

INFLUENCE OF PRODUCT DEVELOPMENT PRACTICES ON ORGANIZATIONAL PERFORMANCE OF KENYA POWER COMPANY IN KIAMBU COUNTY

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Abstract: Due to dynamic global competition in business today, organizations, regardless of their status, whether monopoly or not, have been forced to remain competitive in delivery of their services. This study therefore sought to determine the influence of product development practices on organizational performance of Kenya Power. The study adopted the Relationship Marketing Theory to help bring a theoretical underpinning between the study variables. The research design was descriptive study and the targeted population was the customer and service marketing employees of Kenya Power Kiambu County, where proportionate sampling was used. The Morgan table was used to arrive at the sample size. Data was collected from the employees in the customer service and marketing section which are 1021 in total. A structured questionnaire was adopted to collect quantitative data that was analysed to produce both descriptive and inferential statistics. Regression results indicated that market penetration, product development, advertising and promotion as well as customer orientation practices positively and significantly impact organizational performance of Kenya Company, Kiambu County, Kenya. This study therefore concluded that product development positively and significantly impact organizational performance of Kenya Company, Kiambu County, Kenya. This study recommends Kenya Power Company to pay particular attention to market penetration practices by focusing on those strategies that seek to maximise sales, reach out to new customers for more subscriptions and increase market communication to enhance customer awareness.

Keywords: Product Development, Strategy, Marketing Management

Introduction

The term product development or new product development refers to the process of transforming a market opportunity and set of product technology assumptions into a marketable product (Chang and Taylor, 2016). It is the process of logically combining a series of activities that leads to the launch of new products in response to market opportunities. A product development practice is a defined set of tasks, steps, and phases that describe the criteria by which a company iteratively transforms initial ideas into marketable products or services (Kahn, 2004). These are established practices reflected in the development and introduction of new products to meet new market opportunities.

At Kenya Power, due to monopolistic nature, marketing practices never existed. Marketing department was started in Kenya power in the year 2003, when Kenya Power management felt there was a gap due to heightened competition globally. Since then, Various practices have been put in place such as field visits to unconnected areas and product sales, though when it was started, it was not given the focus it deserved hence need for an enhanced marketing strategy now for competitive advantage.

Product Development is a “success factor for new product development efforts” (Troy et al., 2008). Done properly, it can have a positive impact on market share, profitability, and the long-term viability of an organization. Product Development encompasses practices that help companies achieve high-quality, viable products that meet market needs and add value to their customers while adding value to their business. Namusonge et al., (2017) postulate that product development practices have a significant positive impact on financial performance. Many products fail too quickly due to poor market analysis, poor design (weak products), regulatory risks, weak and untested market assumptions, and delays in getting to market.

Product development demands the integration of many actors of different knowledge and expertise in order to develop a high technological product (Chux Gervse Iwe, 2010).

Product will always be developed with the drive to meet the needs and wants. Consumer satisfaction will lead to customers’ loyalty and in turn result to more sales and revenue for the producing firm/organization (Udegbe and Udegbe, 2013).

Problem Statement

Kenya Power, though a monopoly, has come under heavy competition from alternative energy sources such as solar energy which are cost effective, green and reliable (Mjomba & Kavale, 2015). This has created a gap in Kenya power marketing practices and product development hence need to critically re-evaluate and focus on its marketing strategy.

The concept of product development has been widely discussed in the literature, especially in innovation management research. However, the analysis of the literature on product development practices shows that most references and case studies are in the manufacturing (Akroush and Awwad, 2018; Chang and Taylor, 2016; Vinayak and Kodali, 2014), telecom (Namusonge et al., 2017), aviation (Naghi Ganji et al., 2017) and transportation sectors. Studies on product development practices of energy sector or in electricity supply providers remain sparse, especially those from an emerging economy perspective.

Objective of the Study

This study sought to analyse the determine the influence of product development practices on organizational performance of Kenya Power Company, Kiambu County Kenya

Value of the Research

The current study findings useful in coming up with effective marketing strategies that can improve resource allocation, wealth creation as well as its objectives and goals of connecting 1 Million customers with electricity supply annually. For the academicians, this study presents a platform for interrogation of how product development can be critical for monopoly public commercial institutions.

Literature Review

Theoretical Foundation of the research

Relationship marketing theory was proposed by Alexander in 1998. This theory states that relationship marketing is all about creating interactive relationships with the existing customers and potential customers that result into long term relationships and increase in profitability. Relationship marketing involves having good relationships with other stakeholders such as suppliers and shareholders. Relationship marketing theory

emphasizes on creating interactive relationships with existing customers, potential customers, suppliers and all stakeholders for long term relationships which in turn increases profitability.

Empirical Literature Review

Product Development Practices on Organization Performance

Basing their study on firms in the US and EU, Tehrani (2003) interrogated whether product development strategy was essential to performance of firms in 16 sectors. It was however shown that the effect of this strategy depended on the geographical location of the firm, since those US firms that had put in place such strategies achieved better returns compared to those in Europe. Improving current services through easy pay.

Kenya power has come up with product development practices to improve its customer services such as bills queries through my power App and using *977#. Products such as Stima Loans for new supply connections, buying prepaid tokens through pay bill number 888880 and for post-paid by using pay bill number 888888 to pay the bills. Also through Bonga points, one can redeem points with tokens for prepaid meters. (Kenya Power Review reports 2014)

The results indicate that the relationship between market differentiation and product development and performance depends on the geographies the firm operates in, since US firms that adopt product differentiation and development practices had superior performance than those in Europe.

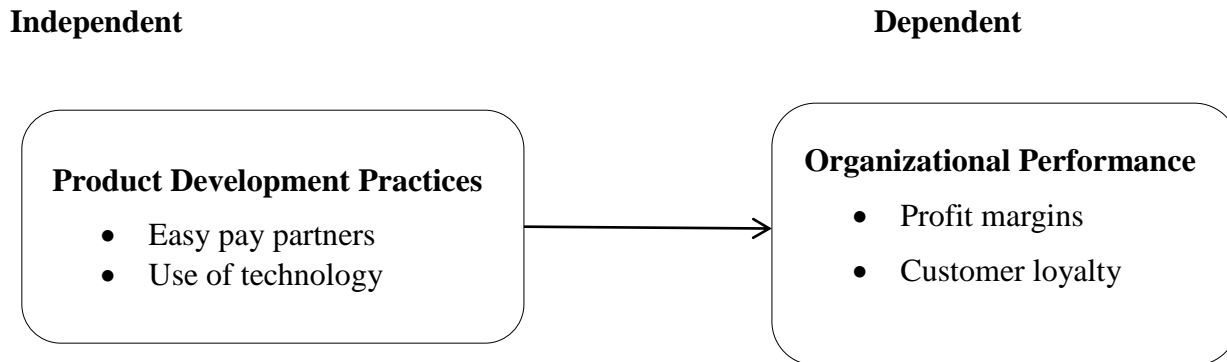
In Nigeria, Nwokah, Ugoji and Ofoegbu (2009) linked product development strategy to firm performance using quantitative approach. The cross examination through correlation analysis, demonstrated that implementation of this approach improved firm sales, profits and customer loyalty.

Assrar (2017) focusing on Egyptian firms dealing in industrial related products, cross examined their product development strategy. Based on a sample of 227 manufacturing firms, data was collected and analysed through partial least squares (PLS) procedure. The results indicate that there are many similarities between the key product development practices in different environments and these practices explain 47.1 percent of the variance in product innovation and internal product quality as well as performance.

Conceptual Frame Work

A conceptual framework provides a link between the predictor and outcome variables in a study presented in a figure format (Kumar, 2019). The dependent variable in this study is firm performance, and the independent factor cost leadership methods.

Fig 1. A Conceptual Model showing Green loans and Firm performance



Source Researchers (2022)

A conceptual framework provides a link between the predictor and outcome variables in a study presented in a figure format (Kumar, 2019). Figure 1 shows the conceptual framework for this study. The summary of variables are; product development, easy pay partners and use of technology improve organization performance in terms of profit margin, customer loyalty.

Methodology

Research Design

This study adopted a case study since the focus was on one unit that is Kenya Power. A case study enables a focus on one organization to enhance in-depth analysis of a concept (Silverman, 2016). Similarly, case study is better when used to obtain information concerning the current status of phenomenon. Hence it was suitable for this study.

Population of the study

Population is the entire units under focus (Taylor *et al.*, 2015). This study targeted 1021 customer service staff, marketing staff and management from Kenya Power Kiambu County Region. The reason for using Kiambu County was to get the real data needed for the study.

Table 1: Sample Size

Subcounty	Population	Customer service	Marketing	Management	%Proportionate	Sample size
Thika	279	120	60	99	27.3	36
Ruiru	101	60	20	21	9.9	13
Juja	95	55	25	15	9.3	12
Limuru	101	60	20	21	9.9	13
Gatundu	119	70	30	19	11.6	15
Kikuyu	108	60	28	20	10.6	14
Githunguri	122	80	25	17	11.9	16
Lower kabete	99	50	30	19	9.7	13
Ruaka	97	60	25	12	9.5	13
TOTAL	1021				100	132

Source: Department of Human Resources 2019, Kenya Power, Kiambu County office

Data Collection

The researchers sought authority and obtained a Research Permit from the National Council for Science, Technology and Innovation (NACOSTI) to collect data. The researchers with the help of research assistants administered an Introduction Letter and the data collection instrument mainly through drop and pick later method. Data was collected from 101 respondents using a questionnaire that was tested for reliability and validity.

Normality test

Shapiro Wilk test ranging from -0.1 to +1.0 was used to test normality. A probability significant value >0.05 means the data is normally distributed.

Table 2: Shapiro Wilk Test for Normality

Variable	Shapiro-Wilk		
	Statistic	df	Sig.
Product development practices	0.91	101	0.231
Organisational performance	0.949	101	0.15

Source: Research Data (2022).

As depicted in *Table 2* above, variables had Shapiro Wilk significance values greater than 0.05. The significance of the Shapiro Wilk statistic for product development practices was 0.231 and that for organisational performance was 0.15. As a result, data was considered to be normally distributed for all the variables.

Response Rate

A total of 132 questionnaires were administered to the respondents of the study who comprised of customer service staff, marketing staff and management from Kenya Power company Kiambu County Region. From these, 101 questionnaires were completed and returned. This represents a general response rate of 76.5%. This response rate according to the suggestions of Fincham (2008) falls within the recommended threshold of 70% and above considered adequate to conduct statistical analysis to enable generalization of findings

Descriptive statistics

Product Development Practices

This study determined the influence of product development practices on organizational performance of Kenya Power Company, Kiambu County Kenya. The average responses are as shown on *Table 3* based on a Likert scale of 1-5 using mean and standard deviation.

Table 3: Descriptive Results on Product Development Practices

Statement	SD	D	N	A	SA	Mean	Std Dev
Meeting end-customer needs through product availability and responsive, on-time delivery.	12.9%	44.6%	13.9%	14.9%	13.9%	2.72	1.27

The ability to fill customer orders faster and more efficiently than the competition	5.0%	33.7%	27.7%	17.8%	15.8%	3.06	1.16
Company strives to improve its current services continuously through introduction of easy pay, my power App and *977# App.	13.9%	32.7%	22.8%	19.8%	10.9%	2.81	1.22
There are efforts to introduce technology in service delivery such through M-pesa pay bill	9.9%	34.7%	27.7%	14.9%	12.9%	2.86	1.18
The company uses cost efficient production methods so as to manage competitive delivery	1.0%	31.7%	39.6%	19.8%	7.9%	3.02	0.94
The organization modifies its service delivery channels alongside the customer demands	8.9%	26.7%	32.7%	21.8%	9.9%	2.97	1.12
The organization has introduced a number of products such as redeem Bonga points for token and Stima loan to attract more customers	9.9%	27.7%	30.7%	17.8%	13.9%	2.98	1.19
Average						2.92	1.15

Source: Research Data (2022)

As indicated on *Table 3* above, majority of the respondents disagreed that there is meeting end-customer needs through product availability and responsive, on-time delivery (mean=2.72). However, majority were neutral with regard to statements that there is ability to fill customer orders faster and more efficiently (mean=3.06) and the company strives to improve its current services continuously through introduction of easy pay apps such as power App and *977# App (mean=2.81).

With regard to adoption of enhanced technology, majority were neutral to the claims that there are efforts to introduce technology in service delivery such as through M-pesa pay bill (mean=2.86), the company uses cost efficient production methods so as to manage competitive delivery (mean=3.02) and that the organization modifies its service delivery channels alongside the customer demands (mean=2.97). Majority of the respondents were also neutral regarding the statement that the company has introduced a number of products such as redeem Bonga points for token and Stima loan to attract more customers (mean=2.98). On average, as shown by mean of 2.92, majority of the participants of the study were neutral when asked on whether the company makes use of various product development practices to enhance organisational performance.

Organisational performance*Table 4: Descriptive Results on Organisational performance*

Statement	SD	D	N	A	SA	Mean	Std Dev
The company has recorded an improvement in its sales turnover	12.9%	37.6%	17.8%	28.7%	3.0%	2.41	1.11
There has been recorded positive attitude by the employees.	3.0%	28.7%	28.7%	28.7%	10.9%	3.16	1.06
The company has recorded an improvement in its operational costs	6.9%	28.7%	29.7%	27.7%	6.9%	2.99	1.06
The company has recorded an improvement in its revenue	5.9%	24.8%	34.7%	23.8%	10.9%	3.09	1.08
The company has recorded an improvement in its market share	0.0%	28.7%	34.7%	25.7%	10.9%	3.19	0.98
The company has recorded a decrease in customer complaints	5.9%	28.7%	19.8%	23.8%	21.8%	3.27	1.26
Average						3.07	1.09

Source: Research Data (2022)

With regard to the company recording improving sales turnover, majority of the respondents disagreed (mean=2.41). However, majority of the respondents were neutral when asked whether positive attitude by the employees has been recorded in the company (mean=3.16). Similarly, most respondents were neutral on the statement that the company has recorded an improvement in its operational costs (mean=2.99). On whether the company has recorded an improvement in its revenue, majority of the respondents were also neutral (mean=3.09) as was the case on the statement that the company has recorded an improvement in its market share (mean=3.19). Another measure sought to determine whether the company has recorded a decrease in customer complaints whereby majority of respondents were neutral (mean=3.27).

Inferential Statistics*Table 5: Influence of Product Development Practices on organizational Performance*

Model summary				
R	R Square	Adjusted R Square	Std. Error of the Estimate	
.867	0.752	0.741	0.480576	
ANOVA				
Sum				
of Squares	df	Mean Square	F	Sig.

Regression	67.116	4	16.779	72.651	.000
Residual	22.172	96	0.231		
Total	89.288	100			

Coefficients ^a

	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	0.056	0.197		0.286	0.775
Product development practices	0.318	0.112	0.318	2.845	0.005

Dependent Variable: Organizational performance

a. Predictors: (Constant), Product development practices

b. Dependent Variable: Organizational performance

Source: Field Data (2022)

The model summary results indicate that the product development practices had a strong positive influence on organizational performance of Kenya Company as shown by the Pearson correlation of 0.867. The coefficient of determination (R-square) is 0.752 implying that product development account for up to 75.2% of the variation in organizational performance of Kenya Company. The results on significance of the model

The significance of the regression model was confirmed by the F statistic at 5% (Sig < 0.000). additionally, F calculated statistic of 72.651 was greater than F (4, 96) critical value of 2.466 confirming significance of the regression model. This implies that product development is significant predictor of the change in organizational performance of Kenya Power Company

Product development practices positively and significantly influenced organisational performance of Kenya Power Company Kiambu County, Kenya as shown by beta value of 0.318 and p-value of 0.005 which is less than 0.05. The implication in this case is that an improvement in product development practices, *ceteris paribus*, results to significant improvement in organisational performance of Kenya Power Company Kiambu County

Conclusion

This study concludes that product development practices positively and significantly affect organizational performance of Kenya Power Company from the regression coefficient result. As such seeking to meet end-customer needs through product availability and responsive, on-time delivery, developing the ability to fill customer orders faster and more efficiently and striving to improve current services continuously through introduction of easy pay apps such as power App significantly enhances organizational performance of Kenya Power Company. Similarly, adopting product development practices through efforts to introduce technology in service delivery such as through M-pesa pay bill, using cost efficient production methods to manage competitive delivery, modifying service delivery channels alongside the customer demands and introducing a number of products such as redeem Bonga points for token improves organizational performance.

Recommendation

This study also recommends adoption of product development practices by Kenya Power Company to improve organizational performance. This can be achieved by designing products that seek to meet end-customer needs through availability and responsive, on-time delivery, developing the ability to fill customer orders faster and more efficiently and striving to improve current services continuously through introduction of easy pay apps such as power. Also to improve on organisational performance, there is need to introduce technology in service delivery such as M-pesa pay bill, cost efficient production methods to manage competitive delivery, modified service delivery channels and introducing a number of products such as redeem Bonga points for token improves organizational performance.

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