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OUTSOURCING CANE HAULAGE AND OPERATIONAL PERFORMANCE IN SUGAR FACTORIES IN KENYA

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Abstract

Outsourcing is a practice used by various organizations to reduce their cost of operation and improve efficiency through transferring of unit operations and processes to third party for a specified period of time. Outsourcing has been practiced by many organizations and businesses with the belief that it leads to improvement of performance at the business functional level. This study was purposely meant to determine the effect of outsourcing cane haulage on the operational performance. This study adopted the survey research design targeting the public sugar factories in Kenya which included Nzoia Sugar Company, South Nyanza Sugar Company, Chemelil Sugar Company, Muhoroni Sugar Company and Miwani Sugar Company, based in Western Kenya and the scope was limited to these five sugar factories. The study used structured questionnaires to collect primary data which was then subjected to descriptive and inferential analysis. Regression analysis was done to find out the relationship between outsourcing cane haulage and operational performance and the outcome indicated that *outsourcing practice had a statistically significant effect on the operational performance of the sugar factories under study. The R squared value obtained was 39.3% and this gave an indication there was a relationship between outsourcing and operational performance.*

Keywords: Outsourcing, Operational performance, Cane haulage, Sugar factories, Kenya

INTRODUCTION

Outsourcing is a strategy which many organizations have adopted to try and improve their performance in terms of efficiency and productivity in general. According to Alder (2013), outsourcing refers to the process of contraction with the most suitable expert third party service provider. Outsourcing has become an important component of the organizational strategy and the main reason being the fact that the companies begin to recognize that they cannot be excellent in all areas, and must therefore make a fundamental change in the way business is done (Barcea & Borza, 2015). Outsourcing is therefore one of the most effective activities in contemporary business, because many companies try to use all innovations of science, techniques and technologies to issue qualified and competitive product which will satisfy consumer.

According to Giuseppe Berlingieri, (2014), the reasons why firms do so much outsourcing is related to the interaction of supply and demand. Over time more and more firms have specialized in services, slowly best practices have been established, services have been standardized, and economies of scale have allowed external providers to beat internal production hence the need for outsourcing. In outsourcing, decisions must be made and the toughest decision is what to outsource and what not. The best strategy is to establish which the core competencies of the business are, what makes it different from the competition and what brings the value added (Barcea& Borza, 2015).

There are various advantages that may be associated with outsourcing, and these advantages can affect operations positively in areas such as: technology, quality, productivity. From the productivity point of view, when dealing with an external provider, all the activities must be measured, set the expectations and analyze if what was done equals, exceeds or is under what was agreed. The activities that are being outsourced are repetitive ones that bring low or non-value added. It is necessary to create a procedure manual where all the processes are registered step by step. By taking this burden from the internal employees, they have the opportunity to stay focus on the strategic activities, on the development of the company and on value added roles (Barcea& Borza, 2015).

According to Deloitte's (2014), Global outsourcing and insourcing survey, growth in all forms has got various risks, such as geopolitical and socioeconomic risk which may not have been previously factored into outsourcing decisions. Due to emergence of these risks in the outsourcing scene, organizations must rethink their strategic management when dealing with the vendors or service providers. The advantages of outsourcing may seem to fit only large firms, various studies have however proved that the same advantages can be obtained also by small-medium size enterprises (Barcea & Borza, 2015).

According to Deloitte's guide on outsourcing (2015), organizations will almost certainly fail to realize the benefits of outsourcing unless they; adequately plan, manage and retain the right level of control in the outsourcing relationship, establish and manage an effective governance process, effectively manage the commercial legal and financial risks of outsourcing and finally effectively manage any transition and transformation phases. To achieve the competitive advantage in a continuous changing environment it is necessary to reshape the boundaries of the organization by making the right decision on what to keep in-house and what to outsource. Nowadays, outsourcing is promoted as one of the most powerful trend. It is not only a cost saving exercise, but a strategic movement that allow managers to limit the firms functions for which they are responsible and focus on the core competencies (Barcea & Borza, 2015).

According to Barcea & Borza, (2015), the problem is that many organizations often rush into outsourcing without fully understanding the consequences related to it and after a short time realize that there are important side effects and the process is not so cost effective on the long run if not well managed. This is in agreement with the Deloitte's findings.

According to Kavcic(2014), outsourcing is a form of company control. Increasingly, companies are aware of the problems caused by outsourcing nonstrategic activities, as this prevents focus on their main activities. By outsourcing nonstrategic activities, companies can focus on strategically important areas and what they are really good at and that focus on strategically important tasks enables companies to increase their added value. Through outsourcing enterprises can acquire such skills quickly, without searching for new employees this also applies to the need for infrastructural and administrative support services. Outsourcing enables an organization acquire functioning and skilled teams who already possess the premises and equipment needed for a certain job (Kavcic 2014).

Gulzhanat(2012) believes that outsourcing is very usable for both parties, because each of them can concentrate its resources on development of core competencies and prospective directions of activity. This in turn leads to essential reduction of expenses on production of the end product because each part works on what it can do best without applying additional effort and without investing on learning new activity types or acquiring new skills. The characteristic of outsourcing can be defined by the level or degree of transfer of control by the business to the external provider or supplier; the companies doing the outsourcing may still have a partial control of the outsourced function.

In the initial days, outsourcing was used mostly when an organization could not perform to world-class excellence in all sectors of the organization due to many factors such incompetence of staff and/or management, lack of capacity within the organization, financial pressures, or technological pressures. This has however, changed and nowadays, companies strive to be the best in their field of operation (O'Riordan et al, 2005). According to Smadi&Al-jawazneh(2016), the influence of economic globalization on different business environments have made organizations to search for opportunities on the wider global market which is available, in order to outsource some of their activities instead of performing them on their own so as to increase their competitiveness and maintain their market position. Many business organizations have opted for different strategic techniques to attain competitive age, one of which is the strategic option of outsourcing.

Business Process Outsourcing (BPO) is a business model that involves transferring all or some processes of operations, and responsibilities, of a specific business or an enterprise to a third-party service provider or to its own subsidiary. The transferred functions are usually non-strategic and non-core in nature, but essential for smooth operations of a business enterprise. The main objective of BPO is to lower the cost of operation and improve the quality of service, while the organization focuses on its core competencies (Shrestha & Sharma, 2013). BPO services can be categorized into horizontal and vertical services where horizontal involves outsourcing in which the vendor specializes in carrying out particular functions across different industry domains for example outsourcing in procurement, payroll processing, human resource management, facilities management and other alike functions. On the other hand, vertical BPO involves various functional services and are provided in a limited number of industry domains e.g. healthcare, financial services, manufacturing and retail among others.

Impact Sourcing on the other hand refers to the practice of taking digitally-enabled outsourcing jobs to marginalized individuals. The practice is expected to create a significant positive 'impact' on the lives of disadvantaged and deprived communities by giving them gainful employment hence improving their material conditions (Burgess, A et al, 2015). It is also a business model not only about charity and social value creation but also a delivery model that can provide traditional business process outsourcing (BPO) services at significantly reduced.

Statement of the Research Problem

Many companies are currently embracing the practice of outsourcing of the non-core activities and all this is done with a belief that outsourcing improves performance of the organization as seen in most literature. It is known that many business activities can be outsourced, this include functions such as provision of security services, transport services, staff recruitment services, just to mention a few.

Most sugar factories are outsourcing various activities and more so, the transportation of cane from the farms after cutting, to the factories for milling. There are however several challenges which has been faced by these factories, according to the Kenya Sugar Board year book there was a total loss of 14,727hrs in the year 2012alone, due to lack of cane in the factories and about 90% of this was due to haulage problem. Such challenges and loss of man-hours translate into huge monetary loss and hence leading to questions regarding the effectiveness of cane haulage system, and the need to understand whether outsourcing of cane haulage is beneficial to the factories or could be having negative impact on the overall performance of these factories.

Even though benefits of outsourcing have been discussed in much literature; there was no available information to show the effect of outsourcing of cane haulage and due to this gap, it became necessary to carry out a study which would bring out the clear understanding of the relationship between outsourcing of this function in the government-owned sugar factories and operational performance of these sugar factories. This was viewed to be important since the sugar cane millers will then be able outsource services with a clear understanding and clear expectations on benefits that come with the outsourcing practice.

Research Objective

To determine the effect of outsourcing cane haulage on operational performance in government-owned sugar factories in Kenya.

Scope of the study

The study was conducted in the government-owned sugar factories in Kenya; this was a population of 5 sugar factories; Nzoia Sugar factory, South Nyanza Sugar factory, Muhoroni Sugar factory, Chemelil Sugar factory and Miwani Sugar factory. These factories are located in the Western part of Kenya and they share most common practices in their operations. Four out of the five sugar factories are operational while one (Miwani) is currently out of operation and those in operation are struggling to improve their efficiencies and general performance. The study was conducted between June and August 2016 and looked mainly into the outsourcing of cane haulage service with an objective of finding out if there is a significant effect on the operational performance of these sugar factories following the outsourcing. The focus was on the opinion of the managers of these sugar factories on the effect of outsourcing the functions or services given above.

Significance of the study

The research outcome of this study will be of benefit to organizations and businesses which carry out several operations in the course of doing business and who may be still involved in performing the non-core activities. Through the outcome of this study, the top management of sugar factories in Kenya will be able clearly understand the effect of outsourcing cane haulage on operational performance their factories. The knowledge obtained from this research will help the factories to make the right and rational decision on the matters regarding outsourcing. From this research it is possible to know whether it is beneficial for sugar factories to contract private cane transporters or buy and manage their own fleets.

The findings from this study will also benefit other organizations which may not be necessarily in the sugar manufacturing business, a good example being the learning institution. Many schools and colleges have opted to buy vehicles, i.e. buses and van for their own transport use, most of the time these buses lie idle in the institutions compounds and in such case, these resources may seem not being utilized fully. Such institution that do not have a lot of travelling can use the findings from this research to adjust their position and to see whether it would be economical for them to outsource such transport and therefore only incur cost when services are provided to them.

Some manufacturing and non-manufacturing organizations that provide transport for their staff/employees will also find this study useful. From the study outcome, these firms will be able to decide whether it is beneficial to outsource the transport services and pay per trip of buy a staff van and keep it idle until staff reporting or leaving time.

The knowledge obtained from the outcome of this study will also help other scholars or students who may be interested in carrying out further research in the area of outsourcing. The gaps identified in this study will provide a guide and direction for other researchers and scholars who may want carry out other researches in this area.

LITERATURE REVIEW

The main theories which the practice of outsourcing is based on and also look at the various studies on outsourcing that have been carried out earlier by other scholars. According to Gulzhanat (2012), much of the studies on outsourcing have been affected by three main approaches, Resource Based view, Core Competence approach and the Transaction cost theory.

The main outsourcing theories highlighted by Perunovic and Pedersen (2007) are the transaction cost economic theory, core competences theory, evolutionary economics theory, resource based view, agency theory, knowledge based theory, neoclassical economic theory, social exchange theory, and economic information theory.

Core Competence Theory

In this approach, the organization looks at the processes involved and identifies those considered key and where the organization has the competence. The core competency theory requires that critical function should be kept in-house, but that other activities that the organization deals with, which are not counted to be core or critical to its function, should be considered for outsourcing (Prahalad and Hamel, 1990). If the organization is to focus on its core competencies as the basis of its sustainable competitive advantage, then activities which do not constitute a core competence for the firm can be given to outside firms who can provide these at lower cost, (Gulzhanat, 2012).

The concept of core competences has been developed on the basis of the resource-based theory. Prahalad and Hamel (1990) defined the core competencies as the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams technologies. The application of concept of core competences in outsourcing became very popular among researchers. The concept has been predominantly used to develop and test various outsourcing decision frameworks arguing that the core activities shall remain in house. Learning and communication premises of the concept made it also applicable in the Managing relationship and Reconsideration phases. Vendor’s competences are assumed to be one of the most important factors that influence success of an outsourcing arrangement, (Levina & Ross 2003).

The results from various literature reviewed suggest that the theory of core competences, the stakeholder theory and the neoclassical economic theory best explain the most important critical success factors of outsourcing relationships

Transaction Cost Economic Theory

This theory looks at the cost of outsourcing in totality. Other than the cost incurred to get the desired services, there are also have the costs that the organization incurs during the process of procuring these services. These costs include the cost of all transactions involved in the process of outsourcing a service. Transaction cost theory helps in facilitating the analysis of the comparative costs of planning, adapting, and monitoring task completion under alternative governance structures, this is according to Kay (2005). Decision-makers must therefore analyze and weigh the cost of production and transaction which are associated with executing a transaction within their firms, versus the production and transaction costs associated with executing the transaction.

Resource Based Theory

The resource-based view in outsourcing founded on the belief that an organization that lacks valuable, rare, inimitable and organized resources and capabilities, shall seek for an external provider in order to overcome such problems. Organizations will try to seal all gaps that may exist in their resources and capabilities in the most cost-effective manner to maintain a distinctive product and its competitive advantage, (Gulzhanat, 2012).

This study is founded on the transaction cost economic theory, looking into the effects of outsourcing on operational performance which translates into economic benefits that the organization can have if the process of outsourcing is done well and properly managed.

Outsourcing Transport services

Ogorelc (2012) defines logistics outsourcing as transferring a firm's logistics functions and associated capabilities to specialized external services providers (ESL). Outsourcing transport and other logistics activities means that it is more rational to buy external logistics services than to operate in-house.

In the case study, “Outsourcing strategy selection for transportation services based on the Make-or-Buy decision.” by Cieśla, (2015), the use of external service will cease to be profitable over 18,190 kilometers transport goods per one year. It therefore follows that carriage volume and distance should be considered when making decisions regarding outsourcing transportation services. For very long distances huge carriage volume, it may be advisable for businesses or organizations to consider managing their own transport fleets.

According to Szuster (2010), Logistics performance usually involves the typical trade-off relation between cost and quality. This opinion is parallel to the assumption that service quality must be maximized at the lowest logistics costs. For many companies cost of transport is the highest logistical cost in which case transport cost is usually defined only as freight charges. Apart from freight charges, costs arise from carrying inventory in-transit, from numerous operations connected with frequent and small deliveries resulted from just in time (JIT) deliveries.

Factories Operational performance

Profitability

According to a study titled Profitability Analysis, profitability is the ability to make profit from all the business activities of an organization. According to Burjar (2011), a significant impact on the profitability increasing exerted the actions of lowering the all operating expenses. From that study it is clear that the lower the cost of operation the more positive impact is realized on the organizations profits. Warusawitharana (2014) in a study “Profitability and Lifecycle of firms” bring up the effect of age of a firm on profitability and documents that the profitability of firms follows a hump shape over the lifecycle, profitability rises for young firms, peaks, and then declines slowly as firms mature

Operations Efficiency

Efficiency is generally a, measure or an indication of how well the resources such as time and energy are used for the intended purpose. According to Mihaiu, Opreana andCristescu (2010),the efficiency can be achieved under the conditions of maximizing the results of an action in relation to the resources used; this can be calculated by comparing the effects obtained in their efforts. When measuring efficiency, we consider a given input into the system and how much output comes from it. Efficiency of a factory may be affected by several factors such as machine downtime, employees performance and availability of raw material needed for operation. Availability of the raw material may on the hand be affected by the aspect of transport.

Cost of Operation

Operation cost is a very important parameter to consider when analyzing performance of a factory. Kremic et al. (2006) bring up the issues of motivators in the outsourcing process and they give cost as one of the motivators. Cost is always looked at very keenly during this process so as to ensure it is as low as possible since lowering cost increases the profit margins for the organization. Sugar cane transportation in the sugar factories is a very important aspect in sugar manufacture and it is one of the major operations that consume much time and money in the sugar factories. A reduction in this cost in such operations goes a long way in reducing the overall cost of operation and increase profitability of the sugar factories.

Empirical Literature Review

A study conducted in Nairobi, Kenya showed that outsourcing of logistics services including transport led to a reduction in delivery time to clients and general reduction in lead time, (Mulama, 2012). This study also found out that outsourcing practices being adopted by the large manufacturing firms resulted in increased productivity, organizational effectiveness, decreased operating costs, improved customer satisfaction, increased profits and improved quality of work life. Another research carried out by Musau (2016) on the impact of strategic outsourcing on organization performance, in agreement with the findings from a study by Mulama (2012), found that cost driven outsourcing led to improved organizational performance by reducing costs and risks while increasing operational efficiency, both in the short term and long term. The study also showed that innovation driven outsourcing brought improvement to performance of organizations by enabling creation, developing and delivery of value to the market faster than its competitors. It was noted that the success of innovation driven outsourcing was largely dependent on cost control and core competencies focus, hence requiring careful evaluation. Musau (2016) also found that focus driven outsourcing assists a company to free up its resources so as to concentrate on its core business, which leads to improved organizational performance.

Kiongera. F et al (2014) carried out study aimed at investigating the effect of logistic outsourcing on the performance of sugar manufacturing firms. In this study, the researchers concluded that logistic outsourcing had an effect on the performance of sugar manufacturing firms. The findings from this study were in agreement with past studies conducted in similar field that outsourcing is a viable business strategy since handing over non-core functions to 3PL service providers enables the management to leverage its resources, spread risks, and concentrate resources in issues critical to survival and future growth. From the findings of this study, the researcher recommends that Sugar manufacturing firms need to evaluate their functions and participate in logistic outsourcing as a strategy aimed at improving their performance and that they should also integrate different outsourcing strategies as they utilize outsourcing in order to focus on their core businesses.

According toMagut, Chirchir and Mulama (2013), the study carried out in Nairobi showed that outsourcing practices led to the firms' performance improvement in various aspects. Outsourcing resulted in increased productivity, Organizational effectiveness, increased profits, continuous improvement, improved quality and improved quality of work life. The results from the study clearly indicated that outsourcing practices have effect on firms' performance. The study also noted that outsourcing resulted in decreased operating costs, improved customer satisfaction, increased productivity, timely delivery of services to clients, reduced lead time and improved profits, faster response to customer demands and use of modern technology in offering of services, (Magut et al, 2013).

In a study conducted by Kenyon & Meixell (2010) they found out that, the effects of outsourcing transportation was the most promising with respect to having a meaningful effect on cost of goods sold (COGS). Their study also indicated that when factories outsource transportation, there was a marginally significant effect on COGS. In addition, it was evident from their study that the outsourcing of transportation tends to benefit small plants with between 100 to 500 employees, but not the smallest plant of less than 100 employees.

A study conducted in Ireland showed that most companies have seen a rapid increase in labor and other cost over the last 20 years, and due to this most companies are looking for ways of lowering and managing these cost. Companies studied by O'Riordan& Sweeney (2007) demonstrated that outsourcing is one of the options they are using to manage and control cost, one of the processes being logistics. It was found from this study that the benefits gained by a company are unique and cannot be easily replicated in another company.

A study conducted in the state corporations in Kenya, Anyango (2014) revealed that outsourcing had effect on the performance of state corporations. This was seen through the level of customer satisfaction, quality of products, efficiency in operations and staff turnover. The study indicated a high positive relationship between outsourcing and performance of state corporations in Kenya. This study recommended that the top management should support their organizations by increasing the extent of outsourcing since this would improve the performance of their firms by enabling them to concentrate on the activities they have capability of doing well, and outsourcing those functions that other firms or individuals can do on their behalf. Another research carried out in a private firm (Delmonte- Kenya), Maku & Iravo (2013) showed that outsourcing has positively impacted on Delmonte performance through cost saving, increased access to technology and expertise, core competence business concentration and improved organizational flexibility, this is in agreement with Anyango (2014). These benefits however come with some challenges such as loss of control of the outsourced services, dependence on suppliers, loss of confidentiality of important information which may land in the hands of competitors, poor quality of certain products such as spare parts.

RESEARCH METHODOLOGY

Research Design

Survey research design approach was used to determine the effect of the practice of outsourcing on the operational performance in government-owned sugar factories in Kenya. This design was used to assess the perception and opinions of the respondents on the subject matter. According to Mathiyazhaga & Nandan (2010), survey may be defined as any systematic procedure in which data are systematically collected from a population or a sample thereof through some form or direct solicitation, such as face to face interviews, telephone interviews or mail questionnaires. Survey research is also defined as a method of descriptive research used for collecting primary data based on verbal or written communication with a representative sample of individuals or respondents from the target population.

The study chose this design since it was able to address the objective of the study and help the research find out the effect of outsourcing on operational performance in these sugar factories. This study looked at the practice of outsourcing cane haulage services and was able to relate the levels of performance of this functional process in the sugar factories and the level of outsourcing practice, this brought out the effect and relationship between these two variables.

Population of the study

This study was carried out in a population of five (5) government-owned sugar factories in Kenya; according to the KSB, year book (2013), there are 11 sugar factories in Kenya out of which 5 are owned by the Kenya government. These factories are located in the Western part of Kenya and have almost similar practices in their operations including the common services which are outsourced. In this study, the senior operation managers were chosen as the respondents. Targeting senior managers was purposely done since these levels of managers were in a position to provide more accurate and reliable information regarding the outsourcing practice and the effect on operational performance in these sugar factories.

Table 1: Target Population and Respondent

	NZOIA SUGAR	**SONY SUGAR**	**MUHORONI SUGAR**	**CHEMELIL SUGAR**	**MIWANI SUGAR**	**TOTAL**
Heads of Department	3	3	3	3	3	**15**
Area Managers	2	2	2	2	2	**10**
TOTAL	**5**	**5**	**5**	**5**	**5**	**25**

Source: Human Resource Departments, 2017

Sampling design

This study took a census approach,(using the whole population of 5 sugar companies), this approach was chosen because the population under study was relatively small and therefore sampling was not necessary. The questionnaires were administered to the respondents, purposely selected from senior management positions. Five managers from each of the selected sugar factories were chosen as the respondents mainly to get more reliable and accurate data regarding the operational performance of various processes before and after outsourcing. The junior and support staffs were not included in the study since the information they give would not have been substantial or reliable.

Data Sources

Primary data was collected and used in this study, the secondary data was not considered since it may have not accurately brought out the information required for this study. The data used in this study was collected using questionnaires specifically designed to address the objectives of this study - the questionnaires consisted of closed ended questions. The questionnaires were administered to the respondents who were instructed to answer using the five point Likert scale ranging from strongly agree (5) as the highest, to strongly disagree (1) as the lowest. These questionnaires were administered to the respondents by the researcher, physically and through electronic media and given ample time to fill the questionnaire before giving them back for analysis.

Data collection tools

Structured questionnaire was used to collect the data for this study. The questions in the questionnaire were kept shot and simple and involved checking the appropriate boxes as agreed by the respondents. This was done purposely to encourage the respondents to answer the questions and to participate in the study. The information was gotten using the five point Likert type scale questions; strongly disagree, disagree, neither, agree and strongly agree. The questionnaire also had questions that required a Yes and No answer to check the opinion of the respondent on the effect of outsourcing.

Data analysis

The data and information collected during the study was checked to ascertain the level of completeness. Those questionnaires that were adequately completed or filled and fit for analysis were coded into SPSS for descriptive analysis. Subsequently, regression analysis was done to find out the relationship between outsourcing and operational performance.

RESULTS AND DISCUSSIONS

Effect of outsourcing on operational performance

The respondents were requested to give their opinions on the effect of outsourcing practice in a five point Likert Scale type questions. The range was from the “the least positive effect” (1) to the “highest positive effect” (5). Mean scores were put in three categories of 0-2.4 (least positive effect), 2.5-3.4 (moderate positive effect) while 3.5-5.0 (highest positive effect).

Table 2: General effect of outsourcing on operational performance

Outsourcing cane transportation	Mean	Std Deviation
Level of efficiency	4.2857	0.4629
Cost of haulage	4.0000	0.5477
Losses due to cane spillage	3.6190	0.9735
Quality of cane delivered	3.1429	0.5732
Effect on profitability	3.8095	0.4024

Results in table above shows that outsourcing has a high positive effect on efficiency of cane delivery (mean of 4.2857), cost of cane haulage (mean of 4.000), losses due to spillage (mean of 3.6190) and effect on profitability (mean of 3.8095). It also shows a moderately positive effect on the quality of cane delivered to the factories.

Correlation among variables

Correlation among variables was performed so as to determine the level and direction of the relationship between the level of outsourcing and the operational performance. The outcome is shown in the table below.

Table 3: Correlation among variables

		Level of outsourcing cane haulage	Performance of Cane haulage
Level of outsourcing cane haulage	Pearson Correlation	1	.593
	Sig. (2-tailed)		.005
	N	21	21
Performance of Cane haulage	Pearson Correlation	.593	1
	Sig. (2-tailed)	.005	
	N	21	21

From table above it is evident that there is positive correlation between outsourcing cane haulage and operational performance. There was strong positive correlation between the variables; a coefficient of correlation of 0.593.

A similar relationship is also observed in earlier studies in sugar miller such as a study conducted by Kiongera. F. et al (2014) and Owuor (2016) whose findings showed that the practice of outsourcing had a positive effect on organizations performance and that it led to improved productivity and profitability.

Outsourcing Cane haulage and performance

The model summary below is from a regression analysis of the level of outsourcing cane haulage and operational performance.

Table 4: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.627[a]	.393	.241	.32265

R of 62.7% show that there is variation in dependent variable when there is a change in the independent variable and R squared of 39.3% show how much variability in operational performance can be explained by a change in the level of outsourcing cane haulage.

Table 5: ANOVA results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.963	1	.963	10.286	.005[b]
	Residual	1.780	19	.094		
	Total	2.743	20			

From the Anova table above, the p value is 0.005 and hence indicates that outsourcing cane haulage has a statically significant effect on the performance of cane haulage. This agrees with results obtained from correlation analysis and this also supports findings from other studies such as Kyusya (2015) who noticed that outsourcing of logistic functions had a positive effect on the operational performance of the shipping firms in Kenya.

From the coefficients table below, we get a p value of 0.005 and unstandardized beta coefficient of 0.283 on the level of outsourcing cane haulage, and this is a clear evidence to reject the null hypothesis and an indicator that outsourcing cane haulage has a statistically significant effect on operational performance of the sugar factories.

Table 6: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.638	.360		7.335	.000
	Level of outsourcing cane haulage	.283	.088	.593	3.207	.005

CONCLUSIONS

The outcome and findings from this research has indicated that outsourcing practices have effect on operational performance of government-owned sugar factories in Kenya. The findings showed that there are benefits that may come with outsourcing of various functional processes and that every organization can benefit from this practice. The advantages of outsourcing has been realized even in other sectors (non-manufacturing) such as banking sector and others such as hospitals. This study gives an indication that these benefits can be felt in the sugar cane milling factories in Kenya if this process is well managed since it can lead to increased productivity and profits by allowing the sugar manufactures to focus on their core function of sugar manufacture which is their area of expertise, and letting their other business partners with expertise in the other areas.

RECOMMENDATIONS

It is recommended that the sugar cane milling factory do evaluation of their process and identify the activities which may be considered as support activities and which can be outsourced. By identifying and outsourcing such functions, the factories will be able to focus on their core business which is sugar production, and improve their efficiencies and profits. Doing outsourcing of various functions will also mean that some risks are transferred to the service providers thereby making the factories more stable and cushioned from these risks. Benefits of outsourcing non-core activities may also be realized in other business set ups other than sugar factories.

It's also recommended that when outsourcing the non-core functions, the management of the organization must still be in control of the outsourced functions. This means being in charge of parameters such quality aspects and safety as may be necessary. The expected benefits can only be realized if the whole process is properly managed and adequately controlled.

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