



**PROCUREMENT PRACTICES AND PROCUREMENT PERFORMANCE OF OIL MARKETING COMPANIES IN KENYA**

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**ABSTRACT**

*This study investigated the procurement practices affecting procurement performance of oil marketing companies in Kenya. The study was anchored on social exchange theory, innovation diffusion theory and game theory. This study adopted cross-sectional descriptive research design. The target population comprised of all small and medium Oil marketing firms operating in Mombasa County which formed the unit of observation. The unit of analysis was the management staff drawn from procurement, supply chain, operations, finance and accounting and ICT. The sample size was 79 arrived at using Slovin's formula from the target population. The collected data was coded and analyzed using the Statistical Package for Social Sciences (SPSS version 26) tool. The data analysis techniques employed included descriptive statistics which measured mean and standard deviation and regression analysis which was conducted to test whether the strength of the relationship between the independent variables and the dependent variable were statistically significant. Analyzed data was presented using frequency and descriptive tables. The study results established that procurement performance demonstrated a substantial positive link with procurement practices, according to the correlation coefficient index. In addition, ANOVA was used to assess the regression model's validity. With a p-value of 0.05, the results showed that the model was valid for assessing the relationship between the research variables. The procurement performance of Oil marketing firms in Kenya was significantly and favorably affected by procurement practices as indicated by the coefficient of determination ( $r^2$ ) in the model summary. The study concluded that the company upholds supplier collaboration to enhance buyer-supplier relationships. Also there is open communication between the companies and oil suppliers. The oil companies undertook vendor development periodically to ensure they meet the required standards and that the oil companies promote alliance-based relationships with suppliers. The study recommended that the oil marketing companies should periodically identify the market oil needs to determine the capacity to procure. Further, the oil marketing companies should perform cost estimation before procuring oil supplies.*

**Key Words:** *Supplier Relationships, Procurement Planning, Purchase Order Tracking, Supplier Sourcing*

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## INTRODUCTION

Companies dealing with oil marketing operate in an environment which is dynamic and complex causing constant challenges to the marketers bordering on supplies oil and gas. The industry further is faced with scarcity due to the inevitable eventual depletion of the world's oil supply (PwC, 2018). With the oil prices at historic lows and with the Covid-19 supply chain disruptions, oil and gas marketing firms are in major urgency to relook at their supply chain, procurement processes and costs. Bower (2018) posits that oil and gas companies of present world are focusing on developing sound strategies for responding quickly to global market needs and positioning strong position in marketplace. These companies are currently designing and implementing procurement practices which they can sustain to minimize wastage, save costs, improve competitiveness hence improve operating income margins (Seuring & Gold, 2017).

The practices of procurement entail the exercise of acquiring goods and services for an organization as per the set policies that govern the choice of suppliers, products and methods that aim to utilize sound business practices which maximize value of the organization (Sollish & Semanik, 2017). They are strategies that may be followed when making company purchasing decisions. These practices may include building supplier relationships, team-based approaches to procurement, competitive approaches, customer relationships and proper use of technology or e-procurement (SchiavoCampo & Sundaram, 2017). Implementing procurement best practices may significantly improve the effectiveness of purchasing decisions. Procurement practices cuts through all departments of an industry as it involves the putting in practice the knowledge of good management. Effective procurement practices create a major source of competitive advantage for the enterprise by operating at a lower cost and hence at a greater profit and improved performance (Seuring & Gold, 2017).

In the United Kingdom, Wright (2016) stated that the adoption of new procurement strategies by the key players in the UK North Sea has been instrumental in rejuvenating the oil industry by allowing cost-effective development of smaller and more marginal oil and gas fields. The challenges on procurement for the oil and gas industry appears to have been the little development from the traditional to the latest approach in procurement where most of the procurement systems used appear to be mere carbon copies taken from other industries. In Puerto Rico, Institute of Energy Economics and Financial Analysis report (2020) reported that the Puerto Rico power company lost US 27.7 billion to oil procurement scandal. Low-quality oil was supplied at an inflated cost. The overcentralized power and lack of accountability of PREPA's Fuel Office facilitated other oil- contracting irregularities.

In Nigeria, its position as a critical player in the energy industry has experienced myriad of concerns over the underperformance of Nigerian oil and gas projects (Cui, Wang, Rui & Chun, 2018). Oil and gas production had been hampered in Nigeria in the past few years, due to the attack on oil and gas infrastructure by militants. Further, oil theft has been one of the major issues faced by the oil & gas market in Nigeria, which resulted in huge losses to operating companies in the country. Shell reports that criminal gangs are targeting, damaging and bunkering an estimated 150 000bbl/d in Nigeria (PwC, 2018). Such factors are expected to have a negative impact on the market growth during the forecast period thus affecting growth of oil marketing firms relying on supplies from the country.

Kenya is an oil importing country with rapidly increasing commercial energy consumption whereas the oil industry is a very important sector in the economy (Mwarano, 2017). Kenya's oil imports and trading arrangement is based on a complex Open Tendering System (OTS). Under the OTS, which is operated by the Ministry of Energy, oil marketers compete to import crude and refined

products for the whole industry. The winner imports the monthly oil requirements and sells to other marketers at an agreed price. Oil industry in Kenya is very competitive and capital intensive venture. The firms operate on the ever changing oil industry environment. It is due to these competitive pressures that many oil marketing firms in Kenya have come up with different growth strategies on different markets in order to grow their businesses.

Oil marketing businesses operate in oligopolistic market structure characterized by strong mutual independence, homogenous petroleum products and high capital entry requirements (Lina, 2017). The current data from Petroleum Institute of East Africa (PIEA) (2018) indicate that there are 72 oil marketing companies in Kenya operating over 3,000 service stations. More than half of these service stations are owned by independent players. The strong mutual independence and competitor reaction patterns by industry players make it difficult to compete on price. Competition on the basis of price has brought with it a decline in margins, reduced profitability and contributed to operating losses. This is evidenced by Total Oil Kenya Limited, a publicly quoted company which reported a loss of Kshs 222 million in the year 2017 (Moronge, 2020). The oil marketing firms have now shifted their focus on procurement practices as the only remaining area for creating distinctive competence.

In Kenya as of December 2020, there were fifty Oil Marketing Companies (OMC's) involved in importation and marketing of the four (4) main petroleum products, that is, Motor Spirit premium (MSP), Motor Spirit Regular (MSR), Automotive Diesel Oil (AGO) and Dual Purpose Kerosene (DPK). The industry also handles Liquefied petroleum gas (LPG), various lubricants, tar and industrial fuels. Over 65% of both the local and export market is controlled by about 5 marketers as follows; Total Kenya 22.55%, Shell 17.81%, Oilibya 10.56%, Kobil 10.55%, Nock 7.10%, the other firms had less than 4% individual market share (KPC product delivery data report, 2019).

The procurement practices adopted by oil and gas companies has become more comprehensive for offering new opportunities to suppliers, company, and buyers. The traditional relationship dimension between suppliers, oil and gas companies and buyers

is becoming more transparent, effective and shared yielding greater value to all players (Wilson & Kuszewski, 2017). According to the Harvard Business Review (2020), purchased products and services account for more than 50 percent of the average oil and gas company's total costs. Thus, even a 5 percent reduction in purchase costs can result in a significant increase in the profit margin for oil and gas companies. This means that small and medium oil marketing firms can leverage of procurement practices to improve their performance.

#### **Statement of the Problem**

Procurement practices which are effective have a potential to create competitive advantage for the business through cost advantages leading to improved growth (Lina, 2017). The oil marketing companies in Kenya have been faced by many challenges that can be attributed to procurement and having a negative impact on growth. In Kenya despite the growth of oil imports by 53.8% (EPRA, 2018) the high oil taxation rate and oligopolistic nature of the industry where 65% of the oil market is owned by foreign firms has locked the upstream market from local independent oil marketers like the Premium Energy. The price regulation by Energy Regulatory Authority has made it impossible for the small oil marketers to leverage on oil pricing as a basis for growth. Further, according to Petroleum Institute of East Africa (2020) Kenyan shareholders of small and mid-tier oil distribution and marketing companies have in the last few years' relinquished ownership to foreign firms. Besides the high volatile competitive environment in the industry has seen Premium Energy lose its market share by 0.6 percent in the last three years forcing the oil marketer to turn to procurement processes to

boost its overall performance by reducing procurement costs (Premium Energy report, 2019).

Various studies have been done on procurement practices and performance. For instance, Hussein and Moronge (2020) did a study on factors influencing procurement in the Kenyan Oil industry and results revealed that procurement competency would increase the levels of procurement performance in the oil industry in Kenya. Lina (2017) carried a study on growth strategies on performance of large oil companies in Kenya and found that growth strategies greatly influence firms' performance. Magawa, and Karanja, (2019) did a study on procurement practices and customer service delivery in petroleum industry in Kenya. The study presented contextual gaps by focusing on service delivery and not procurement performance. However, these reviewed studies failed to holistically investigate how procurement practices affect procurement performance of oil marketing firms. Also few studies had focused on small and medium players in the oil marketing sector in Kenya thus the current study sought to fill the knowledge gaps by investigating the procurement practices affecting procurement performance of oil marketing firms in Kenya.

### **Objectives of the Study**

The general objective of the study was to investigate the procurement practices affecting procurement performance of oil marketing firms in Kenya. The specific objectives were;

- To establish the effect of supplier relationships on procurement performance of oil marketing companies in Kenya.
- To determine the effect of procurement planning on procurement performance of oil marketing companies in Kenya.
- To investigate the effect of purchase order tracking on procurement performance of oil marketing companies in Kenya.
- To assess the effect of supplier sourcing on procurement performance of oil marketing companies in Kenya.

The study sought to answer the following questions;

- What is the effect of supplier relationships on procurement performance of oil marketing companies in Kenya?
- What is the effect of procurement planning on procurement performance of oil marketing companies in Kenya?
- What is the effect of purchase order tracking on procurement performance of oil marketing companies in Kenya?
- What is the effect of supplier sourcing on procurement performance of oil marketing companies in Kenya?

## **LITERATURE REVIEW**

### **Theoretical Review**

The theoretical framework relates to the philosophical basis on which a research takes place and forms a link between the theoretical aspects and practical components of the problem under study it consists of concepts and existing theories that are used for the particular study (Sekaran, 2016).

### **Social Exchange Theory**

Social exchange theory posits that parties exhibit trust in the buyer–supplier relationship by adapting other party's products and production process for their use. The theory is built on the premise that any type of business transaction is prone to have exchange and interactions (West & Turner, 2017). Social exchange theory views inter-organizational governance in the context of a social structure where firms are interdependent and rely on reciprocation (Donaldson & O'Toole, 2017).

The SET is especially applicable in selecting supplier strategies and making supplier portfolio decisions. The SET is specifically applicable for the selection of supplier strategies and for making decisions about how to deal with suppliers. Through a trustful exchange relationship, the chance for a continuation of this relationship is higher. A steady continuous exchange relationship ensures supply.

Generally, social exchange theory assumes that we can accurately anticipate the payoffs of a variety of interactions. The theory also assumes that relationships are interdependent (West & Turner, 2017). Thus, suppliers and buyers are attuned and mutually dependent on each other in relations amongst each other. This means, that relations develop over time and during that development change. This means that the supplier-buyer relations created are positive in nature and that none will have a negative impact to the organization. The theory's preposition to the study is that the supplier-buyer relationships should be highly prioritized in oil marketing firms so as to lead to improved procurement performance.

### **Game Theory**

The game theory was proposed by Neumann in 1953. The theory states that interacting choices of economic agents produce outcomes with respect to the preferences of those agents in which case such outcomes might have not been intended by any of the agents. Game theory is also stated to be the formal study of decision making where various players are obliged to make choices that potentially affect the interests of other players (Turocy & Stengel, 2016). The theory puts into perspective conflict and cooperation. The concepts of the game theory are applicable when the actions of various agents such as individuals, groups, firms or any combination of the foregoing agents, are interdependent with each other. The game theory represents a setting in which involved agents (procuring firm and supplier) who form commitments or coordinate their strategies in order to win jointly or take part in the game as long as it seems to be worth playing together (Cockburn, 2016).

According to Sharma and Bhattacharya (2015) in order to have efficient and effective interaction between the buyer and the supplier the following prerequisite factors should be observed: Information- the availability of information is the most important factor in any negotiation. Most

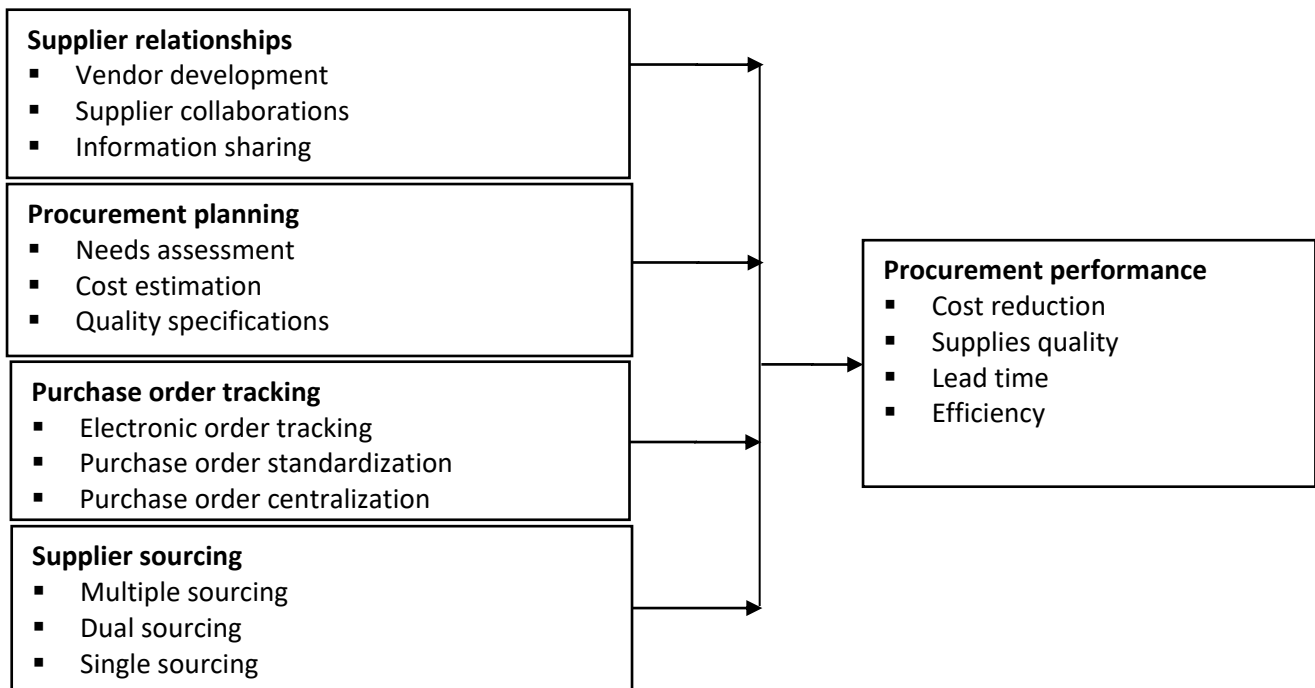
buyers will have experience the uncomfortable situation where the supplier has much better information, not only does he know more about his product, he also knows more about the competitors' products and sometimes the buyer organization in details. In this situation there is little the buyer can do to negotiate better deals. To counter the issues of poor information, the procurement professions have to adopt approaches such as strategic sourcing and category management. The theory supports supplier sourcing variable.

### **Innovation Diffusion Theory**

The Diffusion of innovations theory was proposed by Rogers in 1962; referred to in Einstein (2016). According to Rogers, Diffusion of Innovations theory is a theory of how, why, and at what rate new ideas and technology spread through cultures, operating at the individual and firm level. Based on Diffusion of Innovations theory at the firm level, innovativeness is related to such independent variables as individual (leader) characteristics, internal organizational structural characteristics, and external characteristics of the organization. Individual characteristics describe the leader attitude toward change.

The adoption of e-procurement, in this case, depends upon the need to reform the key stages of the procurement process. According to Rogers, the internal characteristics of organization structure centralization, complexity, formalization, interconnectedness, organizational slack and the number of employees. This relationship demands that a system to be put in place should meet the requirements of the organizations characteristic or operation of the procurement process. In this case, the procurement process is considered as an internal characteristic that deals with tendering, invoicing and payment. And thus, the adopted technology most considered for the performance of this task will be e-tendering, e-invoicing and e-payment. This theory supports purchase order tracking variable.

## Conceptual Framework



### Independent Variables

### Dependent Variable

Figure 1. Conceptual Framework

## Review of Literature on Variables

### Supplier Relationships

Supplier relationship is the procurement strategy for designing of strategic and operational procurement processes as well as the arrangement of the supplier management (Nkpee, & Tamunomiebi, 2020). Supplier relationship classifies and engrosses the right stakeholders to yield ownership of the relationship, drive active communication and bring into line strategic objectives (McLachlin & Larson, 2016). Supplier-buyer relationships have today become the backbone of economic activities in the modern world and a focal point of organizational competitiveness, performance and long-term business success (Cherry, 2017).

Burt, Petcavage and Pinkerton (2016) acknowledge that buyer-supplier relationships have evolved from being transactional in nature, to being collaborative and alliance-based. Business owners and executives are beginning to realise that strategic supplier alliances, if successful, can result in better market

penetration, access to new technology and knowledge, and higher returns on investment than those competitors who do not have such alliances (Wisner, He, Tan, Lee, & Li, 2017). Supplier relationship aims to overcome the traditional adversarial relationship between buyers and suppliers. It is through communication and the sharing of information and ideas that better outcomes are provided for both parties. Vendor rating can be applied as the basis for supplier development and relationship management (Harrison & Hoak 2017).

### Procurement Planning

Procurement planning is one of the primary functions of procurement with a potential to contribute to the success of organization's operations and improved service delivery (Basheka, 2016). It is a function that sets in motion the entire acquisition/procurement process of public institutions. Procurement planning touches many core aspects of a company's operations and, hence, their successful deployment and use are critical to

service delivery and survival of firms (Welter *et al.*, 2015). According to Mullins (2016) there exists a significant positive relationship between procurement planning and service delivery in procurement systems. Mawhood (2015) posits that effective procurement planning is an important route towards securing the right service to be delivered to the clients, and also maximizing the level of service provision which can be achieved.

Quality specifications are detailed requirements that define the quality of a product, service or process. Edvardsson (2016) contends that specification is an integral part of the procurement function. Without a quality specification the process can be filled with pitfalls and obstacles for the purchasing department. He lists the characteristics of a good specification as follows; Identifies the minimum requirements of the end user, allows for a fair and open procurement process, provides for testing/inspection to insure the goods/services received meet the standard set forth in the specification and provides equitable award at the lowest possible cost.

### **Purchase Order Tracking**

Purchase order tracking simply means tracking the lifecycle of a purchase order. Purchase orders play an important role in the procurement process. The buyer generates a purchase order (PO) containing details of the goods or services required and the terms and conditions of the purchase. Once the vendor accepts the PO, it becomes a legally binding document that is used as a reference in case of any issues that may arise while fulfilling the purchase order. Tracking a purchase order is essential to ensure the timely delivery of goods. A purchase tracker is an important part of the purchase order management system (Business Dictionary, 2020).

Wanjera (2016) discussed on the creation of a financially viable e-invoicing solution. Corporate needs to create this critical mass by a value network of alliance partners and technology solution providers to add the necessary desirability for electronic invoicing through the financial supply chain. Electronic procurement offers numerous

opportunities that include enhancing image and improve corporate trading relationships, improve buyer/supplier relationships, as mutual cooperation is required, better accuracy since an order is less likely to be delayed or the wrong goods, delivered because there are no transaction errors (Amit & Zott, 2017).

### **Supplier Sourcing**

The process of procurement which entails identifying and selecting cost economic suppliers with an edge in technology and having a capability of delivering quality supplies to conform to the organizational specification is referred to as supplier sourcing (Lee & Choi, 2016). Many industries have recorded a ratio of sourcing costs over total cost of goods to be between 40 to 80 percent. This ratio has stood still for a record number of years without changing. The institutions which prioritize sourcing strategically stand a chance to save as much as 20 times the cost of operating sourcing process (Chopra & Meindl, 2017).

Gwako (2017) asserts that single sourcing is a situation where a firm chooses only one supplier from a pool of suppliers to provide supplies. According to Dutta and Mia (2016) single sourcing favors situation of grave urgencies which may call for the firm to stick to a single supplier to supply goods or services. In the case of state corporations, having a single supplier could be beneficial since it reduces possible pressure of work and inertia as well as it promotes supplier-buyer relationship strengthening and may lead to the state agency saving millions in switching costs. Another benefit likely to be drawn as a result of single sourcing is reduction in lead times, likelihood of earning discounts due to consolidation of order from a single supplier (Apiyo & Mburu, 2016).

### **Procurement Performance**

Procurement performance involves measuring the extent to which the firm's goals and objectives can be attained by the procurement function with the lowest possible cost (Van Weele, 2016). According to Trent and Monczka (2016) procurement



performance is basically the outcome of effectiveness and efficiency. Mutava (2016) asserts that the process of tendering efficiency and efficacy forms the single determinant of public procurement. The foundation for gauging firm's progression to achieving pre-stated goals and objectives is performance and as such procurement performance is an approach to control cost rather than objective by itself (Coad, 2017).

Kiruja (2016) posits that procurement performance may be viewed in the scope of qualitative or quantitative assessment in an effort to attain efficiency, effectiveness and purchasing economies over a given time. Quantitative assessment is measured using metrics of placed orders quantity, lead time reduction, cost savings as well as administrative costs reduction (Knudsen, 2017). Vonderembse and Tracey (2016) assert that with a cost reduction in input prices, firms can competitively offer their ready goods in the market with competitive prices hence win business. Knudsen (2017) posits that procurement function efficiency and effectiveness can transform the firm from state of reactivity to being proactive in an endeavor to attain its defined goals. The research opines that there are several procurement performance measurement metrics, however, for the sake of the current study lead time, quality, and cost reduction metrics were used as measures of procurement performance.

### **Empirical Review**

Nkpee, and Tamunomiebi, (2020) carried a study on supplier relationship management and vendor's performance evaluation in the Rivers State Bureau for public procurement in Nigeria. The study used cross-sectional survey to investigate the variables. The target population was middle and top management. The study adopted census design due to small population of the study. Hypotheses were tested using Spearman's Rank Order Correlation Statistics. The results revealed a significant relationship between supplier relations and vendor performance evaluation.

Hussein and Moronge (2020) did a study on factors influencing procurement in the Kenyan Oil industry. The study also sought to find out whether company policies, availability of finances, ICT adoption and procurement competencies affect procurement process at National Oil Corporation of Kenya Ltd. The study used a descriptive research design. The target population of the study was the 245 staff of all departments of the national oil corporation headquarters located at Mamlaka Road, Nairobi. The researcher therefore considered 30% of the total target population 245 as appropriate for the study which yields a sample size of 74 possible respondents who were randomly be picked. The methods of data collection were through questionnaires as the main data collection instrument. The results revealed that procurement competency would increase the levels of procurement performance in the oil industry in Kenya.

Lina (2017) carried a study on growth strategies on performance of large oil companies in Kenya. The study adopted descriptive research design. The target population for this study was the 15 major oil firms in Kenya. The respondents were selected from strategic department, operations, customer service making a total sample of 45 respondents. Census was used hence the entire target population of 15 oil companies was studied. The main instrument for data collection was a semi-structured questionnaire. Descriptive statistics technique was used to analyze the quantitative data. Coding was done in SPSS, analyzed and the output interpreted in frequencies, percentages, mean scores and standard deviation. The study found that growth strategies greatly influence firms' performance.

Ogwang and Waweru (2017) study investigated the influence of procurement planning on performance of Kisumu Water Company. The study used descriptive survey design. The study target population was 128 procurement employees, departmental heads, middle management and supervisors. Stratified sampling technique was used to get a sample size of 57 respondents. The study

established that procurement planning has a positive significant influence on performance.

Bahaidar (2015) carried out a study on factors affecting supply chain management by oil companies in Kenya. The research design used for this study was a descriptive design. The target population of this study was all the employees in the oil companies in Kenya. There are 50 oil marketing companies with an estimated total of 1500 employees. A sample size of 150 employees was taken. Data was collected by use of a questionnaire. Data was analyzed mainly by use of descriptive and inferential statistics. The study established that the open tender system also supports the transportation of the oil in a way that minimizes evasion of the import duty.

Odhiambo (2017) did a study on the influence of sourcing practices on multinational corporations' performance. The study employed descriptive research design. Primary data was collected by use of semi-structured questionnaire. Data was analysed by use of SPSS statistical tool. The study results showed that most multinational corporations in the manufacturing sector apply strategic purchasing and internal integration sourcing practices. Githaiga (2015) investigated the procurement practices on performance of oil marketing firms in Kenya. The research design for the study was a descriptive study. The population in this research was made up of 58 oil importing and marketing companies. Since the sample size is relatively small a census was applied. Primary data was gathered using structured questionnaire and interviews were carried out on willing managers. Primary data was gathered using the questionnaires. Regression analysis was applied to determine the relationship between procurement practices and performance of the oil marketing firms. The results revealed that procurement practices have improved the performance of oil marketing firms.

## **METHODOLOGY**

This study utilized cross-sectional descriptive research design. The target population of the study was 99 small and medium Oil marketing firms operating in Mombasa County. The sample size of the study was 79 Oil marketing firms. Thus the unit of observation for the study comprised of all small and medium Oil marketing firms operating in Mombasa County which formed the unit of observation. The study employed stratified sampling technique. The choice of stratified sampling design was informed by the non-homogeneity of the study population. By using stratified sampling technique, the population was first stratified into mutually exclusive sub-groups (strata) who all share a similar characteristic and then samples were randomly selected from the strata (Taherdoost, 2016). The primary data was collected by developing questionnaires which were structured with a five point Likert scale in order to measure all variables. The researcher computed reliability of the research instrument using Cronbach's Alpha coefficient. The collected data was coded and analyzed using the Statistical Package for Social Sciences (SPSS version 25) tool.

## **FINDINGS AND DISCUSSION**

### **Descriptive Results**

Descriptive analysis was conducted on the study variables to check the mean and standard deviation. The results are presented in the following tables.

### **Supplier Relationships**

The researcher asked respondents to rate their agreement or disagreement on the various aspects of supplier relationships. They were required to do this on a 5 point Likert scale where 1 represented Strongly disagree while 5 represented Strongly agree. The results are presented in Table 1.

**Table 1. Supplier Relationships**

	Mean	Std deviation
My company upholds supplier collaboration to enhance buyer-supplier relationships	4.17	.231
In my organization, communication between the company and oil suppliers is open	4.23	.536
My company undertakes vendor development periodically to ensure they meet the required standards	4.02	.444
My company promotes alliance-based relationships with its supplies	4.26	.703

The results in Table 1. have shown that respondents agreed that the company upholds supplier collaboration to enhance buyer-supplier relationships and that in my organization, communication between the company and oil suppliers is open as indicated by a mean of 4.17 and mean of 4.23 respectively. Respondents also agreed that the company undertakes vendor development periodically to ensure they meet the required standards (mean=4.02) and that the company promotes alliance-based relationships with its supplies (mean=4.26). The results agree with the

findings by Nkpee, and Tamunomiebi, (2020) whose study on supplier relationship management revealed a significant relationship between supplier relations and vendor performance evaluation.

#### **Procurement Planning**

The study respondents were asked to rate their agreement or disagreement on the various aspects of procurement planning. They were required to do this on a 5 point Likert scale where 1 represented Strongly disagree while 5 represented Strongly agree. The results are presented in Table 2.

**Table 2. Procurement Planning**

	Mean	Std. Deviation
The company periodically identifies the market oil needs to determine the capacity to procure	4.41	.817
The company performs cost estimation before procuring oil supplies	2.15	.634
The oil supplies quality are specified before ordering for the supplies	4.26	.509
The oil transportation costs and labor are estimated to minimize unnecessary costs	3.01	.822

The results in Table 2. have shown that respondents agreed that the company periodically identifies the market oil needs to determine the capacity to procure and that the company performs cost estimation before procuring oil supplies as indicated by a mean of 4.41 and mean of 4.26 respectively. However, respondents disagreed that the oil supplies quality are specified before ordering for the supplies (mean=2.15). Respondents were indifferent to the statement that the oil transportation costs and labor are estimated to minimize unnecessary costs (mean=3.01). The results concur with Ogwang and Waweru (2017)

who investigated the influence of procurement planning on performance of Kisumu Water Company and the findings established that procurement planning has a positive significant influence on performance.

#### **Purchase Order Tracking**

The study respondents were asked to rate their agreement or disagreement on the various aspects of purchase order tracking. They were required to do this on a 5 point Likert scale where 1 represented Strongly disagree while 5 represented Strongly agree. The results are presented in Table 3.

**Table 3. Purchase Order Tracking**

	Mean	Std. Deviation
The firm applies electronic order tracking to enhance efficiency	4.13	.882
The company has standardized its purchase order	4.20	.887
The purchase order of the company has been centralized	4.82	.883
The company has integrated all purchasing functions electronically	4.89	.881

The results in Table 3. have shown that respondents agreed that the company applies electronic order tracking to enhance efficiency and that the company has standardized its purchase order as indicated by a mean of 4.13 and mean of 4.20 respectively. Respondents also agreed that the purchase order of the company has been centralized (mean=4.82) and that the company has integrated all purchasing functions electronically (mean=4.89).

#### **Supplier Sourcing**

The study respondents were asked to rate their agreement or disagreement on the various aspects of supplier sourcing. They were required to do this on a 5 point Likert scale where 1 represented Strongly disagree while 5 represented Strongly agree. The results are presented in Table 4.

**Table 4. Supplier Sourcing**

	Mean	Std. Deviation
The company source oil products from global suppliers	3.66	.753
The company has a policy to source oil products from a low-cost supplier	4.66	.748
The company sources oil products from multiple suppliers to enhance reliability	4.52	.741
The company sources its oil from single supplier to enjoy economies of scale discounts	3.64	.756

The results in Table 4. have revealed that respondents agreed that the company source oil products from global suppliers and that the company has a policy to source oil products from a low -cost supplier as indicated by a mean of 3.66 and mean of 4.66 respectively. Respondents also agreed that the company sources oil products from multiple suppliers to enhance reliability (mean=4.52) and that the company sources its oil from single supplier to enjoy economies of scale discounts (mean=3.64). The findings agree with a

study by Odhiambo (2017) on sourcing practices and multinational corporations' performance which revealed that supplier sourcing practices has positive effect on corporations' performance.

#### **Correlation Analysis**

Correlation analysis was done to determine the correlation between procurement practices and procurement performance using the Pearson's product moment correlation analysis. The results are shown in Table 5.

**Table 5. Correlation Coefficient**

		SR	PP	POT	SS	PP
Supplier relationships	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	72				
Procurement planning	Pearson Correlation	.296**	1			
	Sig. (2-tailed)	.000				
	N	72	72			
Purchase order tracking	Pearson Correlation	.504**	.776**	1		
	Sig. (2-tailed)	.000	.000			
	N	72	72			
Supplier sourcing	Pearson Correlation	.361**	.487**	1		1
	Sig. (2-tailed)	.000	.000			
	N	72	72	72		
Procurement performance	Pearson Correlation	.597**	.466**	.239	.519	1
	Sig. (2-tailed)	.000	.000	.000	.017	

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

Correlation results revealed that supplier relationships had significant and positive correlation with procurement performance as indicated by r of .597. Also bivariate correlation between procurement planning and procurement performance was discovered to be favorably and moderately correlated. This is supported by a correlation coefficient of 0.466 and a p-value of 0.000. As shown by a r of 0.239 and a p-value of 0.000, the bivariate correlation between purchase order tracking and procurement performance was found to be significant and positive. Moreover, the

correlation between supplier sourcing and procurement performance was revealed to be significant and positive ( $r = .519, p=0.17$ ).

#### Multiple Regression Analysis

A regression model was adopted in the study to establish the statistical relationship between the independent and the dependent variables. The collected data was used to regress procurement performance on procurement practices (supplier relationships, procurement planning, purchase order tracking and supplier sourcing). The results of regression analysis are presented as follows.

**Table 6. Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.678 <sup>a</sup>	.461	.428	1.9620

a. Predictors: (Constant), Supplier relationship, Procurement planning, Purchase order tracking, Supplier sourcing

The regression results in Table 6, showed a moderate regression between the study variables. In the model summary, the  $R^2$  is 0.461 indicating

that predictors explain 46.1 per cent change in procurement performance.

**Table 7. Analysis of Variance**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2068.395	4	517.098	14.321	.000 <sup>b</sup>
	Residual	2419.218	67	36.107		
	Total	4487.613	71			

a. Dependent Variable: Procurement performance

b. Predictors: (Constant), Supplier relationship, Procurement planning, Purchase order tracking, Supplier sourcing

From the ANOVA results in Table 7, it was established that the significance value in testing the reliability of the model was obtained as 0.000 which is less than 0.05, the critical value at 95%

significance level. Therefore, the model is statistically significant in predicting the relationship between the study variables.

**Table 8. Regression Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	11.519	4.061		2.836	.000
Supplier relationships	.438	.199	.175	2.201	.035
Procurement planning	.175	.059	.127	2.966	.020
Purchase order tracking	.519	.216	.483	2.403	.042
Supplier sourcing	.407	.122	.175	3.336	.000

a. Dependent Variable: Procurement performance

The derived regression coefficients of the model are:

$$Y = 11.519 + .438X_1 + .175X_2 + .519X_3 + .407X_4$$

The regression results showed that independent variables had significant value less than 0.05 implying that they are all significant. From the results, it showed that holding all factors constant at zero, the change in procurement performance would be 15.012. Further, the regression results showed that a unit change in supplier relationships would lead to 0.438 unit change in procurement performance. A unit change in procurement planning would lead to 0.175 unit change in procurement performance. Further, a unit change in purchase order tracking would lead to 0.519 unit change in procurement performance and finally, a unit change in supplier sourcing would lead to 0.407 unit change in procurement performance.

## CONCLUSIONS

The study concluded that the company upholds supplier collaboration to enhance buyer-supplier relationships. Also there is open communication between the companies and oil suppliers. The oil companies undertake vendor development periodically to ensure they meet the required standards and that the oil companies promote alliance-based relationships with supplier.

The analysis comes to the conclusion that the oil companies periodically identifies the market oil needs to determine the capacity to procure. Further, it is concluded that the oil companies perform cost estimation before procuring oil supplies. The oil transportation costs and labor are estimated to minimize unnecessary costs. The oil transportation costs and labor are estimated to minimize unnecessary costs. However, the study concludes that oil supplies quality are not specified before ordering for the supplies.

The study concludes that the oil companies apply electronic order tracking to enhance efficiency. The study also concludes that the company has standardized its purchase order. The study concludes the purchase order of the company has been centralized and that the company has integrated all purchasing functions electronically.

The study comes to the conclusion that the company source oil products from global suppliers. The study concludes that the company has a policy to source oil products from a low -cost supplier. The study concludes that the company sources oil products from multiple suppliers to enhance reliability and that the company sources its oil from single supplier to enjoy economies of scale discounts.

#### **RECOMMENDATIONS**

The study recommends that the management of Oil marketing companies should strive to build strong supplier relationships through value-based collaboration. This would go a long way in enhancing buyer-supplier relationships which would be beneficial to the firms. The oil companies should promote alliance-based relationships with suppliers. The oil marketing companies should give priority to open communication with oil suppliers. This communication would improve business relationships. In addition, the oil companies should periodically perform vendor development to develop them to meet the required standards.

The study recommends that the oil marketing companies should periodically identify the market oil needs to determine the capacity to procure. Further, the oil marketing companies should perform cost estimation before procuring oil supplies. Also the oil marketing companies should perform transportation costs and labor estimations to minimize unnecessary costs. More importantly,

the management of oil marketing companies should specify oil supplies quality prior to ordering from suppliers.

The study recommended that the management of Oil marketing companies should digitize oil purchasing processes like tracking by applying electronic order tracking. This would improve oil delivery efficiency. The study also recommends that the oil marketing companies should standardize their oil purchase order and they should centralize these purchase order. The oil marketing companies should undertake integration of all purchasing functions by means of electronic.

The study recommends that the oil marketing companies should consider going global for oil supplies. This would offer price benefits to the companies as international supplies are price competitive. The study recommends that the oil marketing companies put in place dynamic policies to source oil products from a low-cost supplier's and where necessary these companies should source oil products from multiple suppliers to enhance reliability.

#### **Suggestions for Further Research**

The scope of this study was limited to procurement practices in the context of oil marketing firms' procurement performance. Nonetheless, the researcher advises that further research be done on other procurement practices that can affect procurement performance of Oil marketing firms because only 46.1% of the results were explained by the independent variables in this study. Additional research could concentrate on different industries such as manufacturing industry.

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