International Journal of Business and Management Invention
ISSN (Online): 2319 – 8028, ISSN (Print): 2319 – 801X
www.ijbmi.org || Volume 4 Issue 4|| April. 2015 || PP-01-07

Assessment of the effect of Cost Leadership Strategy on the performance of Liquefied Petroleum Gas Companies in Eldoret town, Uasin Gishu County, Kenya

[1]Nyauncho M. Josiah , [2]Nyamweya Isaac Nyagara
[1]Lecturer, Moi University
[2] Accountant, University of Eldoret

ABSTRACT: *The objective of the study was to investigate the effects of cost leadership strategy on performance of LPGC in Eldoret town. In doing this, the study adopted Porter's Generic Competitive Strategies which states that, cost leadership is a firm sets out to become the low cost producer in its industry. The study used a survey design and targets a population of 175 which comprise of 10 station managers, 40 departmental heads, 20 supervisor and 105 employees. A sample size of 64 was selected using stratified sampling. The study used questionnaires and interview schedule as data collection instruments. Data analysis was carried out using descriptive statistics such as Spearman rank coloration, means. Pearson's product moment correlation coefficients were used to assess the degree of linear relationship among competitive strategies and between competitive strategies and performance of the liquefied petroleum gas companies. Normality of the variable was tested for cost–leadership using skewness and Kurtosis. Homogeneity of variances was tested using Levenne's test of equality of variances across gender of respondents. The study established that the company uses cost minimization of operational costs (M=427, SD=1.058) Minimization of procurement costs (M=4.54, SD=0.770), evaluation of labour costs (M=4.17,SD=0.966) and Conducts costing of its promotion activities (M=3.98 SD==1.2050.The study concluded that, cost leadership influences the performance of LPGCs performance enabling the company to reduce price leading to high volume of sales visa a-visa profit margin, increase in service delivery, less return inwards, reduced operational costs and reduced wastages. The study recommended that, Liquidified petroleum companies should carry out through market research to identify the gaps in the markets. The gaps should be varied that is product gap, market gap and promotion gap before designing the competitive strategies.*

KEY WORDS: *Cost leadership strategy, performance*

I. INTRODUCTION

Background Information: Competitive advantage as the ability to stay ahead of present or potential competition, thus superior performance reached through competitive advantage will ensure market leadership. Also it provides the understanding that resources held by a firm and the business strategy will have a profound impact on generating competitive advantage. Powell (2001) views business strategy as the tool that manipulates the resources and create competitive advantage, hence, viable business strategy may not be adequate unless it possess control over unique resources that has the ability to create such a unique advantage. Competitive advantage occurs when an organization acquires or develops an attribute or combination of attributes that allows it to outperform its competitors. These attributes can include access to natural resources, such as high grade scores or inexpensive power, or access to highly trained and skilled personnel (Clulow et al.2003). New technologies such as robotics and information technology can provide competitive advantage, whether as a part of the product itself, as an advantage to the making of the product, or as a competitive aid in the business.

Statement of the Problem: Keeping pace with changing business environment the present day environment is so dynamic and fast changing thus making it very difficult for any modern business enterprise to operate. Hence the product leaders have a challenge on how to be very creative and fast in problem solving while maintaining their team work in order to successed. According to Monroe (2004), consumer electronics, fund management, automotive and pharmaceutical industries include many companies pursuing a strategy of product leadership

Objective of the Study: To investigate the effects Cost Leadership Strategy on the performance of LPGC in Eldoret town.

Research Hypothesis: H_{o1}: Cost Leadership Strategy has no significant effect on the performance of LPGC in Eldoret town.

II. LITERATURE REVIEW

Cost Leadership Strategy: According to Porter's Generic Competitive Strategies, cost leadership, a firm sets out to become the low cost producer in its industry. The sources of cost advantage are varied and depend on the structure of the industry. They may include the pursuit of economies of scale, proprietary technology, preferential access to raw materials and other factors (Peteraf, 1993). A low cost producer must find and exploit all sources of cost advantage. If a firm can achieve and sustain overall cost leadership, then it will be an above average performer in its industry, provided it can command prices at or near the industry average.

The goal of Cost Leadership Strategy is to offer products or services at the lowest cost in the industry. The challenge of this strategy is to earn a suitable profit for the company, rather than operating at a loss and draining profitability from all market players. Companies such as Walmart succeed with this strategy by featuring low prices on key items on which customers are price-aware, while selling other merchandise at less aggressive discounts. Products are to be created at the lowest cost in the industry (Amit and Zott, 2001). An example is to use space in stores for sales and not for storing excess product. This strategy involves the firm winning market share by appealing to cost-conscious or price-sensitive customers. This is achieved by having the lowest prices in the target market segment, or at least the lowest price to value ratio (price compared to what customers receive). To succeed at offering the lowest price while still achieving profitability and a high return on investment, the firm must be able to operate at a lower cost than its rivals. There are three main ways to achieve this (Kotler and Armstrong 2010).

The first approach is achieving a high asset turnover. In service industries, this may mean for example a restaurant that turns tables around very quickly, or an airline that turns around flights very fast. In manufacturing, it will involve production of high volumes of output. These approaches mean fixed costs are spread over a larger number of units of the product or service, resulting in a lower unit cost, i.e. the firm hopes to take advantage of economies of scale and experience curve effects (Chesbrough, Rosenbloom, 2002). For industrial firms, mass production becomes both a strategy and an end in itself. Higher levels of output both require and result in high market share, and create an entry barrier to potential competitors, who may be unable to achieve the scale necessary to match the firms' low costs and prices.

The second dimension is achieving low direct and indirect operating costs. This is achieved by offering high volumes of standardized products, offering basic no-frills products and limiting customization and personalization of service. Production costs are kept low by using fewer components, using standard components, and limiting the number of models produced to ensure larger production runs (Gregson, Andrew 2008). Overheads are kept low by paying low wages, locating premises in low rent areas, establishing a cost-conscious culture, etc. Maintaining this strategy requires a continuous search for cost reductions in all aspects of the business. This will include outsourcing, controlling production costs, increasing asset capacity utilization, and minimizing other costs including distribution, R&D and advertising. The associated distribution strategy is to obtain the most extensive distribution possible. Promotional strategy often involves trying to make a virtue out of low cost product features.

The third dimension is control over the supply/procurement chain to ensure low costs. This could be achieved by bulk buying to enjoy quantity discounts, squeezing suppliers on price, instituting competitive bidding for contracts, working with vendors to keep inventories low using methods such as Just-in-Time purchasing or Vendor-Managed Inventory. Wal-Mart is famous for squeezing its suppliers to ensure low prices for its goods (Kotler and Armstrong 2010). Dell Computer initially achieved market share by keeping inventories low and only building computers to order. Other procurement advantages could come from preferential access to raw materials, or backward integration.

Some scholars assume that cost leadership strategies are only viable for large firms with the opportunity to enjoy economies of scale and large production volumes. However, this takes a limited industrial view of strategy. Small businesses can also be cost leaders if they enjoy any advantages conducive to low costs. For example, a local restaurant in a low rent location can attract price-sensitive customers if it offers a limited menu, rapid table turnover and employs staff on minimum wage. Innovation of products or processes may also

enable a startup or small company to offer a cheaper product or service where incumbents' costs and prices have become too high (Monroe, 2004),. An example is the success of low-cost budget airlines who despite having fewer planes than the major airlines, were able to achieve market share growth by offering cheap, no-frills services at prices much cheaper than those of the larger incumbents.

A cost leadership strategy may have the disadvantage of lower customer loyalty, as price-sensitive customers will switch once a lower-priced substitute is available. A reputation as a cost leader may also result in a reputation for low quality, which may make it difficult for a firm to rebrand itself or its products if it chooses to shift to a differentiation strategy in future. This dimension is not a separate strategy per se, but describes the scope over which the company should compete based on cost leadership or differentiation. The firm can choose to compete in the mass market (like Wal-Mart) with a broad scope, or in a defined, focused market segment with a narrow scope. In either case, the basis of competition will still be either cost leadership or differentiation (Amit and Zott 2001).

In adopting a narrow focus, the company ideally focuses on a few target markets (also called a segmentation strategy or niche strategy). These should be distinct groups with specialized needs. The choice of offering low prices or differentiated products/services should depend on the needs of the selected segment and the resources and capabilities of the firm. It is hoped that by focusing your marketing efforts on one or two narrow market segments and tailoring your marketing mix to these specialized markets, you can better meet the needs of that target market. Market leadership in one of the three disciplines, and perform to an acceptable level in the other two which include Operational excellence and Customer intimacy (Gregson and Andrew 2008).

Operational excellence aims to accomplish cost leadership. Here the main focus centres on automating manufacturing processes and work procedures in order to streamline operations and reduce cost. The strategy lends itself to high-volume, transaction-oriented and standardized production that has little need for much differentiation. It is ideal for markets where customers value cost over choice, which is often the case for mature, commoditized markets where cost leadership provides a vehicle for continued growth. Leaders in the area of operational excellence are strongly centralized, with strong organizational discipline and a standardized, rule-based operation (Gregson and Andrew 2008).

III. METHODOLOGY

Research Design: The study adopted a descriptive survey design, so as to help the researcher to gather data from a sample of population at a particular time. This helped the researcher to assess the phenomenon as it is on the field. The research design is the glue that holds all the elements in a research together and constitutes a blue print for the collection measure and analysis of data Kothari (2003) Survey research is getting information from a large number of people by interviewing a few of them to represent the whole population through the data offered by the respondent. The survey method attempted to picture or document current conditions or attitudes, that is, to describe what exists at the moment (Wimmer, 1987). The survey method tends to be time conscious as it can be carried out on a large number in a shorter period of time.

Population: The target population was 175 respondents (see table 1), comprising of 10 station managers, 40 departmental heads and 20 supervisors and 105 employees from liquidified petroleum gas companies.

Table 1 Target Population

Strata	**Target position**
Station manager	10
Departmental heads	40
supervisors	20
Employees	105
Totals	**175**

Source: ERC (2015)

Sample and Sampling Techniques: The sample size used was 64 respondents comprising of 4 station managers, 15 departmental heads, 7 supervisors and 105 employees was selected using stratified sampling. This was calculated according to Yamane (2007), who developed a formula that was used to calculate the sample size. This is ideal for population size that is smaller than 500. This formula is given as;

$n=N/1+N\ (e)^2$

Where n- is the required sample size

N-is the population size

e-is the error margin

Where N=175

e=.10

Hence $n=175/1+175(.1)^2=64$

The sample size used was 64 which make up for 36.6%of the target population. The sample size was differentiated in their strata based on the 36.6% .This was done according to stratified method. This was ideal since the workers belong to different categories and each category has different role from each other Gay (2001). The categories were put into four strata; the station managers, head of departments, supervisors and employees strata were calculated as follows

Table 2 Sample size

Strata	**Target population**	**sample size**
Station manager	10*0.366	4
Departmental heads	40*0.366	15
supervisors	20*0.366	7
Employees	105*0.366	38
Totals	**175*0.366**	**64**

Source: author (2014)

To sample respondents form each stratum the names of the target population was written and placed in a basket and the required sample size selected hence giving each member in the target population an equal chance of beings selected.

Data collection instruments

The data collection instrument used was questionnaires.The questionnaires were administered to the station managers, departmental heads, supervisors and employees. The questionnaires were used because they can be administered to a large number of correspondents simultaneously and require fewer skills to administer (Feverman, 1997). It also helped the researcher to get responses from different respondents concerning the variables considered by the researcher and closed and open-ended questions were used. At the same time the questionnaires was used as they give the accurate information as the name and identity of the respondent is always not disclosed. The questionnaires also make data analysis easier to the researcher after the research. The major demerit of the questionnaires is that it is normally bound to be lost in case the respondent is given time to go and fill in the questionnaire at later time than immediately.

Validity of Instruments

For the validity to be ascertained the instruments ought to give the same results when repeated in the same category of the population with the same conditions subjected to. Hence, validity is the accuracy and meaningfulness of inferences which on the research results Validity on the other hand, according to Kane (2001), was determined and demonstrated where an instrument performs what it was designed to perform. The research instruments were made available to the thesis supervisors in the faculty of commerce. This helped the instruments measure the content they intended to measure (content validity); correlate the results (concurrent validity) and measure what the instruments purport to measure (face validity). The measure of reliability was therefore be to ensure that the responses was consistent across variables (consistency); individuals do not vary in their responses if the instruments were administered a second time (stability).

Reliability of the Instruments

Data reliability involves the consistency and precision in which the measuring instrument demonstrates. This means that if the instruments which was used are exposed to the same test but at a different environment it has to give the same results provided the measurement in question are the same. Also it means that in case the same test is carried over and over again by different people but the same situation it must give the same outcome expected, reliability of the instrument will be tasted by carry out a pilot study in the adjacent town of Iten.

Reliability is the extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable (Orodho, 2003).

Data Analysis and Presentation

Data to be obtained for this study was coded and edited for completeness. The study used descriptive such as mean and standard deviation and inferential statistics such as product moment correlations, multiple regression analysis were used to analyze data. The data collected was presented using graphs, pie charts and tables.

IV. FINDING AND RESULTS

Univariate outliers: According to Stevens (2002), outliers are cases that have extreme values. Such values when in existence can alter the results of data analysis. In the study, a case was considered a univariate outlier if it's standardized score lay outside the interval -3.0 to +3.0 (Stevens, 2002). Results presented in Table 3 reveal that variable of cost leadership strategy had univariate outliers. Cost leadership strategy had two outliers in cases 30 (z=5.05159) and 31(z=5.05159). The case was revisited and the extreme values were then removed. The case was then used for further analysis.

Table 3: Univariate Outliers

Variable	Case	Z-Value
Cost leadership strategy	30	5.05159
	31	5.05159

Testing for Normality

Normality of the variables was tested for cost–leadership. Response scores for the item measuring a given construct were first summated and averaged to give a particular score for the construct.

Normality was then assessed using skewness and Kurtosis (Tabachnich & Fidell, 2007). The distribution across the variable was considered to be normally distributed if skewness and kurtosis values fell between -20.0 to 2.0. As shown in Table 4 which shows the skewness and kurtosis values for the study variable, skewness and kurtosis values for the variable in the study were within the acceptance range. Normality assumption was therefore considered to have been met.

Table 4: Testing for the Assumption of Normality

	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Cost Leadership	-.889	.325	.322	.639

Source: Survey Data (2013)

Testing for Linearity: Multiple regression analysis assumes that variable in the analysis are related to each other in a linear way; that the best fitting function is a straight line. Pearson's product moment correlation coefficients were used to assess the degree of linear relationship among competitive strategies and between competitive strategies and performance of the liquefied petroleum gas companies. Results displayed in Table 5 reveal that there were positive associations among the competitive strategies as well as between competitive strategies and firm performance. Linearity assumption was therefore supported.

Table 5: Testing the Assumption of Linearity

	Cost Leadership	Differentiation	Focus	Pricing	Performance
Cost Leadership	1				

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Testing for Homogeneity of Variances: Homogeneity of variances was tested using Levenne's test of equality of variances across gender of respondents. The study tested the assumption that the variance of each of the male and female sub-groups was the same on the study variables. The desired outcome was therefore failure to reject this assumption, in which case it would be concluded that the variance of the subgroups was the same.

Results shown in Table 6 indicate that at the alpha level of 0.05, hence the variable was significant. The variable was transformed and then found to be non-significant. It was therefore concluded that homogeneity of variances was supported.

Table 6: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Cost Leadership	.000	1	52	.987

Descriptive Statistics of Study Variables: Means and standard deviations were used to examine respondents perceived prevailing levels of competitive strategies as well as performance of the liquefied petroleum gas companies in the study area.

Levels of Cost Leadership strategies among liquefied petroleum gas companies

Research objective one sought to investigate the effects of cost leadership strategy on the performance of LPGC. In this regard, five items were used to measure the prevailing levels of cost leadership strategies in LPGC in the study area. Respondents were asked to indicate their agreement or disagreement with the five items. Responses were elicited o a 5-point scale ranging from 1-strongly disagree, to 5-strongly agree.

Results presented in Table 7 reveal that on the overall liquefied petroleum gas company's in the study area incorporate cost leadership strategies in their operations. In particular, respondents tended to agree that the company minimizes its procurement costs (M=4.54, SD=0.770); that the company minimize on its operational costs (M=4.22, SD=1.058); that the company conducts costing of its labour (M=4.17, SD=0.966); that the company conducts costing of its services (M=3.98, SD=1.281); and that the company conducts costing of its promotion activities (M=3.98, SD=1.205).

Table 7: Cost Leadership strategy Among Liquefied Petroleum Gas Companies

	Mean	**Std. Deviation**
The company minimizes its procurement cost	4.54	.770
The company minimizes on operational cost	4.22	1.058
The company conducts costing of its labour	4.17	.966
The company conducts service costing	3.98	1.281
The company conducts costing promotion activities	3.98	1.205

These results show that LPGCs within the study area endeavour to adopt cost leadership strategies in their operations. These strategies include among others procurement cost strategy, operational cost strategy, labour costing strategy, service costing strategy and promotion costing strategy.

Testing the impact of cost leadership strategy on performance of LPGC

Research hypothesis one postulated a lack of significant effect of cost leadership strategy on performance of LPGC. Results of the multiple regression coefficients presented in Table 8 below indicate that the standardized coefficient for cost leadership strategy was significant (β=0.357, P=0.011). The hypothesis that cost leadership strategy has no effect on performance of LPGC was therefore rejected.

Table 8: Regression Coefficients[a]

Model	**Unstandardized**	**coefficients**	**Standardized Coefficients**			**Collinearity**	**Statistics**
	B	**Std. Error**	**Beta**	**t**	**Sig**	**Tolerance**	**VIF**
1 (Constant)	2.260	.204		11.063	.000		
Cost leadership strategy	.180	.068	.357	2.639	.011	.210	4.751

a. Dependent Variable: Performance of LPGC

These results imply that cost leadership strategy has a positive effect on performance of LPGC. Consequently, an increase of 1 standard deviation in cost leadership strategy is likely to result in an increase of 0.357 in performance of LPGC.

V. CONCLUSION AND RECOMMENDATION

From the findings it is evident that cost leadership influences the performance of LPGCs performance. The gain cost leadership through minimizing procurement cost minimizing, operational costs, conducting cost of its labour, service costing and evaluation of promotion costs. Cost leadership enables the company to reduce price leading to high volume of sales visa a-visa profit margin, increase in service delivery, less return inwards, reduced operational costs and reduced wastages.

Liquidified petroleum companies should carry out through market research to identify the gaps in the markets. The gaps should be varied that is product gap, market gap and promotion gap before designing the competitive strategies. This will enable appropriate strategy geared towards increasing performance.

REFERENCES

[1]. Amit, R.; Zott, C. (2001): Value creation in e-business. *Strategic Management Journal* 22, 493 520.
[2]. Chesbrough, H.; Rosenbloom, R.S.(2002). *'The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies*.' Industrial and Corporate Change, *11:3, 529-55.*
[3]. Gregson, Andrew (2008). *Pricing Strategies for Small Business* Self Counsel Press.
[4]. Kothari, C.R. (2005) *Research Methodology*. Methods and Techniques (Second Revised).
[5]. Orodho A.J, (2003) *Essentials of Educational and Social Science Research methods:* Qualitative and Quantitative Approaches. Nairobi Acts Press.
[6]. Peteraf M.A., (1993) "The Cornerstones of Competitive Advantage: A Resource-Based View," in *Strategic Management Journal* 1993, Vol. 14, pp. 179-191.
[7]. Porter, Michael E., (1985) *Competitive Advantage*., Ch. 1, pp 11-15. The Free Press. New York.