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Effect of Procurement Methods on Operational Performance of Firms in the Softdrink Industries: A Case Study of Kisii Bottlers Limited

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Abstract

Procurement methods have been of concern for many years to commercial organizations worldwide. Procurement methods play a crucial role in enhancing effectiveness and efficiency in procuring goods and services. Firms have continually desired to enjoy sustainable competitive advantage and improved operations. Therefore, there has been need for commercial firms to embrace effective procurement methods so as to improve their operational performance. However, theoretical literature indicated a deteriorating trend in operational performance in the soft drink industry; in most cases 75% of the production processes in most firms are affected by the supply chain management practices adopted by firms which had led to huge wastage of financial and other resources. The growing need from the customers and the time frame for delivery in most firms is constrained by operational performance. The purpose of this study was to assess the effects of procurement methods on operational performance of firms in the soft drink industry with specific interest in Kisii Bottlers limited, Kisii County Kenya. The study was guided by the following specific objectives: to establish the extent to which open tendering as a procurement method do influence operational performance, to find out the extent to which direct procurement method influence operational performance, to establish the extent to which restricted tendering as a procurement method influence operational performance and to establish the extent to which specially permitted procurement method influence operational performance of Kisii bottlers limited. The literature review was guided by the conceptual framework that indicates the direction of the variables in this study. The study adopted a case study design. The study target population was 125 respondents consisting of 9 respondents from human resources and administration department, 12 respondents from finance department, 26 respondents from sales department and 78 other firm employees working at Kisii bottlers Ltd. Nasiruma's model and stratified random sampling techniques were adopted to select the sample size of 56 respondents for this study. Primary data was collected using a questionnaire. Secondary data was obtained from the firm's procurement department's records relating to procurement of materials used by the firm to enhance its operations for the last 23 years since 1990 to 2013. Quantitative data was analyzed using descriptive and inferential statistics. Descriptive statistics involved the use of percentages and means, determination of regression equations to establish the relationship between variables in this study. The findings of this study indicated that procurement methods are adopted by Kisii bottlers Ltd. The study findings indicated a positive relationship between procurement methods and operational performance of soft drink firms. The study established that the application of procurement methods was significance in increasing operational efficiency of soft drink firms. With respect to these findings the study concludes that proper application of procurements enhance operational performance in the soft drink industry.

1. Introduction

1.1. Background Information to Study

The primary tasks for the purchasing function in a company are much more than only executing purchasing orders. The purchasing department needs to secure supply from different vendors, reduce the total cost, and the risk exposure and contribute to the innovation of the company products (Weele, 2005). There are several different performance measurements in procurement which may be in conflict to other departments' performance measurements. Differences can occur due to where in the company structure the purchasing department is positioned. According to (Weele, 2005) there can be four distinctive management views on purchasing in companies: first, operational and administrative activity, this is when the management uses performance measurements such as backlog, purchasing administrative lead time, number of orders issued, number of requests for quotations issued and adherence to existing procedures. Secondly, commercial activity is when the management knows the potential of cost savings in purchasing and uses different targets that should be reached. This can for example be the cost reduction on the price or the total cost reduction. Thirdly, part of integrated logistics, in this type of company the management is aware of sub optimizing as

a result of putting too much pressure on the purchasing department. This can for example be when a company strives towards cost reduction and the supplier's manufacture products with lower quality to be able to meet the price requirements from the purchasing department. Fourthly, strategic business area where the purchasing department is part of the core business and the part of the company that makes it competitive. Therefore depending on how the management in a company looks at the purchasing department it can differ a lot on what that is important (Weele, 2005).

The purchasing strategy for a company can be divided between how the company should behave towards external factors such as suppliers and the internal factors such as operational performance of different departments and people. How the purchasing department should be connected to other parts of the company can differ a lot between companies. There are two main ways of organizing purchasing and these are either through a centralized purchasing department or a decentralized purchasing department. The benefits of having a centralized purchasing department is that there will be larger volumes being purchased, which results in a better negotiation situation for the company (Gadde et al., 2010). The centralized approach also results in that the person doing the procurement can be more specialized. The decentralized approach is often done when the purchased items are seen as an integral part of the overall performance of the company. This means that every part of the company makes their own decision from where to buy and in what amounts. This alternative doesn't get the benefits of economies of scale as the centralized alternative but the people that use the bought material have better control over the material. In big companies a mix between these two alternatives can be used to get benefits from both. Despite this there is very little link between the procurement methods adopted by business firms and why centralise and decentralise systems. These studies have not indicated the extent to which the methods of procurement are used when firms use either centralized system or decentralized system.

Procurement encompasses the whole process of acquiring property and services. It begins when an agency has identified a need and decided on its procurement requirement (Lysons & Farrington). Procurement continues through the processes of risk assessment, seeking and evaluating alternative solutions, contract award, delivery of and payment for the property and/or services and, where relevant, the ongoing management of a contract and consideration of options related to the contract. Procurement also extends to the ultimate disposal of property at the end of its useful life (Waters 2004). Sound procurement policies and practices are among the essential elements of good governance (KIPPR, 2006). Otieno (2004) notes the irregular procurement activities in institutions provide the biggest loophole through which public resources are misappropriated. The study intends to establish whether of the effects of procurement methods adopted in business firms the resources are misappropriated. According to Thai (2001), the basic principles of good procurement practice include accountability, where effective mechanisms must be in place in order to enable procuring entities spend the limited resources carefully, knowing clearly that they are accountable to members of the public; competitive supply, which requires the procurement be carried out by competition unless there are convincing reasons for single sourcing; and consistency, which emphasizes the equal treatment of all bidders irrespective of race, nationality or political affiliation. The process should also uphold integrity by ensuring that there are no malpractices; informed decision-making, which requires public bodies to base decisions on accurate information and ensure that requirements are being met (Sekaran, 2003). More still, the Procurement practice should be responsive to aspirations, expectations and needs of the target society. Finally, there is need for transparency to enhance openness and clarity on procurement policy and its delivery (World Bank, 2003). The results in the public sector are not the same as in business firms in private sector. The soft drink industry particularly Kisii bottlers limited of its procurement methods they apply are the same as in the public institutions and are the procurement processes the same. This motivated this study to establish the effects of the procurement methods on operational performance.

Accountability is government's obligation to demonstrate effectiveness in carrying out goals and producing the types of services that the public wants and needs (Segal and Summers 2002). Lack of accountability creates opportunities for corruption in any procurement process. Brinkerhoff (2004) identifies three key components of accountability when executing procurement activities, including the measurement of goals and results, the justification or explanation of those results to internal or external monitors, and punishment or sanctions for non-performance or corrupt behavior. Strategies to help increase accountability include information systems which measure how inputs are used to produce outputs; watchdog organizations, health boards or other civic organizations to demand explanation of results; performance incentives to reward good performance; and sanctions for poor performance. These measures are not applicable in business firms where watch dogs are limited in responsibility and decisions are made by owners or agents. The big question in this scenario is to confirm whether there are effects relating to inadequate application of best practices particularly the procurement methods by firms in the soft drink industry.

Public procurement for long is overshadowed with inefficiency, corruption and disregard of fundamental "value for money" considerations. This has adversely impacted the rate and quality of progress in realizing the objectives of national development both from the public and private sector, especially in developing and transition countries (Tan et al., 2009). Employees may neither engage in, nor give the appearance of engaging in, dishonest or unethical actions. Both are injurious to the public's perception of honest government. As a government employee, one might have access to procurement and other non-public information that could affect a contract bid or the award process (Wymer and Regan, 2005). Improper disclosure of such protected information violates numerous laws, as well as ethics rules. Management in contracting authorities should ensure that there is an appropriate focus on good practice in purchasing and where there is a significant procurement function that procedures are in place to ensure compliance with all relevant guidelines. It is unethical to use inside information provided to the agency as part of a tender process, either for the material benefit of the official or for another person. The procurement method adopted in an organization is a reflection of what the procurement team intends to achieve either for the organization or for their self interest. This study intends to establish whether this is the same scenario in the soft drink industry.

According to Wee (2002) ethics are the moral principles or values that guide officials or employees in all aspects of their work. Ethical behaviour includes avoiding conflicts of interest, and not making improper use of an individual's position. Ethical behaviour is important in procurement as it involves the expenditure of money, and is subject to scrutiny by stakeholders. Behaving ethically and fairly including in business undertakings saves resources and improves the organizations reputation. Ethical behaviour supports openness and accountability in a procurement process and gives suppliers confidence to participate in the marketplace. Ethical behaviour can also reduce the cost of managing risks associated with fraud, theft, corruption, and other improper behavior; and enhance confidence in public administration (Wee, 2002). An important and effective way to maintain ethics awareness in agencies is to provide training for employees (Amos and Weathington, 2008). Ethics training and seminars can be provided, along with training in more specific areas, such as procurement procedures, record keeping, records management, and accountability and administrative law. Regular reviews or audits of procurement processes can be done to ensure probity is being considered and achieved (Amos and Weathington, 2008). Financial malpractices also could occur at any stage of the procurement process and influence decisions on the model of procurement (direct rather than competitive), on the type and volume of procured supplies, and on specifications and selection criteria ultimately compromising access to essential quality of materials and services to an organization (Miles and Breen, 2005). The business environment is turbulent and dynamic with greater number of competing firms; this requires that the management team lead from the front when carrying out procurement activities. This motivated this study to unearth the effects of the procurement methods adopted by firms in the soft drink industry.

1.2. Statement of the Problem

Previous studies indicate a deteriorating trend in operational performance in the soft drink industry. The Institute of Economic Affairs, for example asserts that 75% of the production processes in most firms are affected by the supply chain management practices adopted by firms. This has inevitably led to huge wastage of financial and other resources. Some reasons cited for this poor state of affairs are: inappropriate feasibility analysis of turbulences in the supply chain, poor material sourcing and inadequate information when carrying out procurement process. Measuring and reporting the effectiveness of procurement methods adopted by business firms is a new challenge in the field of purchasing. There is scanty literature on the relationship between procurement methods and operational performance. Despite the growing need from the customers for product specialization without expanding the time frame for delivery most firms are constrained on operational performance. This study therefore sought to assess the effects of procurement methods on operational performance of firms in the soft drink industry with specific interest in Kisii Bottlers limited, Kisii County Kenya.

1.3. Objectives of the Study

The study was guided by the following objectives:

1.4. General Objective

The study general objective was to assess the effects of procurement methods on operational performance of firms in the soft drink industry particularly Kisii bottlers limited.

1.5. Specific Objectives

The study was guided by the following specific objectives;

- To establish the extent to which open tendering as a procurement method do influence operational performance of Kisii bottlers limited
- To establish the extent to which direct procurement method influence on operational performance of Kisii bottlers limited.
- To establish the extent to which specially permitted procurement method influence operational performance of Kisii bottlers limited.
- To establish the extent to which restricted tendering as procurement method do influence operational performance of Kisii bottlers limited.

1.6. Research Questions

The study was guided by the following research questions;

- To what extent does open tendering as a procurement method do influence operational performance of Kisii bottlers limited?
- To what extent do direct procurement method influence operational performance of Kisii bottlers limited?
- To what extent does specially permitted procurement method influence operational performance of Kisii bottlers limited?
- To what extent does restricted tendering as a procurement method influence operational performance of Kisii bottlers limited?

1.7. Significance of the Study

This study would be of great significance to a number of stakeholders among them managers in the soft drink industry firms and future researchers. The findings of this study might enable the managers of the firms to achieve operational performance targets and increase their competitive advantage in ever changing business environment. This study would contribute to academic by bringing forward contingency issues on procurement methods and operational performance of firms.

2. Literature Review

2.1. Conceptual Framework

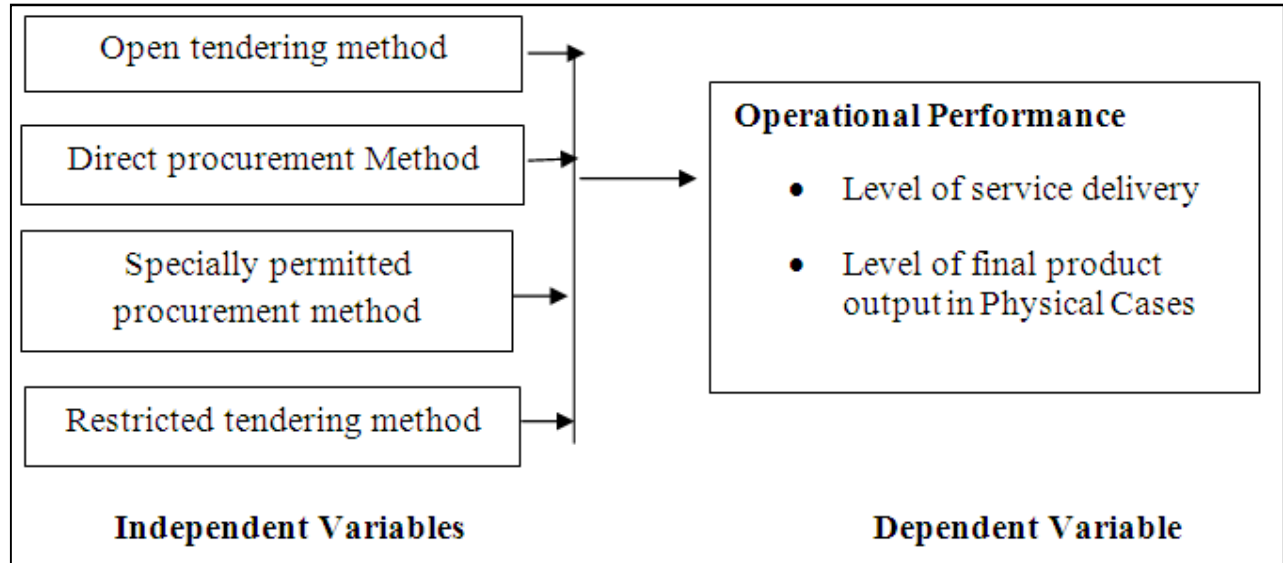


Figure 1: Conceptual Framework

In the study, operational performance in the soft drink industry is conceptualized as being dependent on the effect of procurement methods adopted by firm. The procurement methods are the independent variables in this study. The operational performance is as a result of the application of procurement methods in the soft drink firms.

3. Methodology

3.1. Research Design

This study adopted a descriptive study design with a description of procurement methods and operational performance of Kisii Bottlers Ltd. This study design was considered appropriate as its aim was to make an in-depth analysis of the variables with a view to discover more information and relationship among the variables in the study. It is suitable for a detailed examination and description of variables or phenomenon.

3.2. Target Population

The study target population was 125 respondents consisting of 9 respondents from human resources and administration department, 12 respondents from finance department, 26 respondents from sales department and 78 other employees working in Kisii bottlers Ltd. These respondents were appropriate for data collection in this study. Target population refers to the entire group of the individuals to which the researcher is interested in generalizing the conclusions (Catillo, 2009). Since the study population was small, the target population was equivalent to the study population.

3.3. Sample Design

The study adopted (Nasiurma, 2000) model to determine the study sample size. (Nasiurma, 2000) asserts that the sample size can be determined by:

$$n = \{NC_v^2\} / \{C_v^2 + (N-1)e^2\}$$

where; N- is the target population (125)

C_v- is the coefficient of variation (0.5)

e- is tolerance at desired level of confidence, at 95% level (0.05)

$$n = \{125 \times 0.5^2\} / \{0.5^2 + (125-1)0.05^2\}$$

$$= \{125 \times 0.25\} / \{0.25 + (124)0.0025\}$$

$$= 31.25 / 0.56$$

$$= 55.804$$

$$= 56 \text{ respondents.}$$

Where n is the sample size (56 respondents). Therefore, the study sample size was 56 respondents.

The proportion of the respondents was obtained using the formula:

n

$$N = \sum_{i=1}^n p_i \cdot n$$

n_{i=1}

P_i is the proportion of the sub group in the target population.

For each group: human resource administration department (9/125) $\times 56=4.032$, 4 respondents were selected, finance department (12/125) $\times 56=5.375$, 5 respondents were elected, sales department (26/125) $\times 56=11.648$, 12 respondents were selected; and other firm employees (78/125) $\times 56=34.944$, 35 respondents were selected.

Stratified sampling technique was used to select the sample for the research. Stratified was of great importance because the study was had sub-groups in the target population whose response was of significance in achieving the study objectives. The sampling technique was proportionate to the size of each stratum. This was done by assigning a number to every member in each stratum of the target population. Then the numbers were placed in a different container and the members were requested to pick any number at random. The members who picked a number corresponding to the number he or she was assigned earlier were included in the sample.

3.4. Data Collection Procedure

This highlights how the data was collected from the field. It shows data collection instrument, validity and reliability, and administration of the research instruments.

3.5. Data Collection Instrument

For the purpose of this study and in order to achieve the objectives, both primary and secondary data was used in the study. Secondary data contributed toward background information of the study. Primary data was collected using questionnaires. The primary data was related to inquiries on procurement methods used by the firm in the soft drink industry in Kisii Bottlers limited Kisii County Kenya and their effect on operational performance. Both open-ended and closed-ended questions were used.

3.6. Piloting of the Research Instrument

A pilot test is a method used to test the methods and instruments prior to carrying out research (Mugenda & Mugenda, 2003). The respondents that were selected were 10% of the sample size from Kisii Bottlers Ltd and then questionnaires administered to them. The sample was small since the purpose was not to collect data but to refine the research instrument.

3.7. Validity of the Instruments

The research instrument's validity was provided through adequate coverage of the topic under investigation as per the supervisors' and colleagues' advice. According to (Mugenda & Mugenda, 2003) expert opinion is used to check the content and format of the research instrument to judge validity of the content. The construct validity was ascertained by defining clearly the variables to be measured.

3.8. Reliability of the Instruments

Reliability of the research instruments was provided through a pilot test (test retest) that was conducted in the same firm by using respondents who are not part of the study sample and work in positions relevant in the soft drink industry. The research instrument was presented to 10% of the sample size selected for a pilot study, then the results were recorded, the same instruments were presented to the same group after two weeks and the results were recorded and they were correlated. The scores from the two tests were used to compute the reliability coefficient which was found to be 0.89. According to (Mugenda & Mugenda, 2003) a reliability coefficient of more than 0.8 implies that there is a high degree of reliability of data.

3.9. Data Analysis and Presentation

Quantitative data was analyzed using descriptive and inferential statistics. Descriptive statistics involved working out the percentages and frequencies which were used to assess the correlation of the variables. The inferential statistics involved the use of simple regression model, that is, $y=a+bx+e$ to establish the correlation of the variables in the study and the results were thereof interpreted. Data was presented in frequency distribution tables, percentages and weighted means. The researcher used a Likert scale as a parameter to measure the variables.

4. Results and Discussions

4.1. Position held by the Respondents

The study sought to establish the position held by the respondents in this study. The response rate obtained from the field was recorded in the table 1 below.

Position of the Respondents	Frequency (f)	Percentage (%)
Human resource & Admin	4	7.14%
Finance department	5	8.93%
Sales department	12	21.43%
Other firm Employees	35	62.5%
Total	56	100%

Table 1: Position held by the Respondents

Source: Field data (2014)

Table 1 indicate that 62.5% (35) of the total respondents in this study are other employees in the firm. The sales department form 21.43% (12) in proportion; finance department form 8.93% (5) and finally the human resource department form 7.14% (4) proportion of the total respondents in this study.

This study focus was on the effect of procurement methods adopted in the firm and how they affect or influence the operational performance. Performance in any organization is a function of effort contribution by all personnel in the firm. Other firm employees are the greater contributors of operational performance index; their position which is represented by 62.5% in population is relevant in the implementation process of any procurement method that the management wishes to adopt. Also the type of procurement method adopted directly affects other employees in the firm more since their productivity targets depends on the procured items they are given to use. The firm management through human resource & administration, finance department and partly the sales department, their functional decisions help determine the type of procurement method adopted in the factory. The management's philosophy is always seeking to increase manufacturing throughput efficiency or system performance (Goldratt, 2004). Therefore the analysis of the respondents' position was relevant to study.

4.2. Duration of Service in Kisii Bottlers Limited

The study sought to establish the duration the respondents in this study have worked in the factory. The response rate obtained from the field was recorded as in table 2 below.

Years of Service	Frequency (f)	Percentage (%)
Less than one Year	3	6.4%
Between one to three years	9	15.2%
Between four to six years	23	40.8%
Above six years	21	37.6%
Total	56	100%

Table 2: Duration of Service in Kisii Bottlers Limited

Source: Field data (2014)

Table 2 indicate that 40.8% (23) of the total respondents have worked in the firm for duration between four to six years; 37.6% (21) have worked for more than six years, 15.2% (9) have worked for a period between one to three years in the same company. Only 6.4% (3) have worked for less than one year. The duration of service in the firm by a respondent is important in this study for it gives a clear understanding of the effects associated to the procurement methods used in the firm over time. The level of experience in a firm, the employees are in a position to relate the output to method of procurement adopted.

A total of 78.4% of employees had worked for 4 years and above. This study finding indicated the level of experience and skills acquired by the respondents in their respective positions relating to procurement method adopted by the firm overtime. The more time an employee has stayed if the service the more likely is able to give the relevant information. This finding concurs with the proponents of constraint theory arguments that performance measurements are based on the principles of throughput, inventory dollar days and operating expenses. The theory of constraints measurements are based on simple relationship that highlights the effects of procurement methods on progress toward the operational performance a process that requires time to observe its effects. The proof of operational effectiveness for any procurement is the degree to which it improves operational performance of any business organization (Umble & Murakami, 2006). Therefore, the longer the length an individual serve in the firm the better he or she is in position to give relevant and more reliable response.

4.3. Procurement methods Used in the Company

The study sought to establish the procurement methods used in the company. The response rate obtained from the field was recorded as in table 3 below.

Procurement Method Used	Frequency Yes	% frequency	Frequency No	% frequency
Open Tendering Method	30	54.4%	26	45.6%
Direct Procurement Method	37	66.4%	19	33.6%
Request for Quotation Method	18	32.8%	38	67.2%
Restricted Tendering Method	41	73%	15	26.4%
Request for Proposal Method	23	41.6%	33	58.4%
Low Value Procurement Method	17	31.2%	39	68.8%
Specially Permitted Procurement	43	76%	13	24%

Table 3: Procurement methods Used in the Company

Source: Field Data (2014)

Table 3 reveal that 76% (43) respondents expressed that specially permitted procurement method is used in the firm while 13 respondents forming 24% expressed that the procurement method is not used in the firm. Firms adopt specially permitted procurement when the item procured is from specialized and approved firms as per international standards. Restricted tendering method 73% (41) respondents expressed that the method is adopted while 26.4% (15) expressed that the method is not applied.

66.4% (37) of the respondents expressed that direct procurement is applied in the firm. Therefore the results indicate that all the methods of procurement are used but at a varying rate depending on the resource procured. Kabaj (2003) asserts that the failure to pay adequate attention to the proper management of procurement resources through procurement methods and establishing regulatory frameworks has devastating effects. Procurement systems are central to the effectiveness of development expenditure; budgets get translated into services largely through the firm's purchases of goods, services and works. Further Trionfetti (2000) study asserts that the area of procurement is increasingly prone to firm's internal factors; these factors tend to influence the type of procurement method adopted.

4.4. Economic Environment and Innovativeness of Procurement Methods

Based on a weighted average scale of 5 to 1 (5= to greater extent, 4= great extent, 3= moderate extent, 2 = to a less extent and 1 no extent) the study sought to establish the extent to which the factors in the economic environment do influence the use of innovativeness of procurement methods to achieve the desired state of operational performance in the soft drink industry. The information obtained from the field was recorded as in table 4 below.

Factors in the Economic Environment	5	4	3	2	1	Σf_i	$\Sigma wf_i/\Sigma f_i$ Weight Average
Cooperation mentality of the procurement team	27	11	14	3	1	56	4.071
Surveillance mentality in the Industry	9	21	24	2	0	56	3.661
Selection criteria and procurement content for productivity in the business	22	8	16	7	3	56	3.696
Managerial flexibility of procurement teams in the soft drink industry.	6	42	2	6	1	56	3.875
Sensitivity of procurement materials and supply chain issues	12	37	3	1	3	56	3.000

Table 4: Economic Environment and Innovativeness of Procurement Methods

Source: Field Data (2014)

Table 4 indicate that cooperation mentality among the procurement team enhance innovativeness of the procurement methods adopted in the firm to a great extent (4.071strength). The sensitivity of procurement materials and supply chain issues influence innovativeness to moderate extent (3.000strength). further factors like selection criteria and procurement content for productivity in the business (3.669); managerial flexibility of procurement teams in the soft drink industry (3.875 strength) and Surveillance mentality in the Industry(3.661 strength). Innovativeness is creativity in blending the various methods of procurement to achieve the desired results in the firm.

4.5. Open Tendering and Operational Performance in the soft Drink Industry

Based on a weighted average scale of 5 to 1 (5= to greater extent, 4= great extent, 3= moderate extent, 2 = to a less extent and 1 no extent) the study sought to establish the extent to which open tendering method do influence the parameters relating to operational performance in the soft drink industry. The response rate obtained from the field was recorded as in table 5 below.

Open Tendering influence on operational performance parameters (test factors)	5	4	3	2	1	Σf_i	$\Sigma wf_i/\Sigma f_i$ Weight Average
Production scheduling	25	17	8	5	1	56	4.071
Just in time delivery by the firm	11	35	5	3	2	56	3.893
Material requirement planning and supply chain logistics	19	28	6	2	1	56	4.107
Distribution requirement planning in the supply chain logistics	14	29	10	3	0	56	3.964
Vender management inventory in the supply chain logistics	8	9	26	11	2	56	3.179

Table 5: Open Tendering and Operational Performance

Source: Field Data (2014)

Table 5 indicate results of open tendering and the extent to which operational performance parameters are affected. Material requirement planning is a function of operational performance through Production volumes; open tendering influence this parameter to great extent (4.107strength). Production scheduling (4.071strength); distribution requirement planning in the supply chain logistics (3.964 strength); just in time deliver by the firm (3.893 strength) and vendor management inventory in the supply chain logistics (3.179 strength). These parameters if poorly addressed particularly when applying the procurement methods, and then operational performance is affected.

The study finding on influence of production scheduling on operational performance of Kisii bottlers Ltd resulted to a weighted mean of 4.071 which was interpreted that the respondents were in agreement with the proposition that production scheduling to a

great extent influence operational performance of soft drink firms. When the production processes are planned well it leads to higher rates of production. Production scheduling regulates the rate at which the procured resources flow and thus affecting the speed of the firm's production. Speed of production enhances the capability and speed of providing the products that the meet the customer's demand and hence leading to improved operational performance of soft drink firms.

The extent to which just in time delivery by the firm influence operational performance of Kisii bottlers Ltd was examined and the findings indicated a weighted mean of 3.893. Just in time delivery by the firm was rated at greatly influential to operational performance of soft drink firms. This was interpreted that the respondents to a great extent agreed with the proposition. Just in time delivery as a strategy is able synchronize the flow of products by focusing on the end user requirements through use of real time demand linked to flow which ensures timely replenishment (Baily, Farmer, Jessop & David, 2008).

The study finding on the extent to which material requirement influence operational performance of Kisii bottlers Ltd indicated a weighted mean of 4.107 which was interpreted that the respondents agreed to a great extent that material requirement planning influence operational performance of the firm. Material requirement planning helps the firm to determine precisely when and how much material to procure and process based upon a time-phased analysis of sales orders, production orders and forecasts (Farrington & Lysons, 2006).

The study finding on the extent to which distribution requirement planning in the supply chain logistics indicated a weighted mean of 3.964. This was interpreted that the respondents were in agreement with the proposition that distribution requirement planning influence operational performance Kisii bottlers Ltd to a great extent. Findings concur with (Cousens & Sweeney, 2009) that procurement methods have an effect of smoothing the operations of the firm hence reducing lead time. This was also in agreement with (Hanke & Wichern, 2009) that businesses seek ways to reduce the time to bring products to market place to gain competitive advantage. Therefore distribution requirement planning would enable soft drink firms enjoy competitive edge in the market place and hence their operational performance.

The extent to which vendor managed inventory influence operational performance indicated a weighted mean of 3.179. It was interpreted that vendor managed inventory greatly influence operational performance of Kisii bottlers Ltd. According to (Farrington & Lysons, 2006) it enables production times and quantities to be adjusted to suit the supplier. This also concurs with (Emmett & Granville, 2007) that vendors enjoy better visibility of changing demand and greater customer loyalty. The study findings also indicate that the firms can gain flexibility in their ordering decisions and hence improve their operational performance.

4.6. Direct Procurement and Operational Performance in the soft Drink Industry

Based on a weighted average scale of 5 to 1 (5= to greater extent, 4= great extent, 3= moderate extent, 2 = to a less extent and 1 no extent) the study sought to establish the extent to which direct procurement method do influence the parameters relating to operational performance in the soft drink industry. The response rate obtained from the field was recorded as in table 6 below.

Direct Procurement influence on operational performance parameters (test factors)	5	4	3	2	1	Σf_i	$\Sigma wf_i/\Sigma f_i$ Weight Average
Production scheduling	33	14	5	3	1	56	4.339
Just in time delivery by the firm	25	21	5	2	3	56	4.125
Material requirement planning and supply chain logistics	39	9	6	2	0	56	4.518
Distribution requirement planning in the supply chain logistics	13	22	8	5	8	56	3.482
Vender management inventory in the supply chain logistics	27	16	7	4	2	56	4.107

Table 6: Direct Procurement and Operational Performance

Source: Field Data (2014)

Table 6 indicate results of direct procurement and operational performance parameters, material requirement planning and supply chain logistics is influenced to great extent (4.518); production scheduling to a great extent (4.339) and vendor management inventory in the supply chain logistics to a great extent (4.107) strengths. Just in time delivery by the firm is influenced to a moderate extent (4.125 strength) and distribution requirement planning in the supply chain logistics is influence to a moderate extent (3.482 strength).

The study finding on the effect of production scheduling on operational performance of Kisii bottlers Ltd showed a weighted mean of 4.339. This was interpreted that the respondents agreed strongly that production scheduling influence the operational performance of Kisii bottlers Ltd to a greater extent. Production scheduling plays a critical role in speeding up production execution. Scheduling entails generation of a plan with reference to the sequence of time allocated for the completion of an item (Cousens, Szweszewski & Sweeney, 2009). Production planning involves the acquisition and allocation of limited resources to meet the customer's demand over a given time horizon (Queseda, Gazo & Sanchez, 2012). Material scheduling may regulate the rate at which procured resources flow and hence affecting the speed of the firm's operations.

The study finding on the extent to which just in time delivery by the firm influence the operational performance of Kisii bottlers Ltd indicated a weighted mean of 4.125. This was interpreted that the respondents were in agreement with the proposition that just in time delivery influence the operational performance of the soft drink firms. The aim of just in time delivery is to develop free

flowing order fulfilment and delivery systems so that pipeline inventories can be substantially reduced. This has the effect of reducing inventory losses and hence enhancing operational performance of soft drink firms.

The extent to which material requirement planning and supply chain logistics affect the operational performance indicated a weighted mean of 4.518. This was interpreted that the respondents agreed strongly that material requirement planning influence operational performance of Kisii bottlers Ltd. According to (Ciambrone, 2008) material requirement planning is able to improve scheduling effectiveness. His study indicates that computerised material requirement planning systems can effectively manage the flow of thousand of products

The study finding on the extent to which distribution requirement planning affect the operational performance of the firm showed a weighted mean of 3.482. This was interpreted that distribution requirement planning influence the operational performance of Kisii bottlers Ltd to a moderate extent. The study finding concurs with (Hanke & Winchern, 2009), that having right operational capacity requires having accurate forecasts of requirements. Distribution requirement planning systems are designed to take forecast demand and reflect this through the distribution system on a time phased requirement basis. It facilitates accurate forecasting of customer demand hence enhances the service delivery which will translate to improved operational performance.

The study finding on the extent to which vendor managed inventory influence operational performance indicated a weighted mean of 4.107. This was interpreted that the respondents agreed strongly that the vendor managed inventory influence Kisii bottlers Ltd in its operational performance. Direct procurement provides an opportunity for the development of close relationship which binds the supplier and the buyer. This relationship will enable the supplier to be always availing the procured resources to the procuring firm. According to (Farmer & Barry, 2008), the supplier takes the responsibility of operating the stock within a mutually agreed framework of performance targets which are constantly monitored and updated. This facilitates procurement efficiency and effectiveness and hence improves the operational performance of soft drink firms.

4.7. Specially Permitted Procurement Method and Operational Performance

Based on a weighted average scale of 5 to 1 (5= to greater extent, 4= great extent, 3= moderate extent, 2 = to a less extent and 1 no extent) the study sought to establish the extent to which specially permitted procurement method do influence the parameters relating to operational performance in the soft drink industry. The response rate obtained from the field was recorded as in table 7 below.

Specially Permitted Procurement influence on operational performance parameters (test factors)	5	4	3	2	1	Σf_i	$\Sigma wf_i/\Sigma f_i$ Weight Average
Production scheduling	15	27	6	5	3	56	3.821
Just in time delivery by the firm	31	15	7	2	1	56	4.304
Material requirement planning and supply chain logistics	21	19	5	9	2	56	3.857
Distribution requirement planning in the supply chain logistics	24	18	8	5	1	56	4.054
Vender management inventory in the supply chain logistics	14	29	7	4	2	56	3.875

Table 7: Specially Permitted Procurement method and Operational Performance

Source: Field Data (2014)

Table 7 reveal that just in time delivery by the firm (4.304); distribution requirement planning in the supply chain logistics (4.054) and vendor management inventory in the supply chain logistics (3.875) are all influenced by specially permitted procurement method to a great extent. But material requirement planning and supply chain logistics (3.857) while production scheduling (3.821) strength.

The study finding on the extent to which production scheduling affect operational performance of Kisii bottlers showed a weighted mean of 3.821 which was interpreted that the respondents were in agreement with the proposition that production scheduling positively influence the firm's operational performance. When he business organizations are permitted by the authority to procure goods and services they will be in a position of planning their production processes. This will enhance the firms to meet the myriad needs of the customers. The study findings are also in agreement with (Ayman, 2011), that specially permitted is adopted in many firms in an attempt of improving operational performance.

The extent to which just in time delivery by the firm influence the operational performance of Kisii bottlers Ltd the results indicated a weighted mean of 4.304. This was interpreted that the respondents agreed strongly that just in time delivery influence the operational performance of the firm. According to (Whybark & Vollmann, 2011), raw material ordering frequency is an important factor contributing to inventory cost. Therefore specially permitted as a method of procurement would enhance the firm to reduce the operational costs and hence improve their operational performance.

The study findings on the extent to which material requirement planning in the supply chain logistics influence the operational performance of Kisii bottlers Ltd indicated a weighted mean of 3.857. This was interpreted that the respondents were in agreement that material requirement planning influence operational performance of Kisii bottlers Ltd to a great extent. Material requirement planning as a strategy of supply chain management and logistics helps the firm to always ensure that it has sufficient stock of products necessary for its operations which will facilitate it to meet its production demands. This at the same time enhances the firm not to hold more of the stock at any given time. This is also supported by (Atrill, 2006), that there is need to analyse the costs of maintaining certain level of inventory as there are costs involved in holding too little inventory. Specially permitted can ensure

that the soft drink firms maintain optimum level of the procured resources and this is in line with the argument of (Lazaridis & Dimitrios, 2005) that it is important to keep the inventory at an optimum level. This has an effect of increasing reliability of supply by the firm and thus improves operational performance of soft drink firms.

The extent to which distribution requirement planning in the supply chain logistics affect operational performance findings showed a weighted mean of 4.054. This was interpreted that respondents agreed with the proposition that distribution requirement planning influence the operational performance of soft drink firms. This concurs with (Bowersox, Closs, & Cooper, 2007) that predictability of future demands, resource requirements and consumer needs contribute to flexible operational performance. Specially permitted procurement enhances the firms' competency to be measured by how well it is able to adapt to unpredictable situations.

The study finding on the extent to which vendor managed inventory influence operational performance indicated a weighted mean of 3.875 which was interpreted that the respondents were in agreement with the proposition that vendor managed inventory influence operational performance of soft drink firms. The study findings indicate flexibility of response on resource requirements in the supply chain and integration of supply chain members has same (Craig, 2004). Some of the performances initiatives can be by engaging and energizing supply chain partners to work together and individually to eliminate wasteful processes and excess inventory across the chain.

4.8. Restricted Tendering method and Operational Performance

Based on a weighted average scale of 5 to 1 (5= to greater extent, 4= great extent, 3= moderate extent, 2 = to a less extent and 1 no extent) the study sought to establish the extent to which restricted tendering method do influence the parameters relating to operational performance in the soft drink industry. The response rate obtained from the field was recorded as in table 8 below.

Restricted Tendering method influence on operational performance parameters (test factors)	5	4	3	2	1	Σf_i	$\Sigma wf_i / \Sigma f_i$ Weight Average
Production scheduling	19	23	7	5	2	56	3.929
Just in time delivery by the firm	24	16	10	4	2	56	4.000
Material requirement planning and supply chain logistics	15	21	7	9	5	56	3.625
Distribution requirement planning in the supply chain logistics	16	19	10	7	4	56	3.643
Vender management inventory in the supply chain logistics	18	33	5	0	0	56	4.232

Table 8: Restricted Tendering Method and Operational Performance

Source: Field Data (2014)

Table 8 indicate that vendor management inventory in the supply chain logistics as a parameter in operational performance is influenced to great extent (4.232 strength); just in time delivery by the firm (4.000 strength) and production scheduling (3.929 strength) are influenced to great extent. Material requirement planning and supply chain logistics and distribution requirement planning in the supply chain logistics are influenced to moderate extent strength of 3.625 and 3.643 respectively. The Restricted Procedure as a two-stage process allows firms to draw up a short-list of interested parties by undertaking a pre-qualification stage, prior to the issue of invitation to tender documents. This is most appropriate when many suppliers exist within a market and it is not feasible to issue an invitation to tender to each. Restricted tendering limits the request for tenders to a selected number of suppliers, contractors or service providers; so competition is confined to a certain number of firms either because only a few firms are qualified to fulfill the specific type of requirement, or certain conditions warrant the use of a limited number of firms in order to reduce the time and cost of the selection process as observed in this soft drink industry.

The study findings on the extent to which production scheduling affect operational performance indicated a weighted mean 3.929. This finding was interpreted that the respondents agreed with the proposition that production scheduling influence positively the operational performance of soft drink firms. The finding was in agreement with the argument of (Chase, Jacobs & Aquilano, 2006) that an important feature of lean theory is the emphasis on reduction of inventory and associated costs while maintaining flexibility to service delivery. Restricted tendering enables the business firms to schedule production and deliveries efficiently with reduced pipeline inventory. This translates to increased profitability of soft drink firms and hence improved operational performance.

The extent to which just in time delivery by the firm influence the operational performance of Kisii bottlers Ltd showed a weighted mean 4.000. This was interpreted that the respondents were in agreement with the proposition that just in time delivery by the firm influence operational performance of Kisii bottlers Ltd to a great extent. This finding is in agreement with (Baily, Barry, & Jessop, 2008) that real time demand linked to flow through distribution systems allow for cross docking. Restricted procurement allows the soft drink firms have the resources required to use in producing their final products as demand arises.

The finding on the extent to which material requirement planning and supply chain logistics influence operational performance indicated a weighted mean of 3.625. This was interpreted that the respondents agreed with the proposition at a moderate extent that material requirement planning influence operational performance of Kisii bottlers. Material requirement planning starts with a production programme which schedules the products to be completed time by time during the planning period. It is based on customer orders, sales forecasts and manufacturing policy (Farrington & Lysons, 2006). The study finding concurs with them that restricted tendering help manufacturers determine precisely when and how much materials to procure.

The extent to which distribution requirement planning affect operational performance and supply chain and logistics indicated a weighted mean 3.643 which was interpreted that the respondents agreed at a moderate extent that distribution requirement planning influence operational performance of Kisii bottlers. Distribution resource planning is a system for forecasting or projecting requirements for finished products at the point of demand (Farrington & Lysons, 2006). Restricted tendering enables the firm save on costs of evaluating many tenders. This concurs with (Hansen & Mowen, 2007) that the lower the number of tenderers in the business the lower the costs incurred in evaluating and even monitoring. They also add that it would give the firm a competitive advantage due to production of quality product at low prices and it will respond faster to customer needs.

The finding on the extent to which vendor managed inventory affect operational performance showed a weighted mean 4.232. This was interpreted that the respondents were in agreement that vendor managed inventory influenced operational performance of Kisii bottlers to a great extent. This concurs with (Rushton, Croucher, & Baker, 2011) that the vendor is able to schedule deliveries efficiently as it has better visibility of the client's requirements and it can incorporate these requirements at an earlier stage of its product schedules. Through the restricted tendering, the prequalified suppliers are normally in touch with the business organization. Therefore, the finding agrees that there is an opportunity to develop a much and binding relationship among the retailers and manufacturers as well as giving a much better visibility of the real demand.

4.9. Procurement Methods and Operational Performance

On the 5 point Likert scale, the study sought to establish the extent to which the procurement methods do influence the operational performance of the soft drink industry. The response rate obtained from the field was recorded as in table 9 below.

Procurement Methods	5	4	3	2	1	Σf_i	$\Sigma wf_i / \Sigma f_i$ Weight Average
Open Tendering	30	13	6	5	2	56	4.142
Direct Procurement	10	22	17	2	5	56	3.536
Request for Quotation	13	17	16	2	8	56	3.446
Restricted Tendering	21	18	8	3	6	56	3.803
Specially Permitted Procurement	28	16	9	2	1	56	4.214
Low Value Procurement	26	10	7	8	5	56	3.786
Request for Proposal	24	12	7	8	4	56	3.554

Table 9: Procurement Methods and Operational Performance

Source: field data (2014)

Table 9 indicate that specially permitted procurement method influence operational performance to great extent at 4.214 strength, followed by open tendering 4.142 and Restricted tendering 3.803; low value procurement methods at influence strength of 3.786 in a 5-point Likert scale. Direct procurement influence performance at a strength of 3.536 strength and request for proposal at 3.554 strength while request for quotation is rated lowest at 3.446 strength on operational performance.

Respondents' responses from the firm on their extent of agreement on influence of procurement methods on operational performance were studied and findings tabulated as above. From the table 9 above, it was evident that specially permitted procurement has a greater influence on operational performance of soft drink firms. 50% (28) of the total respondents indicated that specially permitted procurement was most influential, 29% (16) more influential, 16% (9) to be moderately influential, 3% (2) to be less influential and 2% (1) to be not influential. The weighted mean 4.214 of the response was interpreted that respondents agreed that specially permitted method is more influential on operational performance of soft drink firms. The finding concurs with (Cannon, 2008) that a company may sustain competitive advantage by employing appropriate procurement method. Soft drink firms can embrace specially permitted method as a strategy to improve their competitiveness and hence improve their operational performance.

Performance is the effectiveness of the way of doing something. In the production field, performance level equals the standard time for an activity when directly compared with the actual time spent on the task indicates the level of performance physically achieved. Harvey Maylor (2003), performance is not conformance; the emphasis in many business projects today is shifted to excellence being defined in terms of real performance expressed as a function of what is the shortest possible project duration, the lowest cost and the highest level of quality that can be achieved. Tendering process does tie up resources from a contracting authority and a supplier that takes part in the process. In addition the implementation of tendering documentation takes a lot of time. Tendering of an average procurement may take several months of work. If the process is interrupted or otherwise unsuccessful all the re-resources have been wasted. For this reason it is important that procurement process is man-aged properly by adopting the right procurement method. According to Smith et al. (2008), the level of risk increases in the beginning of a procurement and reaches its highest level during the tendering process where the procurement project uncertainty is at its peak; when the production starts, risks are either actualised or expired and the level of risk will decrease as the procurement progresses in the logistics chain. As a result, risk management becomes most vital in the tendering process. Elkington and Smallman (2002) assert that there is a strong relation between an early risk management during tendering and the success of procurement. The volume of resources spent in risk management activities is a fundamental factor to procurement success. An early involvement of risk management will create better conditions for the supplier, in both the tendering process and in the execution phase. Therefore the type of procurement method adopted is a function of risk management process by firms and influences operational

performance. (Craig, 2004). Some of the performances initiatives can be by engaging and energizing supply chain partners to work together and individually to eliminate wasteful processes and excess inventory across the chain.

4.10. Regression Analysis Model

The study used the regression model $y = a + bx$ to assess the results. The study analyzed the volume of production and totals the cost of procured resources in Kisii bottlers limited. The observation on the production levels of CocaCola in physical cases is a function of cost of procured resources for use in the firm and has a relationship to the volume of sales in the distribution chain.

4.11. Trend analysis of Total Production and Cost of Procured Resources

Cost of procured resources is a factor considered most in all procurement methods adopted by firm; while production volume is a function of materials requirement planning which entirely influence the procurement method to be adopted. The study sought to establish the levels of production and sales of CocaCola in Cases and cost of procured resources overtime. The response rate obtained from the field was recorded as in table 10 below. The data was used to develop the trend analysis to show the performance over time and regression analysis.

Year	Cost of procured resources Ksh (millions)(x)	Total volume of production cases (millions)(Y)	X ²	Y ²	xy
2003	10	2.215660	100	4.6509	22.15660
2004	15	2.040860	225	4.1651	30.6129
2005	16	1.856005	256	3.4448	29.69608
2006	18	1.945120	324	3.7835	35.01216
2007	20	2.789131	400	7.7793	55.78262
2008	23	3.377662	529	11.4086	77.686226
2009	25	3.096726	625	9.5897	77.41815
2010	30	3.106621	900	9.6511	93.19863
2011	30	2.581820	900	6.6658	77.4546
2012	32	3.070200	1024	9.4261	98.2464
2013	35	3.616557	1225	13.0795	126.579495
	$\sum X=254$	$\sum Y=29.696362$	$\sum X^2=6508$	$\sum Y^2=83.6444$	$\sum XY=723.843861$

Table 10: Total volume of production and Cost of resources procured

The regression line $y = a + bx$; where y is the dependent variable (total volume of production in physical cases and 'a' is the y-intercept which means that without any resource procured into the firm there is always a constant production and x is the independent variable. Where y is operational performance measured in Total volume of Production of CocaCola in Cases and x Cost of Procured Resources.

$$b = \frac{\{n \sum xy - \sum x \sum y\}}{\{n \sum x^2 - (\sum x)^2\}}$$

$$b = \frac{\{11(723.843861) - (254)(29.696362)\}}{\{11(6508) - (254)^2\}}$$

$$b = + 0.059305221$$

$$a = \{\sum y / n\} - b \{\sum x / n\}$$

$$a = \{29.696362 / 11\} - (+ 0.059305221) \{254 / 11\}$$

$$a = 1.330257806$$

The regression equation result indicate that $y = 1.330257806 + 0.059305221x$; this shows that the cost of procured resources positively influence operational performance (production volume of CocaCola cases).

5. Summary, Conclusion and Recommendations

5.1. Effect of Open Tendering on Operational performance

The study found out that the firm use open tendering as a method of procurement in its procurement activities. It was found out that material requirement planning was used as a function of operational performance through Production volumes; open tendering influenced this parameter to great extent (4.107 strength). Production scheduling influenced operational performance positively by a weighted mean 4.071. Distribution requirement planning in the supply chain logistics (3.964 strength); just in time delivery by the firm (3.893 strength) and vendor management inventory in the supply chain logistics (3.179 strength). These parameters if poorly addressed particularly when applying the procurement methods, the operational performance is affected. It is evident that open tendering as a method of procurement positively affects operational performance of soft drink firms.

5.2. Effect of Direct Procurement on Operational Performance

The study findings indicate that the firm adopts direct procurement method in its operations. Majority of the respondents, to great extent maintained that direct procurement influence positively operational performance of soft drink firms. It was found out that material requirement planning and supply chain logistics was influenced, production scheduling, vendor management inventory in the supply chain logistics and Just in time delivery by the firm was influenced operational performance to a great extent while

distribution requirement planning in the supply chain logistics is influence to a moderate extent (3.482 strength). It can therefore be generalized that to a great extent direct procurement as a method of procurement has a positive influence on operational performance.

5.3. *Effect of Specially Permitted Method on Operational Performance*

The study finding indicated that the firm do use specially permitted method of procurement. The results reveal that just in time delivery by the firm (4.304); distribution requirement planning in the supply chain logistics (4.054) and vendor management inventory in the supply chain logistics (3.875) were all influenced to a great extent. But material requirement planning and supply chain logistics (3.857), and production scheduling (3.821) strength which is moderate extent. It was evident that specially permitted method as a method of procurement positively affects operational performance.

5.4. *Effect of Restricted Tendering on Operational Performance*

The study findings indicate the firm use restricted tendering as a method of procurement. It was found out that vendor managed inventory in the supply chain logistics as a parameter in operational performance is influenced to great extent (4.232 strength); just in time delivery by the firm (4.000 strength) and production scheduling (3.929 strength) were influenced to great extent. Material requirement planning and supply chain logistics and distribution requirement planning in the supply chain logistics were influenced to moderate extent strength of 3.625 and 3.643 respectively. The Restricted Procedure as a two-stage process allows firms to draw up a short-list of interested parties by undertaking a pre-qualification stage, prior to the issue of invitation to tender documents. This is most appropriate when many suppliers exist within a market and it is not feasible to issue an invitation to tender to each. Restricted tendering limits the request for tenders to a selected number of suppliers, contractors or service providers; so competition is confined to a certain number of firms either because only a few firms are qualified to fulfill the specific type of requirement, or certain conditions warrant the use of a limited number of firms in order to reduce the time and cost of the selection process as observed in this soft drink industry. Therefore, restricted tendering as a method of procurement has a positive effect on operational performance of soft drink firms.

5.5. *Effect of Procurement Method on Operational Performance*

The study established that specially permitted procurement method influence operational performance to great extent at 4.214 strength, followed by open tendering 4.142 and Restricted tendering 3.803; low value procurement methods at influence strength of 3.786 in a 5-point Likert scale. Direct procurement influence performance at a strength of 3.536 strength and request for proposal at 3.554 strength, while request for quotation is rated lowest at 3.446 strength on operational performance. Performance is the effectiveness of the way of doing something. In the production field, performance level equals the standard time for an activity when directly compared with the actual time spent on the task indicates the level of performance physically achieved. Harvey Maylor (2003), performance is not conformance; the emphasis in many business projects today is shifted to excellence being defined in terms of real performance expressed as a function of what is the shortest possible project duration, the lowest cost and the highest level of quality that can be achieved. Tendering process does tie up resources from a contracting authority and a supplier that takes part in the process. In addition the implementation of tendering documentation takes a lot of time. Tendering of an average procurement may take several months of work. If the process is interrupted or otherwise unsuccessful all the re-sources have been wasted. For this reason it is important that procurement process is man-aged properly by adopting the right procurement method. According to Smith et al. (2008), the level of risk increases in the beginning of a procurement and reaches its highest level during the tendering process where the procurement project uncertainty is at its peak; when the production starts, risks are either actualised or expired and the level of risk will decrease as the procurement progresses in the logistics chain. As a result, risk management becomes most vital in the tendering process. Elkington and Smallman (2002) assert that there is a strong relation between an early risk management during tendering and the success of procurement. The volume of resources spent in risk management activities is a fundamental factor to procurement success. An early involvement of risk management will create better conditions for the supplier, in both the tendering process and in the execution phase. Therefore the type of procurement method adopted is a function of risk management process by firms and influences operational performance. The study regression model $y = a + bx$; was used and the variables realigned and computed. Where y is operational performance measured in Total volume of Production of Cocacola in Cases and x Cost of Procured Resources. Study results indicate that $y = 1.330257806 + 0.059305221x$; this indicate that the cost of procured resources positively influence operational performance (production volume of Cocacola cases).

5.6. *Conclusion*

It can be argued in this document that all the four variables were of great significance to operational performance of soft drink firms in Kenya. This is because the weighted mean of most of aspects studied was more than 3, the midpoint of the Likert scale. The research study showed that there is a positive influence between procurement methods and operational performance. The study established that application of procurement methods in the operations of soft drink firms was crucial in increasing the operational efficiency in soft drink firms. The regression results indicate that $y = 1.330257806 + 0.059305221x$; this indicate that the cost of procured resources positively influence operational performance; hence procurement methods used have a direct relationship with operational performance. Therefore a positive relationship exists between procurement methods and operational performance of firms.

5.7. Recommendations

- **Effects of open tendering on operational performance**
There is need for the soft drink firms to use the open tendering in their procurement activities so as to be able to access many suppliers to supply the firm with the required goods and services especially when dealing with material requirement planning and production scheduling.
- **Effects of Direct Procurement on Operational Performance**
The firm should embrace direct procurement in its procurement operations in order to realise the benefits of production scheduling such as reduced lead times and higher production rates. The firm should identify the most reliable source from whom it procures the goods and service required. The firm will also stand to realize the increase in profits as it will be in a position of delivering the products to its customer in time.
- **Effects of Specially Permitted Procurement on Operational Performance**
In terms of specially permitted procurement the method that is allowed by the authority to procure goods and services should increased so as to be able to meet the myriad customers' needs which will improve the firm's efficiency.
- **Effects of Restricted Tendering on Operational Performance**
The soft drink firms should embrace the use of restricted tendering for it to improve their relationship with the suppliers. This will enable the vendor to schedule deliveries efficiently, as it has better visibility of the client's requirements and it will incorporate these requirements at an early stage of its product schedule. This is also necessary to confine competition to a certain number of suppliers as it helps in reducing time the firm would spent in evaluating the tenders. Also the firm will be in a position to save on costs of tender evaluation.

6. Area for Further Research

The study identified some more areas that could create insights into the dynamics affecting the application of procurement methods in soft drink industry: there is need to streamline the social political environment in which public procurement operates so as to ensure that, mechanisms to strengthen weak and poor organizational framework are put in place and independence in procurement processes is achieved to avoid political interferences that compromises the practices.

A further study also is proposed to be carried out to analyse the state of procurement professional in soft drink companies as there is increase in accusations of procurement malpractices and procurement inefficiencies at high levels.

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