FACTORS AFFECTING PROCUREMENT SERVICE QUALITY IN THE MANUFACTURING INDUSTRY IN KENYA: A CASE OF BIDCO OIL INDUSTRIES

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ABSTRACT
The researcher sought to establish the factors affecting procurement service quality among the manufacturing firms, with a case study of Bidco Oil Company. The general objective of the study was to establish the factors that affect procurement service quality. The study was guided by the following specific objectives; to assess the influence of supplier development on procurement service quality, to establish the impact of contract management on procurement service quality, to establish the impact of early supplier involvement on procurement service quality and lastly assess the influence of supplier relationship on procurement service quality, the researcher adopted descriptive survey design and used well-structured questionnaires to collect data. The researcher used a sample of 180 respondents that were purposively selected from the procurement department and other line departments that depend on procurement. The data was analyzed by the use of SPSSs and were presented using both descriptive and inferential statistics, frequency tables and percentages were used to present descriptive data while linear equation was used to show the relationship between variables and test hypothesis. It can be established from the study results that procurement service quality is relatively dependent on the kind of environment manufacturing firms are able to create between the firms themselves and their clientele. Whenever any manufacturing firm wants to improve on its procurement platform, then the customer input is very key especially in cases of new product development and launch. The study recommended that supplier relationship, proper execution of procurement contracts, supplier empowerment and involving suppliers in early product development is very crucial to the daily operation of each process of sourcing and hence improve quality of procurement service.

Key Words: Supplier Development, Contract Management, Supplier Involvement, Procurement Service Quality

INTRODUCTION
With today’s competitive business climate, and with the growing trend of outsourcing, offshoring, supply chain uncertainty and rapid globalization trend, that has led to an increasing concern and a major cause of inefficiency in the procurement performance. The supply chain management professionals have seen the need to constantly seek out creative ways of reducing costs, assuring and improving the quality of the final product and to achieve a faster time to market. Procurement service quality is one method that procurement managers can use to help achieve these supply chain goals. Sourcing is researching the market for potential input sources, securing the continuity of these sources, searching for alternative sources and keeping this relevant knowledge up to date (Vollman, Berry & Whybark, 2004). Service quality is vital for any organizations that want to leverage on its core competencies and outsource other activities in order to gain and retain competitiveness.

Materials delivery, quality, cost, financial position, communication and technology were recognized as the commonly used criteria, a fact confirmed from empirical results as well as in previous literature. However other criteria such as ISO certification, reliability, credibility, good references and product development were also necessary. Supplier evaluation strategy is important because it can assist an organization in assuring the right competences among procurement staff and the right tools to support an efficient administration, for example e-procurement; Support the achievement of organizational objectives by linking them with the procurement goals (Chen, 2011).

Strategic sourcing is a process where several purchasing activities are streamlined to support a total supply chain vision focusing on the ultimate customer. The main elements of strategic sourcing include: strategic elevation of the Purchasing function, internal coordination with other functions, supply-based optimization and buyer-seller relationships, and integration and early involvement of suppliers in planning and design processes. Smeltzer et al. (2003) noted that all strategic sourcing strategies emphasize the integration of business practices such as supplier assessment, supplier certification and measurement, therefore sourcing if properly structured can efficiently combine the fundamental competencies of a given firm with the skills and abilities of its suppliers.

The Kenyan economy was and still is experiencing growth with the public and private sectors being engaged in numerous development projects amid expected socioeconomic and governance impacts due to Vision2030 which on its own, has enlisted over 120 flagship projects in order to put the country in a new socio-economic and political pedestal. However, it is vital to note that despite this growth, a huge chunk of Kenya’s manufacturing sector which includes the sugar industry is marred with spending staggering millions of money on purchase of goods and services albeit having pitiable service delivery. It suffices to say; procurement managers are expected to contract with suppliers who provide value for their money, (Gian, 2012). In Kenya, about 60% of government revenue is spent on procurement annually. The Kenyan government is a major buyer of goods and services in the country. This it does through various public institutions spread out all over the country. In view of this, the government has put in place various procedures and processes to follow when conducting public procurement, (Martin, 2004).

Statement of the problem
Studies relating to procurement performance have been done in the past but they have largely dealt with the question of organizational performance. A study done by Odhiambo (2013) on strategic sourcing practices and factors influencing strategic sourcing
practices of manufacturing multinational corporations in Kenya, he found that the most outstanding strategic sourcing practice were strategic purchasing, internal integration, and information sharing. Nyagari et al (2014) addressed the relationship between strategic sourcing and the triple bottom line in Commercial Banks in Kenya. Karanja and Juma (2012) assessed the effect of Strategic Material Sourcing on Operational Performance of Manufacturing Firms: A Case of East African Breweries Ltd, Kenya. Muinde and Shalle (2018) reiterates that the procurement function in Kenya has been plagued by massive scandals and indignity which has been attributed to poor handling of procurement information thus leading to unprecedented corruption.

The above studies focused mainly on the influence of strategic sourcing on organizational performance among manufacturing firms and the impact of strategic sourcing on flexibility of firms supply chain agility, none of the studies dealt with the impact of strategic sourcing on manufacturing firms’ procurement service quality and yet these studies linked strategic sourcing with service quality. Hence this study was carried out to establish the relationship between strategic sourcing and procurement service quality.

**Study Objectives**

The general objective of this study was to examine the factors affecting procurement service quality in the Manufacturing firms in Kenya; A case of Bidco Oil Industries. The specific objectives were:-

- To establish the impact of Supplier Development on Procurement service quality at Bidco Oil Industries.
- To examine the impact of contract management on Procurement service quality at Bidco Oil Industries.
- To determine the influence of Supplier relationship management on Procurement service Quality at Bidco Oil Industries.

**THEORETICAL FRAMEWORK**

**Procurement Transaction Theory**

The theory of procurement transaction provides a conceptual framework identifying four basic power structures (buyer dominance, supplier dominance, interdependence and independence) and proposes that the nature of the structures underpinning buyer–supplier relationships have an impact on the scope for collaborative interactions to improve supply network performance. This is because such interactions represent a substantial investment, which organization will undertake only if they have a strong incentive to do so. It is argued that this incentive to collaborate is strong either where one supplier is dependent on another or where supplier is interdependent. It is further argued that the incentive to collaborate is much weaker in circumstances of buyer–supplier independence (Anually, 2009). The idea of a strategic procurement is used to complement this concept of a focused procurement by suggesting that specific networks can be intentionally designed, created and managed as partially closed systems to deliver enhanced value either through innovation or cost reduction or through a combination.

**Resource Based View Theory**

The currently dominant view of business strategy – resource-based theory or resource-based view (RBV) of firms – is based on the concept of economic rent and the view of the company as a collection of capabilities. This view of strategy has a coherence and integrative role that places it well ahead of other mechanisms of strategic decision making. Rauch et al. (2005) used the Resource Based Theory (RBT) to explain the importance of human capital to entrepreneurship. According to RBT, human capital is considered to be a source of competitive advantage for entrepreneurial firms. Ownership of firm-specific assets enables a company to develop a competitive advantage. This leads to idiosyncratic endowments of proprietary resources (Barney, 2008). According to
RBT, sustainable competitive advantage results from resources that are inimitable, not substitutable, tacit in nature, and synergistic, Davila, Epstein & Shelton (2006). Therefore, managers need to be able to identify the key resources and drivers of performance and value in their organizations.

The RBT reinforces the relationship between various levels of structures within the organizational climate and culture that are geared towards enhancing greater improvement in the procurement performance. It also impacts positively on the accountability, reliability and create a greater user satisfaction among the stakeholders in the e-procurement environment.

**Conceptual Framework**

<table>
<thead>
<tr>
<th>Supplier Development</th>
<th>Contract Management</th>
<th>Supplier Relationship Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information sharing and development</td>
<td>Engagement</td>
<td>Supplier input in NPD</td>
</tr>
<tr>
<td>Trainings</td>
<td>Execution</td>
<td>Prompt payments</td>
</tr>
<tr>
<td>Empowerment</td>
<td>Remedies for damages</td>
<td>Empowerment</td>
</tr>
</tbody>
</table>

**Independent variables**

**Dependent variable**

**Figure 1: Conceptual Framework**

Source: Author (2019)

**Supplier development**

Larson (2006) noted that suppliers’ capabilities determine how sourcing process and quality attainments could be achieved in the supply chain saying that information sharing was critical in strengthening the capabilities of the firm’s suppliers. Larson’s (2006) further said that information affects every part of procurement process because information serves as the connection between various stages of sourcing process and that the use of Enterprise Resource Planning (ERP) systems provide the transaction tracking and global visibility of information from within a company and across its supply chain. The real time information helps supply chain improve the quality of decision and develop the knowledge of suppliers on the quality of decision making. Fraiser (2003) posits that information sharing between the firm and its suppliers is crucial to the daily operation of each process of procurement cycle. Manufacturing firms use information to manage its inventories and hence firms’ suppliers should be well communicated as regards to the necessary materials for productions.

Donald (2006) noted that suppliers needed to be empowered through enabling technologies which they could use to share and analyze information in the supply chain and that managers must decide which technologies to use and how to integrate technologies into their companies. Waters (2006) noted that information flow between the firm and its suppliers and continuous training and development on the part of applicable technologies is a major duty of any procurement managers. The use of Electronic Data Interchange (EDI) allows companies to place instantaneous paperless purchase orders with suppliers. Waters (2006) further noted that training of suppliers in the application of EDI should be adequate and that the efficiency of EDI increases with the knowledge of suppliers in the use and application of it. Transactions are made faster and more accurate than paper-based, suppliers should therefore be educated on the use of internet is significantly important over EDI because the internet convey much more information and offers more visibility than EDI, better visibility enhanced and improved decision across the supply chain process, which has also become the center of every business organization.

**Contract Management**
Donald (2006) argued that contracting played a great role in ensuring performance of supply chain that is achieved through strategic fit, that is basically achieved if the element of responsiveness is adequate across the entire sourcing process, Piskorski (2005) notes that facilities, inventory, transportation and pricing elements are the most important in contract management, facilities include the actual location storage, assembly and production efficiencies, warehousing also is significant, pricing element in contract management determines how much a firm will charge for goods and services that it makes available in the supply chain any change in pricing should be adequately covered in the contract. Larsons (2009) established that transport element should be covered by the contract because it largely impacts on supply chain performance which greatly impacts on procurement services and performance.

Waters (2006) found that inventory was critical in ensuring that contract management is carried out properly which are crucial elements of any sourcing process. Further, Walters (2006) noted that supply chain strategy determines the nature of procurement of raw materials, transportation of materials to and from company, manufacture of products or operations to provide service and distribution of the product to the customer along with any follow ups service and specification of whether these processes will be performed in-house or outsourced are the main reasons why sourcing is carried out. Walters (2006) concluded that inventory significance is derived from the need to achieve quality service delivery in procurement process.

**Empirical Review**

In the recent study by (Lahiri, Kedia & Mukherjee, 2011) identified that higher partnership quality between the buyer and the supplier leads to increased performance benefit and management capability of the firms. Close relationship means risks and rewards should be shared by the channel members. There should also be a willingness to sustain the relationship for a long period of time (Shin, Collier, & Wilson, 2008). Hence, when managing a supply chain network, it was essential to recognize the partners of the supply chain for resulting smooth information flow, inventory control and operation performance.

Odoom (2012), established that logistics and supply chain management practices that promote effective procurement performance with regards to reducing costs and delivering high quality services to customers were still underutilized in the industry even with its success in companies like Wyndham Worldwide and Hilton Holdings in their operations.

Gichuru, Iravo and Arani (2015) study recommended that food manufacturing firms should collaborate with suppliers and other stakeholders in information and resources sharing to achieve high performance. With this nature of collaborative environment created, the procurement sector performance could be enhanced in various aspects; improved service quality, acceptable procurement practices agreeable among the stakeholders and high product quality in relation to its performance.

**METHODOLOGY**

The study adopted the survey design since it largely aimed to understand the relationship between strategic sourcing and service quality. This research targeted 180 employees of the procurement department and other line departments that receive services from the procurement department at the Bidco Oil Industries in Thika. In the study, the sample frame comprised of procurement managers, middle level managers, line managers, supervisors and other line employees. Simple random sampling approach was used in selecting the sample for the procurement officers and purposive sampling was used to pick the samples of employees from other departments mostly middle level managers and other line managers and supervisors. Simple random sampling method is applied in situations where the population
of target exhibit similar characteristics and therefore each individual stands a chance to be selected for the study are selected (Kombo& Tromp, 2006). The researcher also applied his sole discretion to select only those respondents whose inputs were meaningful and relevant for the research.

The study used a heterogeneous population that was drawn from procurement officers and employees of Bidco Oil Industries. According to the existing HR records (2017), there were a total of 1800 employees at the plant. Out of these, the study sampled 10% that represented the entire population of interest. Mugenda and Mugenda (2003) recommend that 10-30% of the population is sufficient representation of the population. The total target population was 1800 employees from BIDCO. Thus, the sample selected for the study was 180 employees from all the departments in BIDCO which was derived from the sampling distribution, as shown in Table 1 below.

### Table 1: Sampling Distribution

<table>
<thead>
<tr>
<th>Category of employee</th>
<th>Total population</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement director</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Procurement managers</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Procurement officers</td>
<td>23</td>
<td>21</td>
</tr>
<tr>
<td>Other line employees</td>
<td>1772</td>
<td>156</td>
</tr>
<tr>
<td>Total</td>
<td>1800</td>
<td>180</td>
</tr>
</tbody>
</table>

**Source:** www.bidco.com (2017)

Primary data was collected using structured questionnaires and interviews which were developed by the researcher as the main data collection tools. The questionnaires were self-administered to the target population in order to get their opinions. These were designed by the researcher and given only to those members of the population with some education and who were able to read and understand the details about the study.

Descriptive statistics was used in analyzing quantitative data that involved descriptive statistical techniques. Descriptive statistics compliments the use of frequencies, mean, and percentages that was then summarized and presented using tables, graphs and charts. Statistical Package for Social Sciences (SPSS) version 21 was employed in computing numerical responses. Frequencies and percentages were used in analyzing descriptive data which was presented in tables. Data analysis, presentation, interpretation, and research writing was carried out simultaneously. Procurement service quality was regressed against four variables of independent variables namely (Supplier development, Contract management, Supplier relationship).

### FINDINGS

#### Table 2: Supplier Development Distribution

<table>
<thead>
<tr>
<th>Statements</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier development impact significantly on procurement service quality</td>
<td>1.84</td>
<td>.672</td>
</tr>
<tr>
<td>in the organization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharing information with suppliers on the current product design helps</td>
<td>1.86</td>
<td>.662</td>
</tr>
<tr>
<td>achieve quality service in procurement process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undertaking regular training of suppliers on changing business models</td>
<td>2.05</td>
<td>.659</td>
</tr>
<tr>
<td>improve quality of procurement service delivery</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As shown in Table 2, a majority of respondents agreed that supplier development impacted significantly on procurement service quality in the organization, as represented by a mean score of 1.84. There was, however, insignificant variation (std. dev. = 0.672) in agreement to this statement. On whether sharing information with suppliers on the current product design helped in achieving quality service in procurement process, a majority of respondents agreed, as represented by a mean score of 1.86. There was, however, no significant variation (std. dev. = 0.662) in agreement to the assertion. Again, these results resonate with Donald (2006) that noted that suppliers needed to be empowered through enabling technologies which they could use to share and analyze information in the supply chain and that managers must decide which technologies to use and how to integrate technologies into their companies. Lastly, undertaking regular training of suppliers on changing business models improve quality of procurement service delivery, represented by an average score of 2.05. There was, however, insignificant variation (std. dev. = 0.659) in agreement to this statement.

**Contract Management**

**Table 3: Contract Management Distribution**

<table>
<thead>
<tr>
<th>Statements</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper execution of procurement contracts enables organizations attain desired service quality levels</td>
<td>1.88</td>
<td>.722</td>
</tr>
<tr>
<td>Instituting proper remedies to non-fulfillment of procurement contract will ensure quality service is attained</td>
<td>2.1</td>
<td>.573</td>
</tr>
<tr>
<td>Elaborate execution procedures is a key factor in the success of contract management</td>
<td>1.83</td>
<td>.645</td>
</tr>
<tr>
<td>Pricing mechanism is an essential requirement in the contract engagement as a shield to suppliers in cases of price changes.</td>
<td>1.97</td>
<td>.812</td>
</tr>
</tbody>
</table>

On whether proper execution of procurement contracts enabled organizations to attain desired service quality levels, the respondents agreed, as represented by a mean score of 1.88. There was, however, no significant variation (std. dev. = 0.722) to the assertion that proper execution of procurement contracts enabled organizations to attain desired service quality levels. These results conform to Larsons (2009) observation that procurement elements should be covered by the contract because they largely impacts on supply chain performance. Moreover, on whether instituting proper remedies to non-fulfillment of procurement contract ensured that quality service was attained, a majority of respondents agreed, as represented by a mean score of 2.1. However, there was no significant variation in agreement that proper execution of procurement contracts enabled organizations to attain desired service quality levels, (std. dev. = .573). Majority of the respondents also agreed that elaborate execution procedures is a key factor in the success of contract management as represented by a mean of 1.83, however, there was no significant variation in agreement as pertains execution procedures of contract to achieve the desired procurement quality levels, (std. dev. = .645). The respondents also agreed
that pricing mechanisms was an essential requirement in the contract engagement as a shield to cushion suppliers from changes in cases of price and price wars that sometimes occur in the course of the implantation of procurement contract. This was found to be very significant as represented by a mean score of 1.97. There was however an insignificant variation with the level of agreement as regards pricing mechanism in case of price changes during periods of procurement process that would affect procurement service quality. This findings resonates with Piskorski (2005) that pricing elements are the most important in contract management, include such facilities as actual location, storage, assembly which affect production efficiencies, and warehousing which is a significant pricing element in contract management that determines how much a firm will charge for goods and services that it makes available in the supply chain and that any changes in pricing should be adequately covered in the contract.

SUMMARY
The study sought to find out the opinion of the respondents in establishing the fact that supplier development has an influence on procurement service quality. The results indicated that a majority of respondents agreed as represented by a mean score of 1.84. This is an indication that supplier development impact significantly on procurement service quality in the organization as was found out from the respondents’ opinion.

The results conform with the observation by Fraiser (2003) that information sharing between the firm and its suppliers is crucial to the daily operation of each process of sourcing. On whether sharing information with suppliers on the current product design helped in achieving quality service in procurement process, it was observed that it greatly has a significant impact as represented by a mean score of 1.86. There was, however, no significant variation (std. dev. = 0.662) in agreement to the assertion. Again, these results resonate with Fraiser’s (2003) observation that manufacturing firms uses information to manage their inventories hence suppliers should be well communicated to regarding the necessary materials for productions.

Lastly, it was also found that undertaking of regular trainings for suppliers on changing business models improve quality of procurement service delivery, as was represented by an average score of 2.05. There was, however, insignificant variation (std. dev. = 0.659) in agreement to this statement.

The study also sought to establish whether BIDCO oil industries do undertake contract management, 83.6% of the respondents indicated that BIDCO did undertake contract management. Only a small minority indicated that BIDCO did not undertake contract management. These results confirm that there were high numbers of BIDCO company employees who believed that the company used to undertake contract management. These results conform to Waters (2006) observation that inventories are crucial elements of any sourcing process management. The pricing element in contract management plays a crucial role in the determination of how much a firm will charge for its goods and services that it makes available in the supply chain and that any change in pricing should be adequately covered in the contract.

The respondents also indicated that proper management of procurement contract increases the level of quality service provision by manufacturing firms as shown in table 4.8, where a vast majority (92.8%) of respondents indicated that proper management of procurement contract increases the level of quality of service while a small minority (7.2%) gave a contrary opinion. Again, the results of the study resonate with Walters (2006) conclusion that inventory significance is derived from the need to achieve quality service delivery in procurement process. These results of the study indicated that
most BIDCO employees believed that proper management of procurement increased the level of quality of service in BIDCO.

On whether proper execution of procurement contracts enabled organizations to attain desired service quality levels, the respondents agreed, as represented by a mean score of 1.88. There was, however, no significant variation (std. dev. = 0.722) to the assertion that proper execution of procurement contracts that enabled organizations to attain desired service quality levels. These results conform to Larsons (2009) observation that procurement elements should be covered by the contract because they largely impacts on supply chain performance. Moreover, on whether instituting proper remedies to non-fulfillment of procurement contract ensured that quality service was attained, a majority of respondents agreed, as represented by a mean score of 2.1.

**RECOMMENDATIONS**

The study sought to find out the opinion of the respondents in establishing the fact that supplier development, sharing of information with suppliers on the current product design and undertaking of regular trainings for suppliers on changing business models improve quality of procurement service delivery. The results indicated that a majority of respondents were in agreement with this assertion. Therefore the researcher would recommend that it would be more significant for manufacturing industries to engage more with their suppliers since it brings more information sharing between the firm and its suppliers which is very crucial to the daily operation of each process of sourcing.

Contract management plays a crucial role in the determination of how much a firm will derive in terms of benefits from its goods and services that it makes available in the supply chain and that any changes that are anticipated should be adequately covered in the contract. This therefore indicates that continued forecasting on inventory movements is very critical in ensuring contract management is properly carried out.

**Suggestions for further Research**

The study focused on influence of strategic sourcing on procurement service quality and its contribution to enhancing performance in the procurement cycle, with key focus on what influences procurement service quality. The researcher only considered three variables in his study but did not capture an aspect of the moderating factors that influence these variables on procurement service quality, supply chain risk management, and inventory management and therefore suggests that further studies can be done on this area.

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