journal*, *9*(25), 512 – 523

[7] Fong, S. F., Lo, M. C., & Ramayah, T. (2014). New product design and performance in the banking industry. *Asia-Pacific Journal of Management Research and Innovation*, *10*(4), 305-321

[8] Fong, S. F., Lo, M. C., & Ramayah, T. (2017). New product development and performance in the banking industry. *Asia-Pacific Journal of Management Research and Innovation*, *10*(4), 305-321

[9] George, B., Walker, R. M., & Monster, J. (2019). Does strategic planning improve organizational performance? A meta-analysis. *Public Administration Review*, *79*(6), 810-819

[10] Ittner, C. D., &Larcker, D. F. (2015). Product development cycle time and organizational performance. *Journal of Marketing Research*, *34*(1), 13-23

[11] Johnson, G., & Scholes, R. (2014). *Exploring corporate strategy*. Financial Times Prentice Hall

[12] Kamakia, P. (2014). *Effect of product innovation on performance of commercial banks in Kenya* (Doctoral dissertation, University of Nairobi).

[13] Kanno, Y., & Shibata, S. (2013). Organizational factors in the product design development process. *International Journal of Business and Management*, *8*(10), 15-26

[14] Kareem, Y. (2017). *The Changing Organization Behaviour Patterns*; Boston: Harvard University Press

[15] Ketchen, D., & Palmer, T. (2013). Strategic responses to poor organizational performance: a test of competing perspectives. *Psychology Management*, 4(1), 185 – 196

[16] Kimamancha, K. K. (2017). *Factors That Influence Product Design in Commercial Banks in Kenya* (Doctoral dissertation, United States International University-Africa)

[17] Koriyow, O. I., & Karugu, L. (2018). Competitive intelligence strategies and performance of commercial banks in Garrisa County, Kenya. *International Academic Journal of Human Resource and Business Administration*, *3*(1), 371-394

[18] Lee, R. P., & Grewal, R. (2014). Strategic responses to new technologies and their impact on firm performance. *Journal of Marketing*, *68*(4), 157-171

[19] Lengwa, S. J. (2014). *Strategic responses by commercial banks to competition in provision of retail banking services in Kenya* (Doctoral dissertation, University of Nairobi)

[20] Mbithi, B., Muturi, W., & Rambo, C. (2015). Effect of Product Design Strategy on Performance in Sugar Industry in Kenya. *International Journal of Academic Research in Business and Social Sciences*, *5*(12), 311 – 325

[21] Ngaira, H. A. (2018). *Strategic Responses by the Kenyan Commercial Banks to the External Environmental Turbulence: A Case of Sidian Bank Kenya Limited* (Doctoral dissertation, United States International University-Africa).

[22] Nwokah, N. G., Ugoji, E. I., & Ofoegbu, J. N. (2019). Product development and organizational performance. *African Journal of Marketing Management*, *1*(3), 089-101.

[23] Nzewi, H. N., & Ojiagu, N. C. (2015). Strategic planning and performance of commercial banks in Nigeria. *International Journal Of Scientific & Technology Research*, *5*(3), 29 - 42.

[24] Pearce, J. A. & Robinson, R. B. (2012). *Strategic Management: Strategy Formulation and Implementation.* Third Edition, Richard D. Irwin Inc