PROCUREMENT SPECIFICATIONS AS A CATALYST FOR ECONOMIC DEVELOPMENT (A CASE STUDY OF KENYA POWER COMPANY).

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ABSTRACT

Specification is one of the most strategic areas in the supply chain. Research has supported the argument that a firm is as good as its products, to support this notion an organization without a competent specification, its competitive edge in the supply chain is hampered significantly (Lysons and Farrington, 2006).

This abstract provides a preview of a paper which documents the assessment of the impact of specifications on procurement performance and show cases why procurement can act as a catalyst for economic development. Information about this is obtained from books, magazines and journals that report on impact of specification on procurement and most important on a case study of Kenya Power Company (KP). The later was chosen due to its high volumes of purchases for both goods and services.

Kenya Power limited procurement department has been using various specifications so as to be able to source the right materials. Use of appropriate specifications has led to some improvements in procurement performance but they have not yet realized the full impact of specification on procurement performance.

The key findings are presented based on respondents in two categories, category A and Category B. Category A been those directly involved in procurement. In regard to the impacts of specifications on procurement performance, 87% and 90%, of respondents in category A and B respectively advocated that performance specification led to quality improvement, supplier innovations, additional value adding services and short lead times hence improvement of procurement performance while 91% and 93% of respondents in category A and B respectively advocated that conformance specification discourages innovations, increases cost and causes difficulties in preparing specification documents thus affecting procurement performance negatively. Both categories concurred that hybrid specifications have a positive impact on procurement performance while brand specification has negative impact on the same.

Keywords: Specifications, performance specification, conformance specification, hybrid specification, brand name specification
1.0 BACKGROUND OF THE STUDY

Kenya Power limited procurement department has been using various specifications so as to be able to source the right materials. Use of appropriate specifications has led to some improvements in procurement performance but they have not yet realized the full impact of specification on procurement performance.

Specification is one of the most strategic areas in the supply chain. Research has supported the argument that a firm is as good as its products, to support this notion an organization without a competent specification, its competitive edge in the supply chain is hampered significantly (Lysons and Farrington, 2006).

One strategic decision of a firm's supply chain is how the specification is done, and the parties involved. For purposes of this research, specification is defined as a statement of attributes of a product, process or services. (Lysons, 2000).

Firms that buy capital items and non standardized goods often find themselves with difficulties in outlining the attributes of the products and services they want from suppliers, which later causes conflict between procurement department, suppliers and user. As firms grow the number of capital assets and services demanded may increase, thus causing a major challenge in the specifications (Ronald and Ballou, 2004).

The process of describing the need is called specification (Lysons, 2000). Effective procurement management and development begins with a determination of the need and then clearly describing need so that all parties understand what is required of them, It involves coming up with and adopting the appropriate method of specifications.
The ideal performance measurement system should: Reveal how effectively customers' needs and expectations are satisfied, Support the firms operating goals and objectives, provide a simple set of measures as possible; Support organizational learning and continuous improvement; and Provide congruence of measures across organizational levels (Burt and Dobbler 2004).

Statement of the Problem

The purpose of this study was to assess the impact of specifications on procurement performance. Measures have been taken to enhance procurement efficiency and effectiveness as different scholars have shown how specifications have a link to improved procurement performance (Lysons and Farrington 2006). This study aims at investigating this phenomenon and assess the impact of specifications to a firm such as Kenya power limited.

2.0 OBJECTIVES

General objective

The general objective of this study was to assess the impacts of specifications on procurement performance.

Specific objectives

(1) To determine the impact of Performance specification on procurement performance at Kenya power.

(2) To examine the impact of conformance specification on procurement performance at Kenya power.

(3) To establish the impact of hybrid specification on procurement performance at Kenya power.
(4) To find out the impact of brand name specification on procurement performance at Kenya power.

**Research questions**

(1) What is the impact of performance specification on procurement performance?

(2) What is the impact of conformance specification on procurement performance?

(3) What is the impact of hybrid specification on procurement performance?

(4) What is the impact of brand name specification on procurement performance?

**Justification**

The findings of this research will be applied entirely in the procurement functions of both private and public companies in aid of achieving short and long term objectives in line with the impact of specifications on procurement performance. Since the overriding philosophy in specification is to clearly and unambiguously outline the attributes of product, process or services (describing the need) and hence the improvement of procurement performance, the study is mirrored in a way that would bring forth a clear understanding of the impact of specifications on procurement performance and by relation the financial performance of the organizations hence the economic state of the nation within which the organizations operate.

**3.0 LITERATURE REVIEW**

**Performance/functional/output specifications**

Performance specifications provide the specific performance that is required but not the method of achieving that performance (Lysons and Farrington, 2006). This means that suppliers are free to choose the materials they intend to use and the manufacturing process or delivery
process if it is a service that is being bought. Giving freedom to supplier’s results to lower costs which is eventually passed to final customers at a lower price (Lysons and Farrington, 2006).

**Conformance/Design/Input specification**

This specification gives precise details of how a product is to be made or a service delivered. It provides in-depth detail for both functional and non-functional requirements and covers assumptions, constraints, performance, dimensions, weights and reliability. If the cost of the standard item is unacceptably high or if there is a supply risk because the product is protected by a patent, it may be worthwhile developing your own specification in order to increase the potential supply base (Lysons and Farrington, 2006)

**Hybrid specifications**

Combine the design and performance specifications, that is giving precise details on how the product is to be made or a service delivered as well as giving suppliers some freedom so as to encourage innovation. Hybrid specification supplement the disadvantage of conformance specifications with the advantages of performance specifications and so it ends up yielding better results (Lysons and Farrington, 2006)

Some of the advantages of hybrid specifications are Suppliers have greater opportunity for innovation, as they are free to offer solutions that in their view best meets the specification, The specification documentation requires less effort to produce, There is more opportunity to pass risk onto the supplier as they have responsibility for the way the specification is met, The contracting authority can specify outputs that can easily be monitored, There is likely to be a wider choice of suppliers (Lysons and Farrington, 2006)
Brand name specifications

Involves identifying the specific make and the model of the item to be procured; this type specification should only be used when no other type of specification can satisfy the Government's needs (Lysons and Farrington, 2006). A specific make and model specification restricts competition and must be accompanied by a justification (Kenya Gazette Supplement No.77, 2005).

Conceptual Framework

The key variables which were measured in regard to the study were both the independent and dependent variables. These variables were measured in regard to the ratings on the percentage number of respondents. Measurement of the distinct variables were based on an ordinal scale whereby the findings of each variable were to be evaluated according to the percentage number of respondents hence this approach gave the researcher a basis to quantify and justify the authenticity of the data that would support the empirical findings of the study. In order to harness and have a formidable understanding of the subject under the study, the researcher used a conceptual model indicated below to assess intensively and extensively the impacts of specifications on procurement performance.

Dependent variable

The dependent variable is often referred to as the outcome or criterion variable. It is the change or difference in this variable that the researcher investigated. For this study, the dependent variable which is procurement performance was affected immensely by the independent variables, which are specifications methods.
4.0 RESEARCH METHODOLOGY

Research design

Descriptive research best describes the way things are (Kumar 2005). The researcher used descriptive research design which primarily shows the state of affairs as it exists at the present (Kothari 2004). The design is appropriate because it allows the researcher to describe, record, analyze and report conditions that exist or existed. Descriptive research attempts to describe a situation, Problem, phenomenon systematically, or describes attitudes towards an issue. It often involves collecting information through interviews, observation, data review, or surveys. Data was collected, edited, summarized and reduced to basic representative values that helped the researcher present his findings of the study in frequencies, charts and presentation in tables and graphs. This form of research design enabled the researcher to illustrate perfectly the diverse findings of the study.

Sampling frame

A sampling frame is the list of all the elements or all the people within a population who can be sampled, and may include individuals, firms or households (Copper and Schindler (2003). A unit of population is a relative term. If all the workers in a firm make a population, a single worker is a unit of the population the sampling frame contains all the units of the population. It is to be defined clearly as to which units are to be included in the frame. The frame provides a base for the selection of the sample.

Sample and Sampling technique

According to Copper and Schindler (2003), sample size must be large enough to be representative of the universe population. Sampling is defined as the process of selecting a
number of individuals for a study in such a way that they represent the larger group from which they are selected (Mugenda & Mugenda, 2003).

The researcher used stratified sampling which provides a greater precision geared to bring forth proportionate stratification whereby each stratum has the same sampling fraction (Kothari, 2004). To constitute a structured sample, the researcher used the stratified method since the population to be sampled was heterogeneous. Using this technique the population was stratified into a number of strata and a sample item was selected from each stratum. The researcher used a sample of ninety (90) employees which constituted 30% of the whole population under the study which is three hundred (300) employees (Mugenda and Mugenda 1999). The decision to use this sample was also based on time and cost because they as well determine the sample size. Hence time and resources constraint of the researcher contributed to this delimitation. (Mugenda and Mugenda 1999)

Therefore a sample size of fifteen (15) employees from either of the six departments were from procurement, operations, stores, legal, finance and marketing in Electricity house, Stima plaza, and industrial area branches. Simple random sampling was used to collect the sample size.

5.0 RESEARCH FINDINGS AND DISCUSSION

Overall rate of response

The research study targeted ninety (90) employees from six distinct departments of the company (Kenya Power). Ninety (90) questionnaires were administered to the various departments and they were collected after two weeks. The following table shows the response rate from the various respondents. Table 4.1 shows the degree of responses.
Table 4.1 Rate of response

<table>
<thead>
<tr>
<th>Departments</th>
<th>Given</th>
<th>Collected</th>
<th>Fully answered</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>100%</td>
</tr>
<tr>
<td>Operations</td>
<td>15</td>
<td>15</td>
<td>14</td>
<td>93.33%</td>
</tr>
<tr>
<td>Stores</td>
<td>15</td>
<td>14</td>
<td>12</td>
<td>80%</td>
</tr>
<tr>
<td>Finance</td>
<td>15</td>
<td>13</td>
<td>13</td>
<td>86.67%</td>
</tr>
<tr>
<td>Legal</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>100%</td>
</tr>
<tr>
<td>Marketing</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>87</td>
<td>84</td>
<td>93.33%</td>
</tr>
</tbody>
</table>

The researcher obtained feedback from eighty four respondents out of the targeted ninety respondents across all the departments of the company (Kenya Power), which represented 93.33% of the administered questionnaires and which the researcher based his discussion and recommendations on. Procurement, legal and marketing department registered 100% response respectively, while operations department registered 93.33% response. Stores and finance departments registered 80% and 86.67% respectively.

Data analysis and discussion

Data was collected, edited, summarized and reduced to basic representative values that helped the researcher present his findings of the study in frequencies, percentages and presentation in tables. Also the researcher arranged the data according to some common characteristics possessed by the items constituting the data. Then the last step was tabulation, which involved
the arrangement of data in columns and rows which created absolute clarity of the data presented.

*Comparative analysis based on a review of the impacts of specifications on procurement performance.*

Most of the respondents had a relatively positive response. The analysis was therefore categorized into two categories, those that directly deal with the specifications and those that indirectly deal with the specification; these was data got from procurement, operation and stores departments in the first category and those from the marketing, finance and legal departments in the second category respectively.

According to the data collected and analyzed, forty-two (42) of the respondents which represented 100% fell under category A and they represented procurement, operations and stores department. The rest of the respondents who were 100% and represented forty-two (42) respondents fell under category B and represented finance, marketing and legal departments. This findings show that the company has a balanced number of respondents who deal with specifications directly and indirectly.

1) *Impact of performance specifications on procurement performance*

The researcher reviewed the impacts of performance specifications on procurement performance activities such as improved quality of goods, supplier innovations, additional value added service within the bids, and long lead times were used. Table 1.2 illustrates this phenomenon.
Table 1.2 Impact of performance specifications on procurement performance

<table>
<thead>
<tr>
<th>Category</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No of Respondents</td>
<td>Percentage%</td>
</tr>
<tr>
<td>Category A</td>
<td>37</td>
<td>87%</td>
</tr>
<tr>
<td>Category B</td>
<td>38</td>
<td>90%</td>
</tr>
</tbody>
</table>

Analysis of 90% of the category B revealed that the respondents were positive (strongly agreed or agreed) that performance specifications has a positive impact on procurement performance they argued that performance specifications results to quality improvement, supplier innovations, additional value added service within the bids, 10% of the respondents were of the opinion that performance specifications do not necessarily result to long lead times. 87% of category A was of the opinion that performance specifications has an impact on procurement performance and that quantity improvements and additional value added services within bids had a positive impact on procurement performance 13% of the respondents concurred that supplier innovations would not necessarily impact on procurement performance but added that it would be better to emphasize on short lead time since this would ensure improved procurement performance.

1) The impacts of conformance specifications on procurement performance: The researcher reviewed the impacts of conformance specifications on procurement performance.
The activities reviewed entailed; discouraged innovations, increased cost, and lead to difficulties in preparation of specification documents. The table 4.7 shows the impacts of conformance specifications on procurement performance.

**Table 1.3 Impacts of conformance specifications on procurement performance:**

<table>
<thead>
<tr>
<th></th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No of Respondents</td>
<td>Percentage%</td>
</tr>
<tr>
<td>Category A</td>
<td>38</td>
<td>91%</td>
</tr>
<tr>
<td>Category B</td>
<td>39</td>
<td>93%</td>
</tr>
</tbody>
</table>

The two categories concurred that using conformance specification would impact on procurement performance. 91% of the respondent in category A concurred that using conformance specifications would discourage suppliers innovations, increases cost, and lead to difficulties in preparation of specification documents. 93% of Category B respondent concurred that using conformance specification would impact on procurement performance but negatively since suppliers will be left with little freedom thus discouraging innovations. It also resulted to increased cost due to rework as a result of strict specifications as well as difficulties in the preparation of specification documents due to the need to adhere to those specifications.

2) **The impact of hybrid specifications on procurement performance:** The distinct activities that were reviewed by the researcher include activities such as; easy sourcing, increased
customer satisfaction, increased profitability, and less waste. Table 4.8 indicates the impact of hybrid specification on procurement performance

**Table 1.4 Impact of hybrid specifications on procurement performance**

<table>
<thead>
<tr>
<th>Category</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No of Respondents</td>
<td>Percentage%</td>
</tr>
<tr>
<td>Category A</td>
<td>42</td>
<td>100%</td>
</tr>
<tr>
<td>Category B</td>
<td>42</td>
<td>100%</td>
</tr>
</tbody>
</table>

All the respondents that is 100% in category A and B respectively concurred that using hybrid specifications had an impact on procurement performance. Both concurred that hybrid specifications have a positive impact on procurement performance and resulted to easy sourcing, increased customer satisfaction, increased profitability, and less waste they agreed that a mixture of two specifications always resulted to satisfied and happy customers/users.

3) **Impacts of brand names specifications on procurement performance:** In order to obtain explicit details based on the impacts of brand names specification on procurement performance, the researcher measured the following distinct activities restricted competition, less competitive prices, difficult sourcing, reduced inspection cost. The table 4.9 indicates the impacts of brand names specification on procurement performance.
Table 1.5 Impacts of brand names specifications on procurement performance

<table>
<thead>
<tr>
<th>Category</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No of Respondents</td>
<td>Percentage%</td>
</tr>
<tr>
<td>Category A</td>
<td>34</td>
<td>80%</td>
</tr>
<tr>
<td>Category B</td>
<td>42</td>
<td>100%</td>
</tr>
</tbody>
</table>

34 of the respondent in category A which represented 80% were of the opinion that using brand names specifications restrict competition due to their limited choice and this would result to less competitive prices and difficulty in sourcing, 20% were of the opinion that brand name specifications has little to do with inspection cost and they agreed that inspection is a must regardless of the brand.

Forty two (42) of the respondent in Category B which represented 100% were of the opinion that using brand name specifications impacted on procurement performance negatively since it hindered competition thus escalating the prices, it also lead to difficult in sourcing but reduced inspection cost.

**General challenges faced by a firm during specification in the improvement of procurement performance.**

From the findings indicated in the table 4.10, 85.71% of the respondents indicated that lack of clear unambiguous communication is an impediment in specification. Lack of user
involvement and early supplier involvement represented 80.95% and 89.29% respectively. Lastly, lack of early buyer involvement represented 66.67% of respondents while less training forums represented 50% of the respondents.

**Recommendations for improving specifications and their impacts on procurement performance**

Recommendations based on effective communication across all the stakeholders, early user, buyer and supplier involvement in the specifications, provision of training forums, provision of clear policies, and strengthening of buyer-supplier relationship were immensely highlighted by the respondents interviewed.

**Table 1.6 Recommendations to improve specifications and their impacts on procurement performance**

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective communication</td>
<td>75</td>
<td>89.29%</td>
</tr>
<tr>
<td>Early user, buyer and supplier involvement</td>
<td>70</td>
<td>83.33%</td>
</tr>
<tr>
<td>Provision of training forums</td>
<td>66</td>
<td>78.57%</td>
</tr>
<tr>
<td>Provision of clear policies</td>
<td>68</td>
<td>80.95%</td>
</tr>
<tr>
<td>Strengthening of buyer-supplier relationship</td>
<td>64</td>
<td>76.19%</td>
</tr>
</tbody>
</table>

From the basis of the findings in the table 4.11, seventy five (75) of the respondents who represented 89.29 % were of the opinion that effective communication between all the stakeholders in procurement should be prioritized. Early user, buyer and supplier involvement, Provision of clear policies, Provision of training forums, represented 83.33%, 80.95% and 78.97% respectively while strengthening of buyer-supplier relationship represented 76.19%. This
therefore should represented the order of priorities for improvement of procurement performance through specifications.

**6.0 CONCLUSIONS**

Though a lot of strides have been made in regard to specifications so as to enhance procurement performance at Kenya Power, still there are a couple of challenges which have hampered the full impacts of specifications on procurement performance to be felt. The noticeable challenges include; Lack of clear and unambiguous communication; Lack of user involvement, lack of early supplier involvement, and lack of early buyer involvement as well as lack of adequate training. When procurement performance is enhanced, there is greater efficiency in the organization resulting to more productivity hence greater contribution to the nations revenue. In short, procurement specifications act as a catalyst for Economic development.

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