Effect of Product Development Strategy on Performance in Sugar Industry in Kenya

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Abstract

The purpose of this research was to examine empirically the effects of new product development strategy on company performance. To do so, two indicators of product development strategy which include development of new product and improvement of existing products were considered as independent variable indicators while performance measures were total output turnover, profitability, sales quantities and capacity utilization. The sugar industry in Kenya was chosen as the empirical context for the present study's analysis largely because of its crucial role in agriculture subsector. Consistent with the study's hypothesis, this study's results show that introduction of other new products other than sugar has largely been minimal while improvement of existing products has adopted through packaging and branding. Resultant performance was positive in total output turnover, sugar sales quantities, capacity utilization was moderate while profitability after tax gave fluctuating results. Performance was fairly responsive to improvement of product processes procedures but poor in introduction of new products since actualization is yet to be realized. Implication aspect of this study's results depicts the crucial need of actualization of new products to the consumer and to exhaustively factory capacities. Introduction of current technologies though been effected by some companies is promising to be a key in investment both for high, diverse production and cheaper with minimum wastage. Present day's managers in effect should take care to build reasonable and realistic expectations about potential new products that are compatible with the current sugar production processes.

Introduction

Is product development strategy rewarding in terms of company performance? Studies in wide ranging contexts have found mixed results in different measures of performance. Researchers have connected higher profits with the ability for firms to innovate (Schumpeter, 1934), while performance in development projects has been found to be determined by a firm's product strategy and its capabilities in overall processes and organization (Clark & Fujimoto, 1991). Others have found financial market losses from product losses failures being larger in magnitude than financial market gains from product development successes (Sharma & Lacey, 2004).

Effective product development rests on a product's design's ability to create a positive product experience (Clarke & Fujimoto, 1991) while product innovations performance has been seen as an important driver for firm growth particularly the combination of product and processes innovations significantly improving firm growth (Goedhuys & Veugelers, 2008). The researchers' further point out that product innovation translates into superior sales growth rates and access to finance. Haeussler, Patzelt & Zahra (2012) concluded that new product development is important for new firm's successful performance though they also attest that developing new products is costly and time consuming with at times uncertain outcomes.

Ansoff (1987) brought into limelight the concepts Product development which he defined as the focus on the needs of the current customers and the wider customer markets. According to Raible (2013), industrial theory is key in the influence on the choice of strategy and decision making of company. Ramsey (2001) further articulates that industrial organizational theory is reflected in the structure-conduct-performance model, which claims presence of a link between the structure of a market, the organizational conduct and organizational performance. Porter (1981) pointed out that the central analytical aspect of industrial organization theory can be used to identify strategic choices.

Product development strategy is recognized and realized through a process whereby those with the power to make decisions for the organizations interact among themselves with other organizational members and with external parties. This study therefore considers choice of strategy mainly in terms of product development. Many organizations today are focusing on becoming more competitive by launching strategies that give them an edge over others. Sugar companies are equally facing the same challenge in their choice of strategy given the crisis the subsector is currently experiencing. The challenge of liberalization, increasing competition from cheap sugar imports, poor industry policies and structures in sugar industry forms the basis of this study Institute of Economic affairs (2005). It is worth noting that a major part of the industry's challenges are emerging from the dynamics of macro environment. According to the Institute of Economic affairs (2005), stakeholders have not been involved in the creation of industry policies which brings into focus the role of corporate social responsibility and the resultant outcome of the choice of strategies.

Product development strategy

Product development has been defined as the focus on the needs of the current customers and the wider customer markets (Ansoff, 1987). Kotler (2000) says in product development a firm remains in its present markets but develops new products for these markets. The view that new products are helpful to the financial health of sponsoring firms is well argued by scholars. Schumpeter (1934), for instance, opined that innovative new products when first introduced face limited direct competition and, as a result, allow relatively high profits to sponsoring firms. Over time these high profits are likely to disappear because of imitation and competition, he argued, but firms that keep on introducing innovative new products may be able to have high profitability for a sustained period. Large and growing literature supports the positive correlation between innovation and firm profitability. In a study of 721 U.K. manufacturing firms during the period 1972–1983, for instance, Geroski et al., (1993) showed that the number of innovations produced by firms had a positive effect on their operating profit margin. According to Clark and Fujimoto (1991) performance in a development project is determined by a firm's product strategy and by its capabilities in overall process and organization. They further claim that firms products help to shape the market environment; the nature of the market environment changes as consumers and competitors learn from new products and services. Goedhuys and Veugelers (2008) found that innovative performance is an important driver for firm growth in particular the combination of product and process innovations that significantly improves firm growth. Financial markets may be attuned sharply to product development outcomes in publicly traded firms (Anurag and Nelson, 2004).

Statement of the Problem

Company performance is a function of combination of factors. The concepts of environment, strategy and performance have been found to have a linkage that derives from the structure-conduct-performance (S-C-P) paradigm of the industrial organization economics. Continued existence of sugar companies necessitates that they continually consider how product development strategy impacts on their performance. How consistent their strategic behaviours are with environmental changes is expected to have implications in their performance. There is empirical evidence of the relationship between choices of strategy on performance of companies. Haeussler et. Al (2012) related development of new products with successful firm performance, Goedhuys & Veugelers (2008) associated product innovations with firm growth while Sharma & Lacey, (2004) found evidence in financial losses to have an implication of product development failures. While different studies have been conducted in different contexts and industries, in the view of the above, this study seeks to address performance implications of product development strategy in terms of development of new products and improvement of existing products in sugar industry in western Kenya.

Objective

The broad objective of the study is to determine the effect of product development strategy on the performance of sugar companies in Kenya region. Consistent with this broad objective, the specific objectives will include: To determine the extent to which new product development and improvement of existing products affects performance of sugar companies in Kenya. The study will seek to answer the question to what extent does Product Development Strategy affect performance of sugar companies in Kenya? Further the study will test the hypotheses H_{01}: There is no significant relationship between introduction of new products and performance of sugar companies in Kenya. H_{02}: There is no significant

relationship between improvement of existing products and performance of sugar companies in Kenya.

Theoretical Review
Resource Based View

This study is anchored resource based view and dynamic capability theory. Resource based view theory has its origin from the work of Penrose (1959), though inadvertently the view was formerly presented by Wernerfelt (1984). A resource based view (RBV) emphasizes the firm's resources as the fundamental determinants of competitive advantage and performance. The model assumes first that firm's within an industry (or within a strategic group) may be heterogeneous with respect to the bundle of resources that they control (Bridoux, 1997). Second assumption is that resource heterogeneity may persist over time because the resources used to implement firm's strategies are not perfectly mobile across firms.

A resource based view (RBV) is one of the most widely accepted theories of strategic management (Powell, 2001). New organisational resources may increase the flexibility in strategic choices, by allowing firms to benefit from new opportunities (Rangone, 1999).The RBV could be considered as an "inside-out" process of strategy formulation: starting from the internal resources of the firm, their potential for value generation has to be assessed in order to define a strategy allowing the firm to achieve the maximum value in a sustainable way (Grant, 1991; Barney, 1986). In this way, the firm product development strategy is determined by the resources available and the capability to deploy them in the best way to obtain a good performance.

Dynamic Capabilities Theory

Dynamic capability philosophy draws on Schumpeterian reasoning, which sees dynamic capability as another rent-creating mechanism based on the competences of organizations (Schumpeter, 1950). Eisenhardt and Martin (2000) defined dynamic capabilities as 'a set of specific and identifiable processes' that are 'idiosyncratic' in details and somehow 'dependent' in their emergence. Dynamic capabilities of firms may account for the emergence of differential firm performance within an industry (Zott, 2000). Zott (2000) synthesizing insights from both strategic and organizational theory, found performance relevant attributes of dynamic capabilities such as innovativeness of products to be the timing of dynamic capability deployment and learning to deploy dynamic capabilities.

Dynamic capability is about organizational competitive survival rather resource based view's achievement of sustainable competitive advantage. Dynamic capability theory explains the capacity of an organization to purposefully create, extend or modify its resource base which refers to the choice of strategy an organization adopts to achieve its goals.

Conceptual Framework
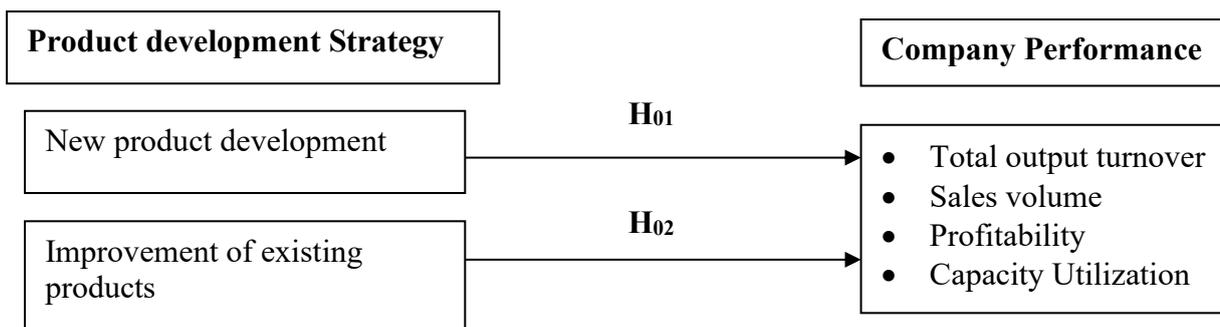The study is guided by the following conceptual framework.

Figure 1: Conceptual Model

The conceptual model presents the perceived relationships as formulated for testing. The conceptual model shows the various relationships among the variables in the Product development strategy - Performance. According to the model, Firm Performance is the dependant variable with both quantitative and qualitative as indicators is influenced product development strategy. Independent variable is presented by product development with its corresponding indicators; new product development and improvement of existing products.

Empirical Review

Using World Bank ICS data from Brazilian manufacturing firms, a study by Goedhuys and Veugelers (2008) identified innovation strategies of firms in particular internal technology creation and external technology acquisition and their effect on successful process and product innovations. The study used the World Bank's Investment Climate Survey (ICS) data collected in Brazil in 2003. The survey collected data for the period 2000, 2001 and 2005, through intensive interviews of firms while analysis was done through Chi-sq test, bivariate probit for significance in correlation. The results indicated that innovative performance is an important driver for firm growth in particular the combination of product and process innovations that significantly improves firm growth. Both innovation and growth performance are supported by access to finance. The study though stated that international openness is important for stimulating firm growth performance, this openness works particularly through competition as an incentive device for cost improvements, stimulating firm growth, but not necessarily as a mechanism for technology absorption improving innovative performance (Goedhuys and Veugelers, 2008).

While examining empirically the effects of new product development outcomes on overall firm performance, Anurag and Nelson (2004) chose the pharmaceutical industry as the empirical context. This was appropriate for the study's analysis due to the gate-keeping role played by the Food and Drug Administration (FDA) provides a specific event date on which to focus the event study methodology. The study estimated market model parameters using a 300-day period. Daily return data were obtained on individual securities from DataStream International and abnormal return for firm. The expected returns were estimated using the market model where returns on security, the daily returns of each firm in days were regressed against the return on market portfolio during the corresponding time period to obtain estimates. This study's results showed that market valuations are responsive strongly and cleanly to the success or failure of new product development efforts. Further conclusions were that financial markets may be attuned sharply to product development outcomes in

publicly traded firms (Anurag and Nelson, 2004). However the study did not consider the intersection of marketing and finance literature.

Strategic Alliances and Product Development in High Technology New Firms, with the moderating effect of Technological Capabilities study was done by Haeussler (2008). Using a database of biotechnology firms the study sought to know how new firms maximize the benefits of these alliances while reducing their risks. Testing the study hypotheses required measuring the alliance portfolio, technological capabilities and product development by HTNFs. The study surveyed biotechnology firms in the UK and Germany, the largest and most developed biotech industries in Europe. Face to face Interviews were conducted with 118 British and 162 German firms which agreed to participate in the study. There was a response rate of 47 percent for Germany and 34 percent for the UK. In the study analysis the study used descriptive statistics to determine correlations among, the study's variables. The study found that the specialization of new firms' technological capabilities can help managers use alliances more productively when it comes to NPD. The results were stable over a variety of different model specifications and when accounted for the endogeneity of alliances (Haeussler, 2008). However, the results drew attention to the importance of the breadth versus depth of the degree of a firm's technological specialization, an issue not explored in this study.

A research seeking to understand which of three different strategic orientations of the firm (customer, competitive, and technological orientations) is more appropriate, when, and why, in the context of developing product innovations was done by (Gatignon & Xuereb 1997). By using questionnaires to collect data from market executives, of these 239 marketing executives, 87.5% (209 managers) agreed to participate in the study. Multiple item scales were developed based on items previously proposed and used successfully in survey research studies. The results suggested that the appropriateness of a given strategic orientation, even a customer orientation, is not unconditional (Gatignon & Xuereb 1997). It was however difficult for the study to evaluate the reasons for the part of the variance which is unexplained.

Cusumano and Nobeoka (1991) examined recent empirical research conducted or published on product development in the automobile industry. Their objective was to identify what has been learned, and what is yet to be learned about the effective management of this activity. The study focusesd 22 organizations from Japanese manufacturers in general, while the basic framework used to compare the studies examined variables related to product strategy, project structure or organization, and project as well as product performance. Evidence from the study indicated that Japanese automobile producers have demonstrated the highest levels of productivity in development as well as of overall sales growth, and have used particular structures and processes to achieve this (Cusumano and Nobeoka, 1991). The evidence does not however clearly indicate what the precise relationships are between development productivity and quality or economic returns.

Research Methodology

A cross-sectional survey research design was be used in carrying out the study. A cross-sectional survey offers the opportunity to collect data across different sugar companies and test this relationship. With respect to the time period over which data will be collected, which will be one point in time across the various sugar companies, a cross-sectional survey was found appropriate. Further, it was ideal because the researcher intended to collect descriptive

data that was accorded statistical treatment to allow for hypothesis testing to come up with objective conclusions (Cooper and Schindler, 2003). The target population of the research entailed nine sugar companies in Kenya. The selected industry is a sub-sector within the larger agriculture sector in Kenya. The population of this study comprises of both parastatal and private companies in the sugar industry in Kenya totaling to nine companies by 2014. These companies diversity formed a good representative in terms of size in production and capacity, age in terms of years of operation, location among others. Target respondents were be senior and middle level managers holding senior portfolios relevant to the study in targeted companies. One hundred and twenty (120) respondents are targeted to fill the questionnaire and one from each company for interview questions.

The current research required that non-probability sampling approaches be used and in particular purposive sampling. According to Leedy and Ormrod (2005) purposive sampling is meant for a particular purpose, where people are chosen who are relevant to the research topic and who the researcher believes can provide the best information to achieve the objectives of the study (Kumar 1996). The study in its choice of respondents targeted members of senior management who bore the greatest responsibility in decision making. Data was analyzed using a combination of both descriptive and inferential statistics. Since the primary research question is to investigate the impact of one set of two or more variables (performance indicators) can be predicted or 'explained' by another set of two or more variables (introduction of new products and improvement of existing products), multiple correlation were used as the statistical tool to analyze the multivariate relationships between product development strategy and performance.

In order to test the hypotheses, multiple regression analysis was conducted using performance as the dependent variable and product development strategy indicators as predicting variables. Regression analysis beta (β) equivalent to the Karl Pearson Correlation Coefficient (r) (Sekaram, 2003) was used to determine the effect of the independent variable on the dependent variable. The hypothesis was tested at 0.05% significance level, with 95% confidence, which is acceptable in non-clinical research works and was used to establish the relationship among the study variables and to test the formulated hypotheses. The logistic regression model for this study took the form:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where Y = dependent variable (Company performance)
β_0 = Constant or intercept which is the value of dependent variable when all the independent variables are zero.
β_{1-n} = Regression Coefficient for each independent variable
ε = Stochastic or disturbance term or error term
X_{1-n} = Independent variable indicators

Results and discussion
A total of 120 managers in sugar companies in both public and private were targeted and to this effect 120 questionnaires were issued. Out of these 72 usable questionnaires were received back giving a return rate of 60%. These 72 questionnaires returned constituted 92% return rate from public sugar companies while 8% from private companies due to their restrictive company policies cited by respondents. The return rate in the current study was

justified by Richardson (2005) who cited Babbie (1973) and Kidder (1981) when he stated that 50% is regarded as an acceptable response rate in social research surveys.

The objective of this study was to determine the extent to which product development strategy affects performance of sugar companies. Product development strategy is a choice strategy in companies which indicates the level in which products and services are either developed or improved in order to achieve superior performance in a competitive environment. In this thematic area performance in product development was assessed in terms of new products or services developed and improved procedures used to achieve quality products within the period between 2009 and 2013.

Developing New products
Introduction of new products is an element of growth. New product strategy was operationalized as the types of new products developed by a firm that denotes the innovativeness of the new products (Barczak 1995). Respondents were asked to state both the number and new products or services introduced within their company operations. The findings are summarized in Table 1.

Table 1.
New Products/Services Introduced

New Products/Services Introduced	Respondents Frequency (f)	Percentage (%)
No product introduced	19	26.4%
Single product introduced	8	11.1%
Two products introduced	33	45.8%
Multiple products introduced	12	16.7%
Total	**72**	**100.0%**

New product strategy was measured by asking respondents to indicate how many products or services were introduced. The results show that majority of respondents found their company to have introduced two products with at 45.8%. 26.4% respondents that no products had been introduced. New Product introduction is an indicator of growth especially where new markets are reached by the new products. Kotabe (1990) in his study found a direct relation to new product performance and better performance while Liu, Lin & Huang (2014) found successful product development to enhance operating performance in textile industry. In auto industry, Cusumano and Nobeoka (1990) linked product development strategy with project structure to improve on project performance. The finding that new product has a positive effect on organizational performance reaffirms that sugar companies cannot depend on their current product offering only to meet their sales and profit objectives. However important, still some new products do not succeed in the market according to (Hultink et al. 1998).

Offering Improved Procedures
Improvement of procedures in production of products and offering of services is an indication of adopting technology to pursue quality products. The respondents were required to state the number of such improved procedures introduced within the company operations. The findings are summarized in Table 2.

Table 2:
Offering of Improved Procedures

Procedures Introduced	Respondents Frequency (f)	Percentage (%)
No Procedures improved	6	8.3%
Single Procedures improved	12	16.7%
Two Procedures improved	41	56.9%
Multiple Procedures improved	13	18.1%
Total	**72**	**100.0%**

From the findings modification of existing products was evident with 56.9% affirming that two modifications were observed in sugar companies. From the interviews it confirmed that modifications were observed through packaging and bagging. Hopkins (1981), points out that successful improvement of products through new processes is an important factor in the survival of the most companies. Organizations depend on such improvements for long-term growth and survival

The research used multiple linear regression analysis to determine the linear statistical relationship between the independent, moderating and dependent variables for this study. All the two null hypotheses were tested using the multiple regression models. The aim of multiple regression analysis was to identify these variables simultaneously associated with a dependant variable and to estimate the separate and distinct influence of each variable on the dependent variable. Multiple regression analysis explained and predicted variation in a dependent variable because of independent variable which was assessed using coefficient of determination (R^2). Standardized Beta coefficients (β) for each variable allowed the researcher to compare relative importance of each independent variable. For each hypothesis, the regression equations were first obtained using the beta coefficients on the line of best fit. The decision rule was to reject Ho: $\beta_i = 0$ if the regression coefficients are significantly different from zero and consequently accept the alternate hypothesis Ha: $\beta_i \neq 0$.

Hypothesis 1 (H$_{01}$): There is no significant relationship between new product development (NPD) strategy and performance (CP) of sugar companies in western Kenya.

Hypothesis 2 (H$_{02}$): There is no significant relationship between improvement of existing products (IEP) strategy and performance (CP) of sugar companies in western Kenya.

The results of ANOVA tests in which F-test was carried out using the Analysis of Variance (ANOVA) to determine whether the regression model $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$ where; X_1– development of new products, X_2– improvement of existing products was significant. A regression model containing two indicators of product development strategy (development of new products and improvement of existing products) was run to predict company performance. The regression model for this hypothesis was:

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$ ....model (i)

Where; Y= dependent variable (company performance)

β_0=constant or intercept which is the value of dependent variable when all the independent variables are zero

β_i is the coefficient for X_i (i=1,2)

Independent variables are:

X_1– Development of new products

X_2– Improvement of existing products

ϱ = error term

Table 3:

Regression Results on the Relationship between product development strategy and company performance

Product development strategy indicators	R^2	β value	T value	Sig.	Performance Measure
New product development	0.039	0.104	0.878	0.383	Sales volume
Improvement of existing products		0.177	1.494	0.140	
New product development	0.092	0.274	2.378	0.020	Capacity utilization
Improvement of existing products		-0.112	-0.975	0.333	

P<0.05

From the table 3 above coefficient of determination (R^2) indicates that product development strategy can predict 3.9% of company performance when measured in terms of sales volume 9.2% is the predictive power when performance is measured in terms of capacity utilization. From the table it is evident that statistically reliable relationship can be found between new product development and capacity utilization (p value is 0.020 < 0.05). The results further show that for every unit change in development of new product, there is a 0.274 (β value) unit change in capacity utilization when all other factors are held constant.

It can be concluded that product development has significant predictive influence on performance in terms of capacity utilization specifically when developing new products while improvement of existing products has no statistical significance (p value 0.333 > alpha value of 0.05) and therefore confirms null hypothesis H2 that improvement of existing products has no significant effect on company performance. Further conclusions depicted by the study show that though product development has a predictive influence on sales volume (3.9%), the influence is not statistically significant (p value 0.383, 0.140 > alpha value 0.05). since product development strategy is significant influencing capacity utilization (t value 2.378 at p value 0.020 < 0.05) it can be concluded that the influence is significantly different from zero and therefore fail to confirm null hypothesis H1 that new product development has no significant effect on company performance.

From the results it can be concluded that improvement of existing products and developing new products can enhance capacity utilization which is a measure of performance. Idle factory machinery is a common trend in most sugar factories which reduces efficiency in operations. While this can partially be justified by the need for maintenance, development of new products could improve efficiency through making use of unnecessary idle factory times and as result enhance performance. The findings are in agreement with studies by Liu, Lin & Huang

(2014) in textile industry where they found product development to better enhance operating performance and organizational effectiveness. Wang & Lee (2011) further confirm the findings of this study when they concluded that product based strategies impact positively on performance when they considered innovativeness of product against performance. The results further partially confirm previous findings of Hoofer and Reilly (1984) who associated strong sales with new product introductions in car industry. Udegbe and Udegbe (2013) findings show innovation process on products to exert positive influence on organizational performance. Innovativeness in development of new products or improvement of existing ones is further supported by resource based theory where new organisational resources are found to benefit from new opportunities and eventually boosting performance (Rangone, 1999). Resource based theory also finds potential for value generation though innovative products as resources allowing the firm to achieve the maximum value in a sustainable way (Grant, 1991; Barney, 1986).

Summary of the Findings
Reveal a weak relationship between product development strategy and all aspects of performance. (Multiple r range between 0.062 and 0.388), and that very low percentages (Adjusted R =3.0% and below) variation in company performance is explained by organizational strategy. The results further reveal that most product development strategy variables have statistically not significant negative effects like operational efficiency, product/service quality, sugar sales and profit after tax (low t-values as well as negative = -0.027, -0.627 -1.718) on some indicators of performance. The results do not concur well with the findings of previous studies, which indicate long term profitability of a firm due to product development strategy (Geroski, Machin and Reenen, 1993), developing new products being fundamental to sustained financial health for profit firms (Sharma and Lacey, 2004). However results are partially in agreement with the findings of Johnson & Aggarwal (1988) and Muller (1987) opined that changes in patterns of consumption tend to dissipate profits to sponsoring firms.

Conclusions
The study led to the conclusion that introduction of new products/services was realized through either bringing on board brown sugar, using byproducts after extraction of sugar except for mumias where extra products like water bottling and ethanol was realized. Improvement of new procedures was largely through adoption of diffuser technology and ISO certification on major scale. On a smaller scale improvement of offerings in terms of rebranding of sugar into new packaging, improvement of farmers' mode of payment and revision in product/service delivery were adopted. Further conclusions indicate absence of bundling of products or services as a strategic approach within the companies' operations. There was disparity across the companies in development of new products and services in addressing product strategy. On the relationship between product development and elements of performance gave mixed outcomes show both low (capacity utilization and profit after tax) and high (increment in turnover) relationships. However regression tests revealed a weak relationship between product development strategy and all aspects of performance.

Recommendations
The study recommends that sugar companies should expand product base, one sugar company has already devised ways of using the already existing infrastructure to add bottling

in the product bracket. Further with improved procedures aiming at effective and efficient operations, it is evident that same products can be manufactured with less costs and thereby improvement on the returns.

Areas for Further Research

The study explored product development strategy, other strategic choices could be studied in relation to performance variables and further other industry contexts other than sugar industry. Further could explore environment to moderate the relationship

References

Ansoff, I. (1987). Conceptual underpinnings of systematic strategic management. *European Journal of operational research.*

Anurag, S. and Nelson, L. (2004). Linking Product Development Outcomes to Market Valuation of the Firm: The Case of the U.S. Pharmaceutical Industry. *Journal of product Innovation Management*

Babbie, E. (1973). *Survey Research Methods Belmont, California*: Wadsworth Publishing Company

Barczak, G. (1995). New Product Strategy, Structure, Process, and Performance in the Telecommunications Industry. *Journal of Product Innovation Management*

Barney, J. B. (1986). Strategic factor markets: Expectations, luck, and business strategy, *management Science*, 42, pp. 1231-1241.

Bridoux, F. (1997). *A resource-based approach to performance and competition: an overview of the connections between resources and competition*. Amsterdam Business School. Netherlands

Clark, K. B. and Fujimoto, T. (1991). *Product Development Performance: Strategy, Organization, and Management in the World Auto Industry*. Boston: Harvard Business School Press.

Cooper, D.R. & Schindler, P.S. (2003). *Business Research Methods.* (8th ed.). Boston: 15 McGraw-Hill Irwin.

Cusumano, M. A. and Nobeoka, K. (1991). *Strategy, structure and performance in product development: Observations from the auto industry.* MIT Sloan School of Management, Cambridge, MA 02139, USA

Eisenhardt, K. M, and Martin, J. A. (2000). Dynamic capabilities: what are they? *Strategic management Journal 21*

Gatignon, H. & Xuereb, J. M. (1997). *Strategic orientation of the firm and New product performance*. Working paper in the INSEAD Working Paper Series.

Geroski, P, M., Machin, S.and Reenen, J. (1993). The Profitability of Innovating Firms. Rand *Journal of Economics*24(2):198–211.

Goedhuys, M. and Veugelers, R. (2008). *Innovation strategies, process and product innovations and growth: Firm-level evidence from Brazil*. Department of Managerial Economics, Strategy and Innovation (MSI)

Grant, R. B. (1991). A resource based theory of competitive advantage: Implications for strategy formulation, *California Management Review,* 33(3), pp. 114-135.

Haeussler, C. (2008).*Strategic Alliances and Product Development in High Technology New Firms: The Moderating Effect of Technological Capabilities*. Institute for Innovation Research, Technology Management, and Entrepreneurship Ludwig-Maximilians Universitat Munchen.

Haeussler, C., Patzel, H. and Zahra, S. A. (2012). Strategic alliances and product development in high technology new firms: The moderating effect of technological capabilities. *Journal of Business Venturing*

Hoffer, G. E., & Reilly, R. J. (1984). Automobile styling as a shift variable: An investigation by firm and by industry. *Applied Economics*, 16(2): 291-297

Hopkins, D. S. (1981). New product winners and losers. *Research management*.

Hultink E. J., Langerak F. and Robben H. S. J. (1998). The Impact of Market Orientation, Product Advantage, and Launch Proficiency on New Product Performance and Organizational Performance. *Journal of Product Innovation Management*

Johnson, J. and A. Aggarwal, A. (1988). Cash management comes to the ball. *Accountancy,* 102

Institute of Economic Affairs' Public Forum, (2005). Nairobi Kenya.

Kidder, L.H., (1981), *Research methods in social relations*, New York, Rinehart & Winston.

Kotabe M. (1990). The relationship between offshore sourcing and innovativeness of US multinational firms: an empirical investigation. *Journal of International Business Studies*

Kotler, P. (2000). *Marketing Management Millenium Edition*, Tenth Edition, Prentice-Hall, Inc.

Kumar, R. (1996). *Research Methodology*. Melbourne: Longman.

Leedy, P. D. & Ormrod, J. E. (2005). *Practical research: Planning and* design 8th ed. New Jersey: Pearson/Prentice Hall.

Liu C., Lin K. & Huang C. (2014). Effects of Product Development on Operating Performance in Textile Industry. *Anthropologist.*

Mueller, D. C. (1987). *The Corporation: Growth, Diversification and Mergers*, Chur: Harwood Academic Publishers.

Penrose, E. T. (1959). *The Theory of the Growth of the Firm*. New York: John Wiley.

Porter, M. E. (1981). The Contributions of Industrial Organization to Strategic Management. *The Academy of Management Review*, Vol. 6, No. 4.

Powell, T. C. (2001). Competitive advantage: logical and philosophical considerations. *Strategic management Journal*

Raible, M. (2013). *Industrial organization theory and its contribution to decision-making in purchasing.* university of Twente.

Ramsey, J. (2001). The Resource Based Perspective, Rents, and Purchasing's Contribution to Sustainable Competitive Advantage. *Journal of Supply Chain Management*. 37(3), pages 38–47.

Rangone, A. (1999). A Resource-Based Approach to Strategy Analysis in Small-Medium Sized Enterprises, *Small Business Economics*, 12, pp. 233–248.

Richardson, J.T.E. (2005). *Instruments for obtaining student feedback: a review of the literature.* Assessment& Evaluation in Higher Education3 0, no. 4: 387–415

Udegbe, S. E. & Udegbe, M. I. (2013). Impact of producer development and innovation organizational performance. *International journal of management and sustainability.*

Schumpeter, J. (1934). *The Theory of Economic Development*. Cambridge, MA: Harvard University Press.

Schumpeter J. (1950). *Capitalism, socialism and democracy,* New York: Harper.

Sekaran, U. (2003). *Research Methods for Business*. New York: John Wiley & Sons Inc.

Sharma, A. and Lacey, N. (2004). Linking Product Development Outcomes to Market Valuation of the Firm: The Case of the U.S. Pharmaceutical Industry. *Journal of product Innovation Management.*

Wang, K. J. and Lee, Y.H. (2011). The Impact of New Product Strategy on Product Performance and Evaluative Criteria. *British Journal of Arts and Social Sciences*

Wernerfelt, B. (1984). A resource-based view of the firm, *Strategic Management Journal*, 5(2), 171–180.

Zott, C. (2000). *Dynamic Capabilities and the emergence of intra-industry differential firm performance; Insights from a simulation study.* Department of Entrepreneurship (INSED) France.