

# ASSESSMENT OF DIFFERENTIATION STRATEGY ON THE PERFORMANCE OF THE SUGAR INDUSTRY IN WESTERN KENYA

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#### **ABSTRACT**

The uncompetitiveness of the sugar industry in Kenya necessitated this study to be carried out. The purpose of the study was to assess the application of the differentiation strategy on the performance of the sugar industry in Western Kenya. The study adopted a descriptive survey design to collect data and was carried out in western Kenya. It targeted employees of Mumias, Nzoia, West Kenya and Butali sugar companies. Questionnaires, interview schedules and observation checklists were used as research instruments. Target population was 1851 employees comprising the management and non management staff making a sample size of 179 employees. Purposive sampling technique was adopted to select employees to participate in the study. To determine the validity of the instruments, they were developed and presented to research experts and my supervisors at the university to establish whether they measured what they intended to measure and to modify them accordingly. Test-re-test method was used where the same instruments were administered more than once to the same people under identical conditions then the performance was compared. For reliability of the results, piloting was carried out at Chemelil and Muhoronii sugar firms before the actual field study. Data was analyzed using both descriptive and inferential statistics after collection. Mumias Sugar Company was found to be aggressive as compared to the three remaining companies. Thus the company stands to gain in terms of corporate image and reputation due to high promotion activities. Lastly, four challenges were identified facing sugar industry performance in western Kenya. These were government policy and politics in the management of the firms, liberalization which has led to importation of cheap sugar from COMESA member countries and Brazil

Key words; Differentiation strategy, Globalization, Performance, Liberalization



# 1.1 Background of the study

Sugar is an important industrial and a major contributor to the Australian economy in terms of being the second largest earner. Its contribution to the national economy can be gauged from the fact that the growing and milling sectors of the industry produce sugar valued at between \$1.2 to \$2.0 billion, depending on world prices (APS RU, 2004) Sugar generates an additional \$1.5 billion in other sectors of economy. The Australian sugar industry produces raw and refined sugar from sugar cane. While Australian produces only 4% of the World Sugar Supply, it exports approximately 12% of the sugar traded worldwide. (SRDC 2002)

Despite earning a reputation for sustainable growth and being very efficient with an overall recovery of approximately 90%, many Australian sugar manufacturers today are facing threats to their competitiveness and survival. In recent years, as observed by the sugar research and development corporation (SRDC 2002) the Australian sugar industry has faced an increasingly different situation with reduced sugar yield and low industries profitability arising out of a combination of adverse internal factors including supply problem caused by natural hazards, particularly high climatic variability and disease and external disappointing return on capital and low profitability throughout the industry value chain.

With Kenya's population growing at a rate of 3.3 percent and annual sugar consumption growth being estimated at 2 percent annually, the demand for sugar will continue to increase. Despite the measures taken by the Government and the industry players to improve the sector and attain self –sufficiency in sugar production, Kenya still experiences a deficit which has to be supplemented by imports from COMESA and other countries (Waswa et al, 2011). Production and consumption of sugar in Kenya shows that by the end of 2003, the country consumed over 650,000 tonnes of sugar against a production of slightly less than 450,000 tonnes. This left a deficit of over 200,000 tonnes that was imported from other sugar producing countries (KSB, 2003). The challenge is for Kenya itself to meet her sugar requirements and be a net exporter of sugar and it's by- products to other countries (Waswa et al, 2011). The adoption of strategies such as differentiation will facilitate competitiveness in the industry for overall efficiency and effectiveness.





The future of the sugar is thus potentially good given the unmet demand. Kenya can become self- sufficient in the production of sugar and even produce a surplus for export. With the increasing per capita income in Kenya, the rapid increase in population and the existing export potential, there exists an ideal investment opportunity in the sector to further increase production capacity (EPZA, 2005). But the management set ups must adopt appropriate management strategies like differentiation and other best practices to create the necessary competitive advantages for superior performance.

#### 1.2 Statement to the Problem

Sugar being a widely traded basic commodity in the world implies that if the sector is well managed, it can bring numerous returns to any country. Studies on differentiation have shown that it has a strong correlation to employee performance in terms of high productivity in the automobile industry in Britain. A study carried out by Awino ZB et al (2009) shows that differentiation practices in the sugar industry in Kenya are limited. This study therefore sought to investigate the competitiveness in the sugar industry in Western Kenya.

# 1.3 Justification of the study

Sugarcane is still one of the most important crops in Kenya alongside tea, coffee, maize and horticultural crops. It directly supports over 250,000 small- scale farmers who supply over 80% of the cane milled by the sugar companies. An estimated 6 million Kenya's saves the livelihood directly or indirectly from the sugar industry. Domestic production of sugar saves the country in excess of us and 250 million (KES 20 Billion) in foreign exchange annually. (Waswa et al., ). However the domestic production is inefficient and is unable to compete effectively with imported sugar. This study investigated the differentiation strategy and its effect on the performance of the sugar industry in the Western Kenya. On the basis of this the study is considered justified because the findings will enable stakeholders to make appropriate decisions for increased competitiveness in the sugar industry.



#### 2.0 LITERATURE REVIEW

## 2.1 Strategy

The tasks of crafting and executing company strategies are the heart and souls of managing a business enterprise and winning in the market place. A company's strategy is the game plan management is using to stake out a market position, attract and please customers, compete successfully, conduct operations and achieve organizational objectives (Marcus, 2005).

In crafting a strategy, management is, in effect saying; among all the paths we could have chosen, we have decided to focus on these markets and customer needs, compete in this fashion, allocate our resources and energies in these ways, and use these particular approaches to do business. A company's strategy thus indicates the choices its managers have made among alternative markets, competitive approaches and ways of operating. It is partly the result of trial – and – error organizational learning about what worked in the past and what didn't and partly the product of managerial analysis and strategic thinking about all the circumstances surrounding the company's situation. (Thompson, Gamble and Strickland, 2004).

The central thrust of a company's strategy is undertaking moves to strengthen the company's long-term competitive position and performance of Sugar Industry. Typically, a company's strategy consists of both offensive and defensive elements – Some actions mount direct challenges to competitors, market positions and seek to establish a competitive edge. Others aim at defending against competitive pressures, the manners of rivals and other developments that threaten the company's well-being. What separates a powerful strategy from an ordinary or weak one is management's ability to forge a series of moves, both in the market place and internally, that produce sustainable competitive advantage. With competitive advantage, a company has good prospects for winning in the market place and realizing above average profitability. Without competitive advantage, a company risks being outcompeted by rivals and or locked into mediocre performance of Sugar Industry (Porter, 1985).

Creating and sustaining superior performance can be achieved through the differentiation strategy. Differentiation strategies are attractive whenever buyers needs and preferences are too diverse to be frilly satisfied by a standardized product or by sellers with identical capabilities.

A company attempting to succeed through differentiation must study buyer's needs and behavior carefully to learn what they consider important, what they think has value and what they are willing to pay for. Then the company has to incorporate buyer's desired attributes into its product



1985).

or service offering that will clearly set it apart from rivals. Competitive advantage results once a sufficient number of buyers become strongly attached to the differentiated attributes (Porter,

Successful differentiation allows a firm to; Command a premium price for its product, Increase unit sales (because additional buyers are won over by the differentiation features), gain buyers loyalty to its brand (because some buyers are strongly attracted to the differentiating features and bond with the company and its products).

# 2.2 Product quality differentiation strategy

A product is any item that possesses utility behind it. All products cater to satisfy some needs of some people. So, in very simple terms, we can define a product as a need satisfying entity. (Ramaswamy and Namakumari, 2005). A product is not a mere non-living object; It is not merely an assemblage of matter -physical and chemical. Utility alone is not the friction of a product. A product means something more than a physical commodity. People associate meanings with products; they desire satisfaction from the non-utility aspects of a product as well. Products have an identity or a personality of item own.

The utility aspect of the product is but one component of the product personality. The brand name, the package, the labeling, the manufacturers name and prestige all go into the personality build- up of the product. And this total personality of the product or the "total product offering" is the real tool with which a market satisfies a customer. (Theodore Levitt 1960) Products are almost always combinations of the tangible and the intangible. To the buyer, a product is a complex cluster of value satisfaction.

The product is total package of benefits the customer receives when he buys it. The customer never just buys the generic product. He buys something that transcends from whom he will buy what he will pay (Levitt, 1960). But the products personality is not complete without the quality factor. Quality reflects the degree to which a good, service or idea meets the demands and requirements of customers. Quality of products are often referred to as reliable, durable, easily maintained, easily used, a good value or a trusted brand name. The level of quality is the amount of quality that a product possesses, and the consistency of quality depends on the product maintaining the same level of quality. (Ferrell; Hirt and Ferrell, 2006).

It is an accepted fact that a firm cannot build up a good and lasting reputation in the market through marketing flair alone; it is only through quality products that it can acquire that



reputation. Japan and Germany have today emerged as business leaders only through their quality assurance. Strict control of the production process made the products from these nations globally acceptable (Ramaswamy and Namakumari, 2005). In fact, many of these products have been accepted as zero defect products. They are so reliable and well engineered that their customers are prepared even to wait for them, if necessary. (Horper, 1972).

in any organization where quality assurance is weak. (Meyer and Allen, 1994).

# 2.3 Technology deployment as differentiation strategy

New technology is needed for continued economic growth. The economist Schumpeter argued that new technologies replaced old ones in waves (creative destruction) as certain sectors (e.g. textiles, steel, automotive, chemicals, pharmaceuticals, telecommunications, computers, biotechnology) dominate the global economy at particular intervals (J Schumpeter, 1975).

Technological change according to Schumpeter is like a "series of explosions" with innovations concentrated in specific sectors or leading edge industries that provide growths momentum. These leading sectors propel the economy forward.

Advances in technology can dramatically alter an industry landscape, making it possible to produce new and better products at lower cost and opening up whole new industry frontiers (Thompson, gamble and Strickland, 2004). Technological developments can also produce competitively significant changes in capital requirements, minimum efficient plant sizes, distribution channels and logistics and experience or learning – curve effects. In the steel industry ongoing advances in technology (which involve recycling scrap steel to make new products) have allowed steel makers with state- of- the – art to gradually expand into the production of more and more steel products, steadily taking sales and market share from higher-cost integrated producers (which make steel from scratch using iron ore, coke and traditional blast furnace technology) Nucor, the leader of the technology, revolution in the United States, came from nowhere in the 1970 to emerge as the nation's biggest and the lowest – cost steel producer as of 2002, having overtaken US steel and Bethlehem steel, both integrated producers and the long time market leaders.

In the space of 30 years, advances in technology have changed the face of the steel industry worldwide.(Prahalad and Hamel, 1990).

This study contends that competitiveness in the sugar industry in Western Kenya was achieved when state- of –the- art technologies are adopted. This will make them develop into niche players



with specialized capabilities. The introduction by MumiasSugar Company of the diffuser crushing technology clearly gives the firm the competitive edge in the crushing process.

## 2.4 Sales promotion activities differentiation strategy

Sales promotion involves direct inducements offering added value or some other incentive for buyers to enter into an exchange. The major tools of sales promotion are store displays, premiums, samples and demonstrations coupons, contests and sweepstakes, refunds, and trade shows. In 2002, consumers redeemed 3.8 billion coupons in the USA, saving an estimated and 3billin. Nearly 80 percent of consumers in the USA use coupons. Sales promotion stimulates customer purchasing and increases dealer effectiveness in selling products. It is used to enhance and supplement other forms of promotion.

General motors, for example launched an advertising campaign to encourage more prospective buyers to purchase more vehicles. The "sleep on it" campaign resulted in more than 350,000 consumers taking G.M vehicles home overnight and ultimately more than 100,000 sales. (Hathdat, 2003).

Test drives allow sales persons to demonstrate vehicles, which can help purchase decisions. Sampling a product may also encourage consumers to buy. Pepsico, for example, used sampling to promote its sierra mist soft drink to reach more than 5 million potential consumers at well – travelled sites such as Times Square and Penn station (Mac Arthur, 2003). In any given year, almost three fourths of consumer product companies may use sampling. In the USA, Sales promotions are generally easier to measure and less expensive than advertising. Although less than 2 percent of the 248 billion coupons distributed annually in the USA are redeemed, offering them in Sunday inserts is cheaper than producing television commercials (Renae, 2001).

According to Meyer and Allen (1994) sales promotion involves the use of incentives or interest-building activities to stimulate traffic or sales. It is most often promotional tools. Examples of sales promotion are: displays – Window, show room, point – of- purchase and exterior displays. While many displays are designed in- house, others (particularly in retail businesses) are put together by manufacturers and wholesalers. These prepackaged displays may come with instructions for assembly or be set up by supplier representatives. Premiums are anything of value that a customer receives in addition to the good or service purchased. They include coupons and gifts placed inside product packages and can be used to attract new customers. Sweepstakes and contests are games used by businesses to get customers thinking and talking



about what the company has to offer. Sweepstakes like those run by publishers are simple games of chance. Contests on the other hand, require the customer to do something in order to win. Rebates – Automobile manufacturers have made rebates (or returning part of the purchase price) popular in recent years. Such discounts, however, can be used by many other types of businesses. Samples – Free trial – size packages are particularly useful in introducing new products. Such samples can be distributed by mail, door-to-door, or handed out in retail stores. Soap manufacturers, food packagers and publishers are some of the businesses that have successfully used these techniques. Sales promotions have the inherent advantage of being able to catch and hold customer's Interest – at least in the short run. On the down side, some types of sales promotion are expensive. Also, bringing them to an end can result in some customer disappointment (Meyer and Allen, 1994; Ramaswamy and Namakumari, 2005).

## 2.5 Conceptual Framework

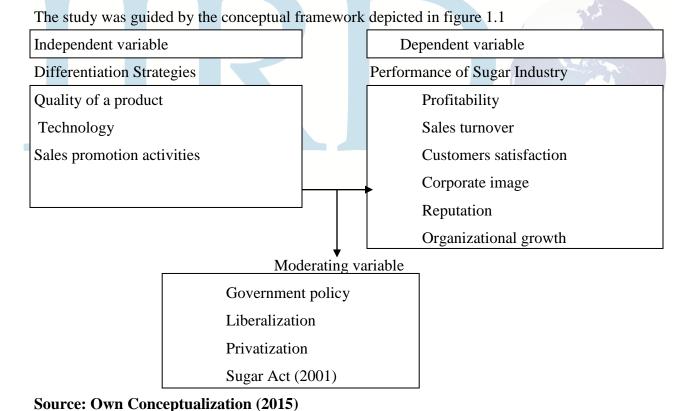


Fig 1: conceptual framework



# 2.6 Knowledge gap

There is overall production inefficiency in sugar industry in western Kenya region. Little or no research seems to have been undertaken to investigate the management strategies that have been adapted by management to achieve competitive advantage. This study endeavored to address this by investigating the relevance of the differentiation strategy on the performance of the sugar industry in western Kenya.

#### 3.0 RESEARCH DESIGN AND METHODOLOGY

## 3.1 Research design

Research design refers to an approach that was used in any research undertaking. It is an arrangement of conditions for collection and analysis of data (Mugenda and Mugenda, 2003). It is also the pattern that the research intents to follow, the plan or strategy for conducting the research (Willis and David 2009). This study used descriptive survey design. Descriptive design is describing status of situation/phenomenon as it is (Wills and David 2009). Mugenda and Mugenda (2003) define descriptive survey design as a process of collecting data in order to answer questions concerning the current status of the subjects in the study. The advantage of using descriptive survey design is that it allowed the researcher to measure the frequency of a phenomenon but also measure the preference of people hence, enabling the researcher to appreciate how the differentiation strategy can influence performance of the sugar industry in the Western Kenya Zone (Gay, 1981). The design in this study determined and reported the way things such as behavior, attitudes, values and characteristics were.

This study was carried out in Western Kenya which is located to the North of Lake Victoria and bordered to the west partially by Mt. Elgon volcano and Eastern Uganda. To the East lies the expansive Rift Valley and physique Nandi Escarpment. The study was carried out in this region because of the good quality sugar produced by the four firms namely Mumias, Nzoia, West Kenya and Butali Sugar Companies.

This study investigated Assessment of differentiation strategy on the performance of the sugar industry in western Kenya. The study targeted management and non-management staff on



permanent employment of Mumias, Nzoia, and West Kenya and Butali sugar companies as summarized in the table below (table 3.1)

Mugenda and Mugenda (2003) define sampling as a process of selecting the number of individuals to represent a larger group of subjects. The purpose of sampling is to secure a representative group which enables the researcher to gain information about population. He then defines a sample as a smaller group obtained from the accessible population. This research drew sample following the recommendation of Kombo and Tromp (2006) of 10% to 30% to be a representative for a study population. While Best and Khan recommend a 20% to 30% as ideal to represent a target population under study. In this study, the management staff and non-management staff were selected randomly on the basis 10% as recommended by the above authors. The study targeted 10% of management and non-management staff of Mumias, Nzoia, West Kenya and Butali sugar companies as summarized in the table below

**Table 1: Target population and sample population** 

Category	Company	Target	SAMPLE 10%
Management Staff	Mumias	250	25
	Nzoia	201	20
	West Kenya	78	8
	Butali	52	5
Non-management Staff	Mumias	560	51
	Nzoia	420	42
	West Kenya	180	18
	Butali	110	10
Total		1851	179

### Source: Payroll in respective companies, 2015

In order to answer research questions, data was collected by use of questionnaires and interview schedules developed by the researcher. There was a questionnaire for management and non-management staff, observation checklist for non-management staff, interview schedules for management staff. The instruments were both open-ended and closed-ended questions so that at a time the respondents could have the freedom to express their views and opinions and also make



suggestions (Mugenda and Mugenda, 2003). The closed ended questions guided the respondents to give specific responses required by the researcher such as gender and education level etc.

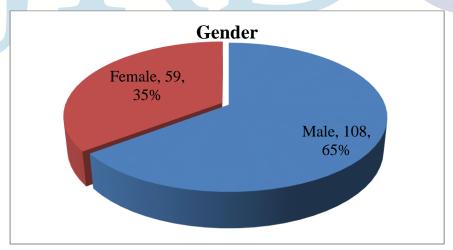
#### 4.0 RESEARCH FINDINGS AND DISCUSSION

## 4.1 Demographic characteristics of the Respondents

This section discusses the social and demographic characteristics of the surveyed sample population; these include gender, age, duration worked, department and education of the respondents. Out of the 179 questionnaires that were administered, 167 were returned and met minimum entry condition for further analysis in this study. This represented approximately 94.4% of the total questionnaires administered. Those who did not respond to the questionnaire were 12 who cited their work schedules as the impediment for data collection exercise.

# 4.2 Gender of the Respondents

The respondents were required to state their gender. From the findings, majority of the respondents were male comprising of 65 %( 108) while female were 35(59%). The results are as shown in Figure 2.



**Figure 2: Gender Respondents** 

It is evident in the three sugar companies in western Kenya that females are less represented as compared to male counterparts even though they constitute slightly above a third gender rule as enshrined in 2010 Kenya Constitution.



#### 4.3 Age of the Respondents

The respondents were required to state their age group. The valid age groups were below 23 years, 24-40 years, 41-60 years and above 60 years. The results are as shown in Figure 3.

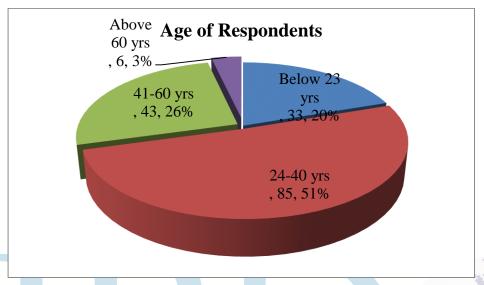


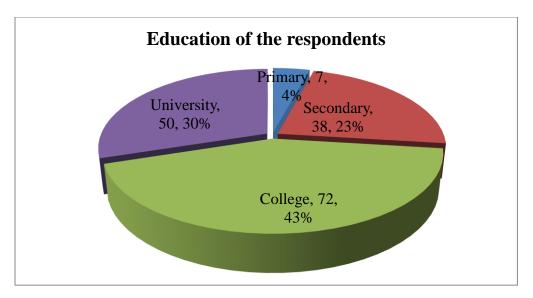
Figure 3: Age of Respondents

Figure 3 revealed that majority of the respondents are between 24-40 years as they are more than a half (51%). However, 41-60 years were 26 %( 43) and below 23 years were 20 %( 33). Only 6 respondents were above 60 years and they formed 3% of the respondents. This shows that majority of the respondents in this study were between 24 and 70 years as they formed 77% of the respondents. These ages are considered active in terms of output hence the response from this respondents increased validity of the findings.

#### 4.4 Education of the Respondents

The respondents were required to state their academic qualifications. From the findings, majority of the respondents were having college education as shown by 43 %( 72). They were followed by university education 30 %( 50) and secondary education were 23 %( 38). Primary education was least as they were 4 %( 7). The results are as shown in Figure 4.





**Figure 4: Education of Respondents** 

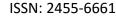
Since all the respondents were literate, data collection exercise was easy as the respondents were able to fill the questionnaire on their own without the need of research assistants to aid them. However, 73% of the respondents who were having college and university education provided the much needed information especially in the open ended questions where their opinion was need in term of product differentiation and performance of their respective companies.

# 4.5 Effect of product quality as a differentiation strategy on the performance of the sugar industry

The first objective of the study was to establish the effect of product quality as a differentiation strategy on the performance of the sugar industry in Western Kenya. The objective answered the first research question of the study "What is the effect of quality of a product as a differentiation strategy on performance of the sugar industry in Western Kenya?" This was done through examining product quality in relation grade of sugar, types of grade available, good value, different sugar price, customer value for money and organization growth.

## 4.6: Response on Sugar quality effect on performance of the sugar company

The findings revealed that all the four sugar factories in western Kenya have a quality assurance section while 96.41 %( 161) of the respondents revealed that there is effort to improve the quality of sugar produced by their companies. However, 86.2% (144) indicated that there were different quality outputs of sugar in their companies. Regarding the extent to which respondents





agree with statements relating to the effect of product quality as a differentiation strategy on the performance of Sugar Company, the results are as presented in Table 2

Table 2: Response on Sugar quality effect on performance of the sugar company

Sugar quality effect on performance of the sugar company	SA	A	N	D	SD
Due to high grade of sugar sold at premium	20.36%	53.89%	17.96%	7.19%	2.4%
price, the company has high Profitability	(34)	(90)	(30)	(12)	(4)
We have all grades of sugar for wider market	52.69%	26.95%	13.77%	3.59%	2.99%
requirement leading to high Sales turnover	(88)	(45)	(23)	(6)	(5)
The company response to customer value for	4.19%	19.16%	51.5%	20.96%	4.19%
money has created high Customers satisfaction	(7)	(32)	(86)	(35)	(7)
Different product quality at good value has	53.29%	27.54%	13.77%	4.19%	1.2%
created high Corporate image	(89)	(46)	(23)	(7)	(2)
The company Reputation is high due to	5.39%	18.56%	50.9%	21.56%	3.59%
different quality and different price of sugar.	(9)	(31)	(85)	(36)	(6)
My company enjoys high Organizational	1.2%	3.59%	20.36%	52.69%	22.16%
growth due to differentiated sugar products.	(2)	(6)	(34)	(88)	(37)

From Table 2, 74.25% of the respondents agreed that due to high grade of sugar sold at premium price, the company has high Profitability compared to 9.6% who did not confirm that high profit is a result of high grade of sugar sold at premium price. High sales turnover is as a result of having all grades of sugar for wider market as shown by 79.6% of the respondents although 6.58% were not in agreement. Over half of the respondents were undecided whether high customer satisfaction is as a result of company response to customer value for money with even though does who confirmed (23.4%) that were less than does that did not confirm (25.2%).

High corporate image is a result of different product quality at good value as shown by 80.8% of the respondents although 5.3% of the respondents indicated otherwise. However, 50.9% of the respondents were not sure whether the company reputation is high due to different quality and different price of sugar with 25.15% of the respondents disagreeing with the relationship between company reputation and different prices of sugar. Lastly, 74.5% of the respondents did not agree that high Organizational growth is due to differentiated sugar products with only 4.7% confirming that organization growth is due to differentiated sugar products.



## 4.7 Correlation between product quality and Performance of Sugar Industry

The Pearson correlation analysis was used to assess the relationship between product quality as a differentiation strategy and performance of Sugar Industry. The results in Table 3 revealed that the relationship between product quality and Performance of Sugar industry is positive, weak and significant (r = .233\*, p < .05). This indicated that an increase in product quality as a result of product differentiation would result to an increase in performance of Sugar Industry in western Kenya while a decrease in the product quality can lead to a decrease in the performance of Sugar Industry.

Table 3: Correlation between product quality and Performance of Sugar Industry.

			Performance of
		Product quality	Sugar Industry
Product quality	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	92	
Performance of	Pearson Correlation	.233*	1
Sugar Industry	Sig. (2-tailed)	.026	
	N	92	92

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

# 4.8 Regression Results of technology deployment and Performance of Sugar Industry

Regression analysis was used to tell the amount of variance accounted for by one variable in predicting another variable. Regression analysis was conducted to find the proportion in the dependent variable (performance of Sugar Industry) which can be predicted from the independent variable (technology deployment). Table 4 below shows the analysis results. The results revealed a coefficient of determination ( $r^2$ ) of 0.342. Meaning technology deployment can explain 34.2 % of the variance in performance of Sugar Industry in Western Kenya. The adjusted r square attempts to produce a more honest value to estimate r square for the population. The F test gave a value of (1, 91) = 46.82, P<0.01, which was large enough to support the goodness of fit of the model in explaining the variation in the dependent variable .It also means technology deployment is a useful predictor of performance of Sugar Industry.

Table 4 Regression Results of technology deployment and Performance of Sugar Industry

Model	R	$\mathbb{R}^2$	Adj.	B	SE	B	T	df	$\mathbf{F}$	Sig.
			$\mathbb{R}^2$							

ISSN: 2455-6661

(Constant)				.750	.409		1.836	
Technology								
Deployment	.585 <sup>a</sup>	.342	.335	.827	.121	.585	6.843 (1,91) 46.820	.000

a. Predictors: (Constant), Technology Deployment

# 4.9 Regression Results of Sales promotion activities on Performance of sugar industry

The study sought to examine the effect of Sales promotion activities on performance of sugar industry in Western Kenya and the results are in Table 5. It was established that the coefficient of determination (r²) was 0.028 and therefore Sales promotion activities can only explain 2.8 % of the variation in performance of sugar industry in western Kenya. The relationship between the Sales promotion activities and performance of sugar industry is not Significant since p is greater than .05, (p=0.111, p>0.05). Meaning that sales promotion activities have an effect but it is not significant to the performance of sugar industry in western Kenya.

Further, the F test gave a value of (1, 91) = 2.585, P>0.05, which was not large enough to support the goodness of fit of the model in explaining the variation in the dependent variables. It also means that sales promotion activities are not a very useful predictor of performance of sugar industry.

Table 5: Regression Results of Sales promotion activities and Performance of sugar industry

Model	R	R <sup>2</sup>	Adj. R <sup>2</sup>	В	SE	β	T	df	F	Sig.
(Constant)				2.951	.346		8.521			
Sales										
promotion	.167 <sup>a</sup>	.028	.017	.159	.099	.167	1.608	(1,91)	2.585	.111 <sup>b</sup>

a. Predictors: (Constant), Sales promotion activities

#### 5.0 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Summary

Basing on the first objective of the study, the findings established that product quality as differentiation strategy has significant positive weak effect on the performance of the sugar

a. Dependent Variable: Performance of Sugar Industry



industry in Western Kenya (r = .233\*, p < .05). The regression analysis revealed that 5.4 % of the variations in performance of sugar industry can be explained by product quality leaving 94.7% to be accounted by other factors. Further, 63% of the respondents had opinion that sugar product differentiation causes increased company performance due to high grade sugar sold at premium price, all grades of sugar for wider market and different quality as well different price of sugar

leading to company reputation, sales turnover and high profits.

Basing on the second objective of the study, the findings determined that technology deployment as differentiation strategy has significant positive moderate effect on the performance of the sugar industry in Western Kenya (r = .585\*\*, p< .01). The regression analysis revealed that 34.2 % of the variations in performance of sugar industry can be explained by technology deployment as 65.8% is been accounted by other factors. Most of the respondents (96%) had opinion that sugar technology deployment strategy has led to increased company performance due to superior production technology in processing of high grade sugar yields as well as limiting hazards. This has led to increased organizational growth, company reputation, corporate image, customers' satisfaction and an increase in company profitability.

Basing on the third objective of the study, the findings revealed that company sales promotion activities as differentiation strategy has insignificant positive weak effect on the performance of the sugar industry in Western Kenya (r = . 167, p > .05). The regression analysis revealed that 2.8 % of the variations in performance of sugar industry can be explained by Sales promotion activities as 97.2% is been accounted by other factors. Most of the respondents (57%) had opinion that sales promotion activities have not caused an increase in company performance as only Mumias Sugar Company was found to be aggressive as compared to the three remaining companies. Thus the company stands to gain in terms of corporate image and reputation due to high promotion activities.

Lastly, four challenges were identified facing sugar industry performance in western Kenya. These were government policy and politics in the management of the firms, liberalization which has led to importation of cheap sugar from COMESA member countries and as far as Brazil. Others were privatization of sugar firm with aim to increase accountability and performance as well as Sugar Act 2001 as disputed involving parties and investors has not been settled especially between Mumias Sugar and West Kenya as well as West Kenya and Butali Sugar Factories. The sugar act needs to be amended to make it more functional



#### **5.2** Conclusions

The research paper sought to address the specific research questions using correlation and regression analysis where the conclusions were derived from.

The study concluded that quality of a product as a differentiation strategy had significant positive weak effect on the performance of the sugar industry in Western Kenya. Even though the four companies have quality assurance sections and effort to improve the quality of sugar, there are few different quality outputs of sugar in some companies.

The findings also revealed that technology deployment as a differentiation strategy has significant positive moderate effect on performance of the sugar industry in Western Kenya. All the four firms have invested in new technology so as to enhance their product differentiation and they have different technology as compared to original technology in their company which has resulted to increase in profitability, customer satisfaction and good corporate image.

The study also concluded that sales promotion activities by sugar firms in western Kenya have insignificant positive weak effect on the performance of sugar industry. Although they have marketing and promotion sectors, Mumias sugar company sector is the most active, aggressive and vibrant in terms of sales promotion and marketing. The rest have limited marketing and promotion activities although there is effort to promote sugar produced by their companies due to competition from other sugar producing companies.

Lastly, the study concluded that government policy, privatization, liberalization and Sugar Act 2001 are the main challenges facing performance of the sugar industry in western Kenya. These challenges create unfair competition or mismanagement of the resource due to government policies that are hinged to political balkanization of the sugar region and government of the day.

#### **5.3** Recommendation

The following recommendations were made basing on the conclusion of the study.

There is a need for sugar industry not only in western Kenya but in the whole republic to invest heavily on the quality of sugar they produce. This can be done by having quality assurance departments well-funded and supported so that they can produce high grade sugar products as well as different product quality at different prices which will lead to customer satisfaction hence increase in profitability.



ISSN: 2455-6661

With an increase in trade liberalization, there is need for sugar firms to deploy appropriate technology in production of cane, processing of cane as well as production of sugar so that wastage is minimized and the sugar cane bred takes less period to mature. This technological advancement will result to superior quality, use of different byproduct that will enable firms to not only concentrate on sugar production as core business but also on ethanol, power and bagasse thereby competing competitively with imported sugar.

The marketing and sales promotion activities should be developed to full capacity. This will ensure maximum awareness of sugar not only in the region where firms are situated but in the whole of COMESA region. Also maximum support is needed in terms of funding, marketing and promotion sections so that they procure the required human resources to drive the section.

The government should limit the politics associated with sugar industry. Political interference in the management of sugar firms results in selecting board members who are politically correct. They engage in corruption which hurts earnings of the sugar firms.

Government policies should be developed in such a manner that local industries are protected from foreign competition. This would enable most infant firms to develop and stabilize themselves in the market.

The sugar Act needs to be amended to make it more functional, the parliamentary committee including SUPAC, SUCAM and the agricultural parliamentary committee need to agree on the areas that require to be reviewed so that disputes amongst different stakeholders in sugar industry are resolved amicably.



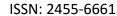
#### REFERENCES

- Aaker DA and Myers JC, (1977). Advertising Management. New Delhi: Prentice Hall Limited.
- Apsru (2004), Sugarcane Production (online). Available (Accessed on 15<sup>th</sup> June 2004).
- Attewell P and Rule J (1984). "Computing and organizations; what we know and what we don't know" Communications of the ACM, Vol 27:1184-1192 (December).
- Awino Z, Wamalwa R, Imaita I (2008). Challenges facing the implementation of differentiation strategy at the Mumias sugar company limited. Kenya
- Berndt, ER and Morreson, Catherine J (1995). "High-tech capital formation and economic performance in US manufacturing industries, An explanatory analysis, "journal of econometrics"
- Berndt, Ernest R, Morison, Catherine (1992). "High-tech capital formation and labor composition in US manufacturing industries; an explanatory analysis," National bureau ofeconomic research working paper no 4010 (March)
- Blathberg CR, Neslin. SA (1990). Sales Promotion concepts and methods MC-Graw Hill, Inc.USA
- Bonacorsi, A. Lipparini A (1994). "Strategic partnership in new product development. An Italian case study journal of product innovation management."
- Burner. R (2010). The political economy of policies for small-holder Agriculture, world development 38(10), 1442-1452
- Bustos,Linda (2008). "110 ways retailers are using social media;" (last accessed July 20<sup>th</sup> 2008) (http/www.getelastic.com/social-media)
- CGD Bills Digest (2005) 'Stirring up the sugar industry', June 2005.
- Chamberlain E and Robinson L. (1993); Theory of monopolistic competition: origins, results and implications. 8<sup>th</sup> edition southern economic journal.
- Creswell, J.W. (2002). Research design: Qualitative, quantitative and mixed approaches.

  Thousand Oaks: Sage Publication
- Dageratu, Alexandru, Arvind Rungaswamy and Jianan W.O. (2000). "Consumer choice behavior in online and traditional SM: The effects of brand name, price and other research attributes," Int journal of research in marketing, 17 (1)55-78



- Danahar, Peter J,Isaac Wilson and Robert Davis (2003)."A comparison of online and offline consumer brand loyalty marketing science", 22(4) 461-76
- Dostaller, I. (2010). Avoiding rework in product design: evidence from the aerospace industry: International journal of quality and reliability management
- Earl C. Meyer and Kathleen R. Allen (1994), Entrepreneurship and Small Business Management. New York: McGraw Hill.
- Ellis, K, Sing, R, and Ong'olo, D. (2010). Assessing the economic impact of competition:
- findings from Kenya, London, Overseas Development Institute.
- Epza (2005) Export processing zone cited in Waswa F. et al (eds) Commercial sugarcane Farming in the Lake Victoria Basin. Kampala: Fountain Publisher.
- Emmanuelides, PA (1983), "Towards an integrative framework of performance in production development projects" journal of engineering and technology management, Vol 10 pp 363-392
- Gay. L.R (1981) Educational Research: Competencies for Analysis and application- upper Saddle River, NJ: Menu.
- Griffin A. (1993). Metrics for measuring product development cycle. Time journal of product innovation management 10,112-125
- Hitt,Lorin et al (1994) "Three faces of IT value: The theory and evidence, The proceedings of the fifteenth international conference on information systems (December)"
- Hoch (1994): Planning theory practice and housing. Journal of the American planning Association
- Horper Boyd (1972) Marketing Management, New York; Harcourt Brace Jovanovich.
- J. Schumpeter (1975). Capitalism, Socialism and Democracy. New York; Harper. PP 82-85.
- John A. Orodho (2004). Elements of education and social science Research methodsMaseno Kenezjapublisher.
- Jorgenson, Dale W and Stiroh Kevin (1995). "computer and growth", Economics of innovation and new technology, vol 3;295-316
- Kate MacArthur (2003)." Sierra Mist: Cie Nicholas" Advertising Age November 17, 2003 P5-2.
- Kegode P. (2010). Economic Governance Reforms in the sugar sub sector, paper submitted to centre for Governance and Development.





- Kellman, S.J (2002). "contracting in lester M salamon, etal". The tools of the govt; A guide to the new Governance (New York, Oxford union press)
- Kenya Sugar Board (2004). Industry Investment opportunities KSB
- Kenya Sugar Board (2002). Kenya Sugar cane Board year book of statistics.
- Kenya Sugar Board (2003). Kenya Sugarcane Authority. Year book of statistics
- Kenya Sugar Board (2010). (Http://www.kenya sugar.eo.ke/index,php? option=con-content and task = view and id= 19 and itemid = 45) accessed: 214/06/2010.
- Kerlinger FN (1973). Practical Assessment, Research and Evaluation. A peer-reviewed electronic journal ISSN 1531-7714
- Kombo D.K and Tromp DLA (2006). Proposal and Thesis writing. Nairobi: Panlines Publications Africa.
- Koufteros XA and Marcouliles ,GA (2006). "Product development practices and performance: A structural equation modeling-based multi-group analysis hit journal of production economic, Vol 103 pp286-307 –Manguela –Rata (2002)
- Lal (1990). The Impact of Sales Promotion on organization effectiveness in Nigerian

  Manufacturing Industry. Universal journal of Marketing and Business Research

  (ISSN) 2315-5000. Vol1 (4) Pg 123-131
- Landaner, Thomas K (1995). The trouble with computers, Themit press, Cambridge, A.
- Levitt, Theodone (1960).Marketing Myopia; Business Review Havard Business Review (July August 1960.
- Lin (2009). Grey Game Theory and its Application in Economic Decision making-CRC Pres Book.
- Manarangsan,S and K.Kaewthep. (1987).sugar industry of Thailand ,Bangkok Institute of asian studies,Chulalongkon university
- Mary Jane Byrd and L.C Megginson (2009).Small Business Management. New York: McCraw Hill.
- Mark H. McCrormack (2000). What they don't teach you to at HAVARD Business School. New York: profile Books
- Margaret Kabim and A. Njenga (2009). Research, monitoring and Evaluation. Nairobi: Focus Publication Limited.
- Marcus, AA(2005). Management strategy: Achieving sustained competitive advantage. New



York: McGraw- Hill Irwin.

Meyer E.C and Allen K.R (1994). Entrepreneurship and small Business Management; New York: McGraw.

Miller,R (2008): International political economy:contrasting world views, London.

Muchen and Leon (1991). Flexible estimation of price response functions using retail scanner.

Journal of Retailing and consumer services (2007) 383-393

Mugenda O.M and Mugenda A.G (2003) Research Methods: Quantitative and Quantitative Approaches, Africa Centre for Technology Studies, Nairobi.

Mwiria and Wamahiu (1988) Issues in Educational research in Africa. Nairobi: EAEPS.

Neteyarah, P, et al (1994), The future of thai sugarcane and sugar industry, Bangkok: Thailand Development Research Institute (TDRI)

O. C. Ferrell, G. Hirt and Ferrell (2006) Business A changing world . New York, McGraw-Hill Irwin.

Omolo (2005) Politicizing Adjustment Policies in Kenya's Sugar Industry: Effects on poor development outcomes. The Hague. Netherlands.

Orodho JA. (2005). Elements of education and social research methods. Maswa publishers, Nairobi

Osterman,P (1986)."The impact of computers on the employment of clerks and managers, Industrial and labor relations review', vol 39:175-186.

Porter, M.E (1985). Competitive advantage; creating and sustaining superior performance. New York: Free Press.

Prahalad CK and Hamel C (1990). The core competence of the corporation. Harvard Business Review 68(3). 79-93.

Promotion Marketing Association (2003) Press release September is national coupon month'

Ramaswaryvs and S Namakumari (2005); Marketing Management. New Delhi McGraw-Hill Tata.

Renae Merle (2001).U.S slowdown is good news for coupon seller valises. The wall street Journal, May 2001, PB2.

Roach, Stephen S (1987). "America technology dilemma: A profile of the information economy," Morgan Stanley special economic study (April)



Rok (1999). National Poverty Eradication Plan 1999- 2015. Department of development Coordination office of the President Nairobi: Government Printer 655-670

Rok (2007) Divisional Office, Ministry of Agriculture Webuye.

Roscoe J T (1973). Fundamental Research, Statistics for behavioral research. New York.

Rossister and Percy (1987). Advertising and Promotion Management, New York: Mc-Graw Hill

Sara B, (1993).Privatization and public,private partnerships;New yorkchartham.House publishers

Shankar Vemkatesh and Ruth N.Bolton (2003). "An empirical analysis of determinant of retailerpricingstrategy" Marketing science, 23(1) 28-49

Sindabi AM (1992). An analysis of the Guidance and Counseling program in selected Ed. Dissertation, Virginia polytechnic and state university. Falls church Virginia

Society for International Development (SID) (2004) Pulling Apart. Facts and Figures on equality in Kenya. Nairobi SID.

SRDC. (2002), The Australian Sugar Industry (online). Available:

http/www.srdc.gov.au/industry.htm (Accessed on 15.12.2002)

SRDC (2002). Improved nutrient management in the Australian Sugar Industry. Final Report, SRDC Project.

Stuart Wyatt (2010). The Secret Laws of Management London: Head Publishing GroupVS Ramaswamy and S. Namakumari (2004) Marketing Management. Boston: HBS Press.

Sugar Industry Submission (1999). To The House of Representatives Standing Committee Inquiry into Primary Producers Access To Gene Technology. June 1999

Thompson AA, JE. Gamble and A.J. Strickland (2004). Strategy. New York.

Thomas L. Powers (2004). The Impact of Structure and Process attributes on satisfaction and behavioral intentions. Journal of services marketing vol 18/ss.pp 114-121

Walts M (1992).Peasant and flexible Accumulating the third world producing under contract, economic and political weekly 27(30);90-97

Waswa F, CW Netondo, LW Mama, T. Nasiko (2011). Commercial Sugar cane Farming in the Lake Victoria Basin. A quandary of opportunities: Kampala: Fountain Publishers. Kenya Sugar Board (2003) Kenya Sugar cane entirety yearbook of statistics.

Willis. Y.O, Onen, D. (2009). *WritingResearchProposalandReport*. A Handbook for Beginning Researchers, Nairobi, Jomo Kenyatta Foundation.





Wilson, Diane D (1995). "IT investments and its productivity effects; An organizational sociologists perspective on directions for future research" Economics of innovation and new technology, vol3:235-251

Zhang, QF (2012): The political economy of contract farming in Chinas Agrarian Transition – journal of Agrarian change 12(4); 460-483

