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Research Article

Influence of Strategy Implementation on performance of Privately Owned Sugar Factories in Western Kenya

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Abstract

Privately owned sugar companies are established institutions with a written strategic plan. It has been noted that there is declining performance in Kenya's Sugar Industry. Strategies are formulated in a systematic way and from a well-informed background by the Top Management Teams (TMTs). If well implemented by middle and line managers, there is a high expectation of increase in performance. In view of this performance, there is need to find a suitable solution for this perennial problem of declining performance in terms of profitability otherwise the problem will escalate and affect the whole economy of the country in a great deal. The findings of the study were that Growth Strategy formulated by privately owned firms has not been implemented. Cost Minimization Strategy was significantly correlated with firm performance with a correlation coefficient = 0.327, and Product Differentiation Strategy was significantly related and had a regression coefficient = -0.1756133. Market demand was the moderating variable and it had a significant effect on performance with a p-value of 0.0057. Thus the study concluded that there existence of a significant relationship between strategy implementation and performance.

Keywords: Strategy implementation; Privately owned Sugar firms; Performance; Kenya.

Introduction

The environment within which firms operate is constantly changing and firms have to constantly review its strategies and response to these changes. Strategic management has developed as a response to increasing challenges caused by high levels of environmental turbulence. Firms have developed means to minimize the effect of poor performance of a product or service they are engaged in by formulating working strategies so as to remain relevant in the turbulent environment. Internationally, firms have expanded their operation to global levels to take advantage of the world market. It has been observed in [1] that strategy diagnosis helps determine the firm's developed strategies, which, in the long run will ensure success. The developed strategies do not necessarily see the day of light as most strategies ends up unimplemented [2].

Kenya sugar industry has been granted extension for the deadline to open its market as it works to save its firms from the effect of inflated importation from cheap producing nations within this market [3] Firm's strategy formulation is a top management job and it is prepared from a well-informed background and it produces a clear blueprint of what a firm can implement to achieve its desired goals. It has been stated in [4] that more than 50% of the formulated strategies of firms fail at implementation stage; they argue that a poorly implemented strategy is inconsequential as it is better to implement a second class strategy that to not or poorly implement a first class strategy. Low profitability records in the country sugar industry should be of a great concern to all the management and stakeholders since the industry employs directly and indirectly a big number of population especially in western region and contributes a lot in their socio-economic status of this population [5,14].

To meet the objectives of the study and establish the research process, a model was used as a guideline; namely a conceptual framework. The conceptual framework must be developed to cover all activities and actors of an organization and cover the external environment factors that

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might have a major impact on those activities [6]. The focus of the relationship between the organization's strategic management practices was considered in the framework pitting selected strategies on sugar firms' performance (profitability). Finally, the framework concentrated on the major issues rather than on specific details. Activities of the independent variable element, affects performance, which is also a dependent variable and which is noted by the firm's profitability trends, level of production in terms of trends of tonnage of sugar production and market share.

Research methodology

The research was a longitudinal research design. The design permits the measurement of differences or changes in a variable from one period to, as well as allows the prediction of future outcomes based upon earlier. The research was a case study of Butali and West Kenya Sugar Companies. Stratified random sampling was employed on line managers. This is necessary to incorporate all variables identified in and to take care of the possibilities of non-response from the population. These techniques have been previously used in research since they allow the researcher to focus on people or events that they believe will be important in their research, [7] found out that Strategy formulation is a priority of the top management, while strategy implementation relies on middle and line managers; hence the research engaged top, middle and line managers from these companies and other casual employees who have strategic implementation responsibilities. The technique model was able to deal with dependent variable on multiple independent variables [8]. The information was collected "on the field" with the structured and systematized questionnaire in an electronic database. The multivariate regression analysis took the following model (Eq. (1)).

$$Y_1 = \alpha + \beta_1 x_1 + \varepsilon \quad (1)$$

Where: Y_1: Performance of firm, x_1: Growth strategies, α: Constant term, β: beta coefficients and ε: error term.

The model in Eq. (1) presented a simplified approach of the relationship between the selected generic strategy implementation and performance. It explained the effect of the identified variables, median factor and performance of the sugar firms in the study area. Based on the nature of some collected data, nonparametric statistical techniques were used for data analysis. Specially, non-parametric techniques are ideal, when the data is measured on nominal (categorical) and ordinal (ranked) scales. Kruskal-Wallis test (A non-parametric technique) was used to measure the relationship between selected generic strategy implementation and business performance of firms. From equation, the sugar firm's Strategic Performance (SP) was modeled as a function of three strategic management components; Growth Strategy Management.

$$SP = f(GSM)$$
$$SP = \alpha + \beta 1GSM + \varepsilon \quad (2)$$

Where, ε is the error term.

Results and discussion

The stationarity of the series in Equation (2) was observed using the some tests. Production capacity in Mumias sugar Company had four important subseries, three of which are diversification since sugar production is the core function of the company; sugar sales, ethanol sales, water and power sales. The stationarity of each individual series was drawn and it was observed that sugar sales series was non stationary since it had a trend.

Table 1. LR variance: Bartlett kernel, 5.00 lags average (chosen by LLC)

	Statistic	p-value
Unadjusted t	-6.7538	
Adjusted t*	-4.0277	0.0038

Source: Research data 2018

To estimate the long-run variance of the series, xtunitroot by default uses the Bartlett kernel using 5 lags as selected by the method proposed by [9]. The Levin–Lin–Chu bias-adjusted t statistic is −4.0277, which is significant at all the usual testing levels. Therefore, null hypothesis is rejected and found that the series is stationary. When we use the demean option to xtunitroot to remove cross-sectional means from the series to mitigate the effects of cross-sectional correlation, we obtain a test statistic that is significant at the 5% level. Table 2 is a presentation of the Fischer type test of Augmented Dickey-Fuller (ADF) test. All four of the tests strongly reject the null hypothesis that all the panels contain unit roots [10].

When the number of panels is finite, the inverse chi-squared P test is applicable; this

statistic has a chi-square distribution with 2N degrees of freedom, and large values are cause to reject the null hypothesis. Carrying out a simple regression analysis for the collected data yields the table 3. Test of Hypotheses Based on the study objectives of this research, the hypotheses of the study were tested at 5% level of significance as follows: H_{01}: There is no significant relationship between growth strategies on the performance of sugar firms in western Kenya From the results above, the growth strategy indeed has a significant relationship on the performance of sugar firms in Kenya with a coefficient of 0.0001175 and it is significant at 10% level with a p-value of 0.1458.

Therefore, the growth strategy influences the performance of sugar firms in Kenya. In this study, growth strategies implementation which is measured by how a firm invests in diversifying its product so as not to rely on one product which can be affected by price fluctuations and other environmental forces is found to be having a positive on sugar factories in western Kenya. The relationship exhibited in this research can be explained by the fact that higher diversification helps a firm to meet its objectives even in times when the main product performance is not trending well in the market.

Table 2. Fisher Type Unit Root Test

Fisher type unit root test for PROFITABILITY based on augmented Dickey-Fuller tests		
H_0: all panels contain unit root	Number of panels=5	
H_a: at least one panel is stationary	Number of periods=6	
AR parameter: panel specific	Assymptotics: T->infinity	
Panel means: included		
Time trend: not included	Cross sectional means removed	
Drift terms: included	ADF regressions: 2 lags	
	Statistic	p-value
Inverse chi P square (12)	20.9008	0.0000
Inverse normal Z	-1.0829	0.0000
Inverse logit L* t(34)	-2.9805	0.0000
Modified inv. Pm Chi square	3.8943	0.0000
P statistic requires number of panels to be finite Other statistics are suitable for finite or infinite number of panels.		

Source: Research data 2018

Table 3. GMM System Dynamic Panel-Data Estimation, One Step Results: Profitability

Source	Ss	Df	MS
Model	5.457e+13	4	1.3645e+13
Residual	4.2351+10	1	4.2351e+10
Total	5.4621e+13	5	1.0924e+13

Number of obs) = 6
F (4, 1) = 322.18
Prob> F = 0.0418
R – squared = 0.9992
Adj R – squared = 0.9961
Root MSE = 2.1e+05

PROFITABILIT~Y	Coef	Std. Err.	t	P> | t |	[95% conf.	interval]
DIFFERENTIA~N	-.1756133	.0152923	-11.48	0.055	-.3699202	.0186936
COST_MINIM~N	16.37757	7.248452	2.26	0.265	-75.72274	108.4779
GROWTH_STR~Y	.0001175	.0000278	4.23	0.148	-.0002352	.0004702
_cons	-1138702	1464680	-0.78	0.579	-1.97e+07	1.75e+07

Source: Research data 2018

This result is consistent with the empirical [10] who observed that the floriculture farms implementation of growth strategies influences performance. In their hypotheses testing they concluded that the empirical result showed implementation has a significant influence on the performance of flower firms. However, [11] found that growth strategy implementation has a negative and significantly related to firm performance of selected SMEs in Nigeria. This difference could be as a result of different methodology and firm in question. The regression model was based on the equation 2. From the results, the multiple linear model will be:

$$Y_1 = -1138702 + 0.0001175X_1 + \varepsilon \quad (4)$$

Conclusions

From the findings, the present study concludes that performance of sugar factories in western Kenya increases with increase in implementation of growth strategies. The mean value reported for the sampled sugar factories was 21.2% which is relatively more than the recommended ration of 5%. Indicating that diversification is a strategic venue for firms performance. The research findings also show that there is there is a correlation and a positive relationship between cost minimization strategy implementation by sugar factories in western Kenya and performance. The mean from sampled factories was 41.55%. The results satisfactorily show that cost minimization is a key strategy implementation element that results to high performance by sugar factories. The research indicated that there is a correlation and a negative relationship between product differentiation and firm performance. A mean of 57.00% was obtained from the data collected. This indicates the implementation of product differentiation strategies does not necessarily lead to increase in level of performance of sugar factories in western Kenya.

Conflicts of interest

Authors declare there are no conflicts of interest.

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