

ASSESSING INFLUENCE OF PRODUCT RESEARCH IN ENHANCING PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN NYERI TOWN

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ABSTRACT

In the world today, it is nearly impossible to efficiently sell products or services without conducting market research. Increased competition has led businesses to demand more of market research to improve on performance. The market research strategies used considered the rapidly changing demands of the business competitive edge that may affect the performance of Small and Medium Enterprises (SME) in Kenya. This study aims at assessing the effect of product research in enhancing performance of SME in Nyeri town. The study employed a survey research design as it is efficient and all the variables were measured without increased cost. Using stratified and simple random sampling, the researcher selected a sample of 74 respondents from a sampling frame of 351 SMEs. The criteria for stratification were the amount of capital invested: First stratum constituted all SMEs with a capital investment of below Kshs 50,000, second stratum between Kshs 50,000 and Kshs 150,000 and third stratum above Kshs 150,000. In the second stage, simple random sampling technique was applied where each SME from each stratum was given a serial number in the respective category and the numbers were picked at random. A self-administered structured questionnaire was distributed to the SME's where 86.5% response rate was achieved. Collected data was analyzed using statistical package for social sciences (SPSS Version 20) to generate descriptive and inferential statistics. The influence of product research in enhancing the performance of small and medium enterprises performance was measured using correlation coefficient and multi regression analysis. The finding of the study revealed positive and statistically significant results for the relationship between product research ($\beta = 0.367$ at p value 0.001) on performance of SME's. The researcher recommended that SME's should consider market research as a strategic factor that leads to improved performance other than succeeding by mere luck hence should conduct market research regularly. The study suggested that future research could focus on finding out the limiting factors hindering SME's to conduct regular market research.

Key Words: SME Performance, Market research, Products, Role

1.1 Introduction

Market research is a continuous process for collecting, investigating and interpreting information about a particular market. It is an essential part of any business that wants to offer products or services that are focused and well targeted. Business decisions that are based on good intelligence and good market research can minimize risk, pay returns and are communicated better (Kamau, 2010). The current customers experiences is a valuable information source, not only were these customers allowed for the gauging of how well their expectations are met but also told where things were getting right and more importantly where things are getting wrong

Market research creates benchmarks and helps to measure the progress. It is important in that one identified potential customers as they also understand the existing customers (Minlan, 2009). The market research is any organized effort to gather information about markets or customers. This is a very important component of business strategy. This term is mostly used interchangeably with marketing research (Sarkees M, 2011), but expert practitioners have drawn a distinction as follows, and marketing research is concerned only with marketing processes, while market research is concerned specifically with markets.

In Kenya, the SMEs are the drivers of the economy and as such through the sessional paper number 2 of 2005 the government recognized their impact on the economy. The challenge arises as SMEs are unstructured and as such their management is dependent on survival of owner and also they do not invest much in the market research. Beside the information of the target market, one also needed the information of one's products amongst others (Yang and Coates, 2010). The gap in performance was the basis of the study which determined the influence of product research in enhancing performance of the small and medium enterprises. (Neely, Adams et. al.2011) identified the key reason for business strategic failure as the organization's processes not being aligned with its strategies.

1.2 Statement of the Problem

Globally SME's have been defined differently by different countries, they are a pillar to any economy and as such they require information to enhance their performance. Increased competition has led businesses to demand more of market research to improve on performance. The researcher was answering the questions as to what the influence of product research is in enhancing the performance of small and medium enterprises in Nyeri town.

The importance of product research has often been overlooked and underestimated by various businesses. Some of the main reason for this is lack of business acumen, the belief that market research is a very expensive exercise, belief that it requires too much time and that it is too hard and that it shall only be conducted if one is starting up a big business entity or corporation (Eng, 2009). Big corporations do not share out how they conduct their product research; there must have been an input of market research in their success. (Bergh off, Philip and Uwe ,2012) in a study on the benefits of market research asserts that the failure of undertaking product research could place the businesses where the majority of their success would be dependent on luck rather than market strategy.

Market Research strategies used need to consider the rapidly changing needs of the market place and the demands of business looking for a competitive edge which affected the performance of SME. Today, Product Research has adapted to innovations in technology and the corresponding ease with which

information is available, this further demand for a thorough market research Garengo, P., S. Biazzo, et al. (2008). It came out clearly that SME's do not undertake Market research and hence their potential is not fully exploited due to lack of adequate information leading to poor performance. Due to the outlined gap in the performance of SME's, the researcher wishes to fill it up by carrying out this research and confirm that Product research plays a big role in enhancing performance of small and medium enterprises.

2.0 Literature Review

2.1 Empirical review

In this section the researcher shall consider the existing knowledge and information by other researchers relevant and in support of the study that the researcher is undertaking. It shows the gap that the researcher intends to fill up.

2.1.1 Influence of product research on the performance of small and medium enterprises

Research and development (R&D) functions of any company are mostly related with the invention of new products. While this may be very important, the development of existing products is equally significant because consumer preferences are continuously changing. The task of product research and development will be to come up with the products in terms of goods and services that meet and satisfy the needs of tomorrow's clients (Hinson et al, 2011). In all professionally run companies, research and development will always have strictly commercial functions so that they can further the company's business objectives by improving on the products' quality, this will improve operational processes and provide expert advice to the rest of the company and to customers (Lamberti &Noci, 2010). Research will not be expected to pay back for itself within a foreseeable time span. Large companies may allocate as much as one-tenth of their resources on the budget to research (Barnabas, et.al, 2010). Product researchers use marketing information to help them to develop products or services and choose suitable designs. A supermarket or a bookshop's layout have to be designed in such a way that customers will quickly find what they want. In this case the right use and allocation of space is vital to ensure profitability (Jiménez-Zarco et al., 2011).

A company might be reluctant to change an earlier design, particularly if it provides status (e.g. a designer label on a tracksuit). Conversely, small or slight changes may be made to products to bring them up-to-date e.g. if we take the logos of leading companies to give them a more modern and current feel (Jiménez-Zarco et al., 2011). Once a design has been completed the product researchers will build a prototype which could then be tested. Some prototypes will be discarded while others will be modified and improved.

Suliyanto and Rahab (2012), opine that recent research has concluded that internet shoppers are increasingly depending on product research before deciding what to buy. The majority of customers would not make a purchase without first consulting product research. Many respondents also engage more directly with providers through their social media outlets.

2.2Theoretical Review

2.2.1 Rogers' Diffusion Theory

2.2.1.1 Innovation

Rogers(1995) offered the following description of an innovation: "An innovation is an idea, practice, or project that is perceived as new by an individual or other unit of adoption" An innovation may have been invented a long time ago, but if individuals perceive it as new, then it may still be an innovation for them (Mankin, 2007). The newness characteristic of an adoption is more related to the three steps; knowledge, persuasion and decision of the innovation-decision process (Mohannak, 2007).This would go well with the objective of product research in this study. Uncertainty is an obstacle to the adoption of innovations. An innovation's consequences may create uncertainty: (Gohary, 2007) "Consequences are the changes that

occur in an individual or a social system as a result of the adoption or rejection of an innovation". To reduce the uncertainty of adopting the innovation, individuals should be informed about its advantages and disadvantages to make them aware of all its consequences (McAdam, & Keogh, 2007). Moreover, Rogers claimed that consequences can be classified as desirable versus undesirable (functional or dysfunctional) or direct versus indirect

3.0 Research Methodology

3.1 Research Design

The researcher adopted a survey research design so as to establish the relationship between real life phenomenon in a true social-economic setting (Franklin, 2012). The research involved a study where questionnaires with structured questions were used.

Survey involves statistical data analysis and is a popular and common strategy in business and management research (Bruce, 2009). The central features of survey are that it allows the collection of a small amount of data in a standardized form from relatively large number of individuals from a known population.

3.2 Sample size determination

In this study the researcher had a sample of 74 respondents. They were categorized as the respondent from the registered SMEs. Out of this population of 351, the researcher considered a sample size of 21% for each of the stratum and hence ended up with a sample size of 74 respondents. This was deemed to be a representative sample of the population to be used (Franklin, 2012) explains that for any meaningful study, 10- 20% of the target population would provide a representative sample. The 21% was considered, being on the higher ensured a more inclusive and representative sample. This was illustrated by the table below:

Table 3.1 Sample Size

Capital Invested (‘000)	Population	Sample
<50	149	31
50-150	114	24
>150	88	19
Total	351	74

3.3 Data Analysis and presentation

The collected data was carefully analyzed through statistical methods of mean, standard deviation, variances and regression analysis and presented in form of frequency, tables, charts, graphs and percentages for ease of interpretation and discussion according to the objectives and research questions of the study. The aim of qualitative data analysis is to transform and interpret qualitative data in a rigorous and scholarly manner (Sarantakos, 2010).

This made it easier for the comparison and interpretation of data findings appropriately. Inferential statistics (Pearsons correlation, ANOVA and Multi regression) and descriptive statistics (Mean and standard deviation) were used. However, since qualitative data was also generated, it was analyzed and presented in form of tables and graphs, and measured through Coefficient correlation and coefficient of determination. The data collected by likert scale was rated and quantitative data analyzed using the Statistical Packages for Social Sciences (SPSS) version 20. The numerical method was used to test normality of data

4.0 Data analysis, presentation and interpretation

4.1 Introduction

Chapter four contains data analysis, presentation and interpretation. The broad objective of the study was to determine the influence of product research on performance of small and medium enterprises in Nyeri town. Data was coded, analyzed and the results were obtained using descriptive and inferential statistics guided by the research objectives and research questions. The findings were presented in form of frequency tables and their implications explained. Pearson's Correlation Coefficient was used to determine the extent of the relationship between the dependent and independent variables.

4.2 Response Rate

Out of the 74 respondents targeted by the study 64 responded giving a response rate of 86.5% of the target population.

4.3 Influence of product research on the performance of small and medium enterprises

In this objective the study sought to determine the influence of product research on the performance of small and medium enterprises in Nyeri town. It was measured in terms of Expertise in product/ service development, Access to low cost products, new market for new products and Knowledge of the products you deal with. Regression analysis was done to determine the effect of each factor of product research on the performance of small and medium enterprises. Table 4:10 a, b and c shows the influence of each factor of product research on the performance of small and medium enterprises.

Table 4:3 (a) Product research Factors on the performance of small and medium enterprises

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.883 ^a	.779	.764	.63912

a. Predictors: (Constant), Knowledge of the products you deal with, Access to low cost products, New market for new products, Expertise in product/ service development

From the regression results above, the R value was 0.883 indicating that there is a strong positive relationship between product research and the performance of SME's. The R squared (R^2) value of 0.779 shows that 77.9 percent of performance of SME's is explained by product research factors. The remaining 22.1 percent is explained by other factors put in place by the SME's to enhance performance.

Table 4:3 (b) Product research – ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	85.134	4	21.284	52.105	.000 ^b
	Residual	24.100	59	.408		
	Total	109.234	63			

a. Dependent Variable: Performance of SME

b. Predictors: (Constant), Knowledge of the products you deal with, Access to low cost products, New market for new products, Expertise in product/ service development

The model was significant with the F ratio = 52.105 at p value $0.000 < 0.05$. This is an indication that product research has a positive and significant influence on performance of SME's.

Table 4:3 (c) Product research – Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.104	.282		-.367	.715
	Expertise in product/ service development	.273	.099	.256	2.750	.008
	Access to low cost products	.269	.075	.267	3.600	.001
	New market for new products	.506	.092	.496	5.478	.000
	Knowledge of the products you deal with	.018	.074	.017	.247	.806

a. Dependent Variable: Performance of SME

Regression coefficient results indicates that Expertise in product/service development, Access to low cost products and New market for new products had positive and significant influence on performance of SME's at $\beta = 0.273$ at p value 0.008, $\beta = 0.269$ at p value 0.001 and $\beta = 0.506$ at p value 0.000, which are all less than 0.05. This means that as SME'S gain expertise in product/ service development, access low cost products and expand to new market for new products performance of SME's improve.

Knowledge of the products dealt with had a positive but insignificant influence on performance of SME's with $\beta = 0.018$ at p value 0.806 > 0.05. This meant that, Knowledge of the products dealt with had an influence on performance of SME's though the influence is insignificant. We therefore conclude that product research factors under consideration had a positive influence on performance of SME's but the influence could be significant or insignificant.

5.1 Discussion of the findings

This study aimed at investigating the influence of product research on performance of small and medium enterprises in Nyeri town. The findings of the study revealed that SME's have capacity to conduct market research and that they are aware of the positive influence of the market research on performance of SME's, even though very few conduct market research. This finding asserted earlier study by Eng (2009), who noted that the importance of market research will often be overlooked and underestimated by various businesses. He pointed out that some of the main reasons for overlooking the importance of market research include, lack of business acumen, the belief that market research is a very expensive exercise, belief that it requires too much time, and that it is hard and that it will only be conducted if one is starting up a big business entity or corporation. In addition the finding revealed that majority of the traders operating SME's started their business with less than Ksh. 50,000 as startup capital.

In determining the influence of product research in enhancing performance of small and medium enterprises, The results of the linear regression analysis between product research factors and the performance of SME's indicated a strong and positive relationship with $R=0.883$ and the R squared value was 0.779. At 95% confidence level the p-value was 0.000. The findings of the study further indicated that expertise in product/service development, access to low cost products and new market for new products had positive and significant influence on performance of SME's whereas knowledge of the products you deal with had a positive but insignificant influence on performance of SME's.

Multi-regression analysis revealed also that product research had a positive and significant influence on performance of SME's when combined with others independent factors under the study.

The findings concurs with earlier researcher Hinson, (2011) who noted that most people relate research and development (R&D) function of any company with the invention of new products. He stated that the development of existing products is equally significant because consumer tastes and preferences are continuously changing while product research and development will be to come up with the products that meet and satisfy the needs of tomorrow's clients. Sulyanto and Rahab (2012), found out that recent research has concluded that internet shoppers are increasingly depending on product research before deciding what to buy hence majority of customers would not make a purchase without first consulting product research.

5.2 Conclusion

The general objective of the study was to establish the influence of product research on performance of small and medium enterprises in Nyeri Town. The study findings revealed that product research had a positive and significant influence on performance of small and medium enterprises whether considered independently or together with the other factors. Product research gives SME's insider knowledge on the need to plan for new products, grow business and succeed in today's competitive markets. It enables SME's to compare their products and services with those of their competitors and also ascertain acceptability of their products in the market place.

In summary, product research was found to be an important exercise that enables SME's to improve their performance since product research was found to have positive relationship on performance of small and medium enterprises. The finding asserts earlier study by Sen, (2010) who affirmed that if a firm does not undertake product research, it will place the business in a situation where the majority of its success shall be dependent on sheer luck rather than market strategy. He then concluded that it is therefore wise that before investing in business and spending money on a new venture, the business will and must consider conducting product research first.

According to Kamau, (2010), product research is a continuous process for collecting, investigating and interpreting information about a particular product. He concluded that business decisions that are based on good intelligence and good product research can minimize risk, pay returns and will communicate better to their existing and potential customers. Fabayo (2009), confirms that SME's fail due to lack of study of their products in the market.

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