THE INFLUENCE OF COMPETITIVE BIDDING AND PERFORMANCE OF SMALL AND MEDIUM FOOD PROCESSING ENTERPRISES IN KENYA

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Abstract

Purpose: The main objective of the study was to examine the Influence of Competitive Bidding and Performance of Small and Medium Food Processing Enterprises in Kenya.

Materials and methods: this study used descriptive research design Descriptive research design is used to describe characteristics of a population or phenomenon being studied. It does not answer questions about how/when/why the characteristics occurred. Rather it addresses the question what are the characteristics of the population or situation being studied. The characteristics used to describe the situation or population is usually some kind of categorical scheme also known as descriptive categories. The unit of observation of the research consisted of Directors/Owners and procurement managers the study collected primary data for analysis. Primary data was obtained by the use of structured questionnaires. The Questionnaires were selected upon because of its advantages of being able to collect huge amount of data in a cost effective way and at the same time. Data Analysis is the process of systematically applying statistical and/or logical techniques to describe and illustrate, condense and recap and evaluate data. various analytic procedures “provide a way of drawing inductive inferences from data and distinguishing the signal (the phenomenon of interest) from the noise (statistical fluctuations) present in the data. The data was then be coded and checked for any errors and omissions. With the aid of Statistical Package for Social Sciences SPSS v 23.0, the research thus performed a multiple regressions analysis on primary data to estimate the beta values of factors and t-test to determine the significance of the coefficients at 95% confidence level. F–test statistics was used to determine the overall significance of the model at a confidence level of

Results: The study revealed that in the case of solicitations for goods and works procurement, after confirming compliance with the technical requirements, a comparison of the proposed price is made, and the offer that is technically compliant, and with the lowest evaluated bid price, is the one that is recommended for contract award.

Recommendations: The study recommends that Competitive evaluation in Small and Medium Food Processing Enterprises successful sellers should be frequently decline to bid a job because, based on their knowledge of themselves, of the client, these buyers may cultivate vendors they do not intend to buy from but still need in order to have bids.

Keywords: Competitive Bidding, Competitive pricing, Supplier selection, Quality selection
1.0 INTRODUCTION

The study will analyze the influence of methods of Procurement and Performance of Small and Medium Food Processing Enterprises in Kenya. This chapter aims at providing sufficient information for better understanding of the study. Specifically the chapter will provide information on global perspective of methods of Procurement, regional perspective and then narrows down to the local issues that the study will address. It highlights on the background information, statement of the problem, general and specific objectives, and research questions, justification of the study and the scope of the study.

According to Kulp and Potts (2012), Procurement methods are the procedures used by the procuring entity to acquire goods, services and works. These methods can be competitive and non-competitive. There's a preference for using competitive methods of procurement given that they tend to promote transparency, economy and efficiency, and limit favoritism. Manyega, (2015) provides that Identification of need and requirements analysis is in procurement methods an internal step that involves an understanding of business objectives by establishing a short term strategy three to five years for overall spend category followed by defining the technical direction and requirements and the method of acquisition.

Procurement methods include identifying particular suppliers that can provide the required product or services. There are many sources to search for potential suppliers. One good source is trade shows (Maritim & Ochiri, 2015). Modern procurement software often incorporates a supplier catalog for standardized goods and services. Supplier management and liaison: Organizations that have more strategic goods or services that require ongoing interfaces with a supplier will use a supplier relationship management process. Strategic outsourcing relationships should set up formal governance processes.

Negotiations and contracting Negotiations are undertaken that often include price, availability, customization, and delivery schedules. The details are outlined in a purchase order or more formal contract (Potter &Christopher, 2015). Purchasing decisions include factors such as delivery and handling, marginal benefit, and price fluctuations. Procurement generally involves making buying decisions under conditions of scarcity. If good data is available, it is good practice to make use of economic analysis methods such as cost-benefit analysis or cost-utility analysis (Mwangi, 2016).

1.1.1 Small-Scale Food Enterprises

According to Weele (2010) states that the Small-scale food enterprises have played an important role in the Malaysian economy, particularly in terms of employment generation, better income distribution and as a training ground for entrepreneurs before they invest in larger enterprises. Small-scale food enterprises have important linkages to related industries such as the manufacture of machinery and food packaging materials and suppliers of food ingredients (Guçlu, 2013). The small-scale food enterprises have continued to expand in line with policies and incentives introduced by the government. Malaysia’s National Agricultural Policy aims at achieving a balanced development of agriculture and industry, with improved integration of the two. Government incentives to develop agriculture lead to increased efficiency in the food processing industry (Thirlwall, 2013). The Government’s commitment to assist in the healthy growth of the private sector is seen in its implementation of the Industrial Master Plan (IMP).

According Adusei and Awunyo (2015) small-scale food processing enterprises (SSFPEs) as one of the important measures for national development and addressing food security challenges particularly in Nigeria in the areas of mechanization of food processing unit operations, development of new and existing...
technologies, design and development of machinery and systems for processing and preservation of different agricultural produce of high which facilitate the achievement of the technical roles of food processing target (Adeoye, 2012). SSFPEs play important roles in the Nigeria economy of a developing country, particularly in terms of employment creation, income generation, post-harvest losses reduction, food preservation, value addition, improvement of food safety and nutritional quality, increase in shelf-life of a product, and act as training grounds for entrepreneurship.

The food pressing sector in Kenya provides both jobs and wealth by leveraging success in the agriculture sector Entrepreneurs before they invest in large scale enterprises (Kithae & Gakure, 2012). The horticultural sector is one of the fastest growing sectors in the economy and is the second largest foreign exchange earner after tea. Opportunities exist in production and export of products such as cut-flowers, French beans, pineapples, mushrooms, asparagus, mangoes, macadamia nuts, avocados, passion fruits, melons, and carrots. Food processing is the transformation of cooked ingredients, by physical or chemical means into food, or of food into other forms (Kiraka & Catwalk, 2013). Food processing combines raw food ingredients to produce marketable food products that can be easily prepared and served by the consumer. Food processing typically involves activities such as mincing and macerating, liquefaction, emulsification, and cooking such as baking, boiling, broiling, frying, or grilling (Tarus & Ng’anga, 2013). Pickling, pasteurization, and many other kinds of preservation; and canning or other packaging. Primary-processing such as dicing, slicing, freezing or drying when leading to secondary products are also included.

1.1.2 Small and Medium Food Processing Enterprises

Small and medium-sized firms are the drivers of the Kenyan economy. They employ about 7.5 million Kenyans outside the small-scale agriculture. Therefore SMEs are recognized as contributing to the distribution of wealth, as they allow the middle class to emerge and contribute to the solution of regional economic imbalances given their greater flexibility in terms of location. (PricewaterhouseCoopers, 2010). This promotes economic development and improves people’s lives Despite this important economic role SMEs play in Kenya, SME’s continue to face many challenges as they try to propel economic growth of an economy (Rioba 2015).

The Kenya food processing industry is composed of businesses dedicated to the transformation of raw materials and semi-finished products coming from primary activities such as agriculture, zoo techniques, forestry and fishing (Cousins & Scoones, 2014). According to (KAM, 2013) the largest production sectors of the food processing industry include milling, brewing, confectionery, animal, baking, soft drinks, vegetable oils, fish and meat processing (Cassim, 2010). Other important food processing segments include dairy products, sugar, fruits and vegetables, liquor production, wineries and the bottling of natural spring and mineral waters.

Food and beverage manufacturing plants located throughout the processing zones are engaged in transforming raw agricultural materials into products for intermediate or final consumption. Food processing is the transformation of raw ingredients, by physical or chemical means into food. Food processing typically involves activities common to manufacturing such as transportation, processing, testing, packaging, and storage (Rioba, 2015). Large amounts of materials are needed drive the food manufacturing supply chain, from raw materials sourcing to plant production to end consumers. That information is critical in enabling food companies to meet regulatory requirements unique to the industry (Mwangi, 2016). This application of the right procurement methods offers food manufacturers tremendous potential to improve operations in terms of traceability, compliance, energy costs, and partner collaboration. However, achieving some of these improvements will
require application of competitive bidding, negotiation on the process of acquiring raw product as well as competitive supplier evaluation (Lysons & Farrington, 2012).

1.1.3 Concept of Performance of Small and Medium Food processing Enterprises

Competiveness of firms is focused on revenue growth, operating cost reduction, working capital efficiency and fixed capital efficiency to maximize shareholder value (Bigsten, 2010). However, supply chains are becoming complex; there are numerous elements within them that may stop organizations from achieving the firm core objective of remaining competitive through enhanced operational effectiveness (Guçlu, 2013). Decisions rendered at the firm level regarding resource allocation are not simply based on supply chain operational efficiencies but has implications on the overall firm performance and competitiveness.

According to (Mwangi, 2016) states that Small and medium enterprises play a crucial role in the growth and development of the economy through generating employment opportunities, reducing regional imbalances, industrialization of rural and backward areas and assuring equitable distribution of resources. The nature or degree of innovation refers to the newness or degree of novelty of an innovation (Ngugi & Mugo, 2014). A radical innovation results in something new, whereas an incremental innovation results in something improved. Radical innovations in food processing are associated with fundamental change, such as a new product or process, and are often implemented through a specific innovation project. Incremental innovations are add-ons to a previous innovation, such as changing the materials used to make a product or improving service operations.

According to Rioba (2015) provides that Benefits of food processing include toxin removal, preservation easing marketing, distribution tasks and increasing food consistency. In addition, it increases yearly availability of many foods, enables transportation of delicate perishable foods across long distances and makes many kinds of foods safe to eat by de-activating spoilage and pathogenic micro-organisms (Thirlwall, 2013). Modern supermarkets would not exist without modern food processing techniques, and long voyages would not be possible.

1.1.4 Methods Of Procurement

According to Ngugi and Mugo (2014) provides that Procurement methods are the procedures used by the procuring entity to acquire goods, services and works. These methods can be competitive and non-competitive. There’s a preference for using competitive methods of procurement given that they tend to promote transparency, economy and efficiency, and limit favoritism (Nyaoga & Aduda, 2015). The Food Processing Enterprises should establish a set of guidelines to use when selecting the suppliers and service providers that was on the invitation list. The procurement methods enable Food Processing Enterprises to find the best-suited and most qualified agencies to procure goods and services from. It’s also employed as a way for the procuring team to save time and money during the selection process.

Different procurement methods are used during tendering processes which includes Electronic reverse auction where the buyers compete to obtain a good or service by offering increasingly higher prices (Rotich & Waruguru, 2013). A competitive bid process is mostly used in the procurement of goods and services. The process entails submitting a sealed envelope detailing the price and terms of an offer. The recipient of the offer then selects the competitive bidder that has delivered the lowest price or best terms (Barasa, 2014). The RFP details the scope, specifications, and terms and conditions of the proposed contract and the criteria for evaluating the bids. Then separate negotiations are carried out with each bidder whose bid falls within the
preset competitive range (Mamad & Chahdi, 2013) the process concludes with the award of contract to the bidder who offers most advantageous price, quality, and service combination.

Competitive Procurement implies that the process of implementing a supply solution through a controlled bidding or Project process that is fair and open (Amwoha, 2015). The competitive process involves many mandatory steps such as information-gathering, RFP and tendering, evaluation, selection and contract issuance. Invitation to Bid means the process of inviting qualified or prequalified vendors to submit offers, bids, quotations, or Projects for specified goods or services within the terms and conditions of the competitive document (Adusei & Awunyo, 2015).

1.2 Statement of the Problem

The SMEs have had challenges in compliance with the right procurement methods which the biggest hindrance competitive bidding, supplier evaluation and competitive negations on quality and prices of the commodities which in the long run affects the quality of products delivery managers unconsciously, leading to huge financial loses as well as poor output, substandard. There is need for proper procurement procedures and methods in order to preserve small and medium food processing investments. Kenya Association of Manufacturers KAM (2013), note that one of the major challenges that SMEs lack of incorporating of the procurement methods in acquisition process (Kithae & Munyao, 2012).

The availability of these problems present the food processing industry with the challenge to progress and improve in order to meet the needs of customers and the rapidly changing world of business. According to KNBS (2014) this industry accounts for 18% of manufacturing sales declines 13.2%, due to quality issues and 4.9% on beverages 17% of gross value added in the manufacturing sector and employs resulting to 14.5% operating cost and total employment sector expenditures as a percentage of overall revenues of between declining from 10% to 6% approximating to between 800,000ksh to 150000ksh hence poorest-performing companies in the lowest quartile had a range of working capital of revenues KIPPRA (2013).

Studies in the same industry from other researchers were conducted by Awino & Gituro (2011). An Empirical Investigation of Supply Chain Management Best Practices in Large Private Manufacturing Firms in Kenya. Studies on implementation of lean practices and innovation in management of SMEs in Kenya (Kiraka, 2013), did not articulate the procurement process and methods for food processing company.

Therefore, this study will examine the Influence of methods of Procurement on Performance of Small and Medium Food Processing Enterprises in Kenya and what procurement methods small and micro enterprises can adopt to counter the challenges?

1.3 Research Objectives

1.3.1 General Objective

The main objective of the study was to examine the Influence of Competitive Bidding and Performance of Small and Medium Food Processing Enterprises in Kenya

1.3.2 Specific Objectives

The study was guided by the following specific objectives:

i. To determine the effects of Competitive pricing on Performance of Small and Medium Food Processing Enterprises in Kenya.
ii. To determine the influence of Supplier selection on Performance of Small and Medium Food Processing Enterprises in Kenya.

iii. To determine the influence of Quality selection on Performance of Small and Medium Food Processing Enterprises in Kenya.

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter reviews the various theories that exist on effects of Influence of methods of Procurement on Performance. It specifically covers the empirical studies, conceptual framework critique of the literature review and the research gaps. A literature review is an assessment of a body of research that addresses the research question (Creswell, 2013). The purpose of literature review is to identify what is already known.

2.2 Theoretical Framework

According to Kothari (2012), a theory is a coherent group of tested propositions commonly regarded as correct that can be used as principles of explanation and prediction for a class of phenomena. The theoretical review is the structure that can hold or support a theory of a research study. The theoretical review introduces and describes the theory that explains why the research problem under study exists. This study used four theories that help explain the arguments advanced in this study on influence of the procurement methods.

2.2.1 Rough Set Theory

The study was based on Rough Set Theory of Competitive Bidding the influence of Competitive Bidding and Performance of Small and Medium Food Processing Enterprises in Kenya. According to (Pawlak 1982) as a method which classifies objects into similarity classes (clusters) containing objects that are indiscernible concerning previous occurrences and knowledge. According to (Bai & Sarkis 2009), the Rough set theory allows for distillation of a larger set of suppliers into a smaller set of the candidate preferred suppliers, and eventually the selection of a preferred supplier. Its application to supplier selection and decision making contributes through use of historical decisions integrating previous organizational knowledge and learning into the latest decision process. The major advantage is that it can generate satisfactory outcomes using a relatively small amount of data or with great variability in factors (Li et al., 1997).

2.2.2 Competitive Bidding

According to Ngari (2012) a competitive bid process is mostly used in the procurement of goods and services. The process entails submitting a sealed envelope detailing the price and terms of an offer. The recipient of the offer then selects the competitive bidder that has delivered the lowest price or best terms (Maritim & Ochiri, 2015) Competitive pricing is the process of selecting strategic price points to best take advantage of a product or service based market relative to competition. This pricing method is used more often by businesses selling similar products, since services can vary from business to business, while the attributes of a product remain similar.

2.2.3 Performance of Small and Medium Food Processing Enterprises

According to Mwangi, (2016), the basic goals of Performance of Small and Medium Food Processing Enterprises are to improve performance, reduce costs and minimize risk. A good Performance of Small and Medium Food Processing Enterprises solution provides a reliable performance metrics. According to Yi-Ming,
Cost Reduction use one supplier, you are eliminating competition for your orders. Find several suppliers who compete on price, and use several of them at all times so you can avoid costly delays in receiving products. Using multiple suppliers protects you from spending money for less-than-satisfactory service. In addition, if there's no approval process and individuals have the power to order supplies whenever they want, you could be ordering things you don't need. Examine your ordering process to see if it is causing waste.

According to Sharabati, & Salleh, (2014) states that on Lead Time finding ways to expedite shipments from suppliers, order closer to the time you need the supplies. Ordering far in advance can incur warehouse costs, because you have to store them so that they'll be available, and products are more likely to get lost or damaged. In addition, examine whether to shorten the time it takes to transport supplies from where to receive them to where needed (Kepher, & Oduma, 2015). Transportation from the supplier and within your company add days or weeks to the supply chain and increase costs.

### 2.2.4 Competitive Bidding

According to Baidoo, (2014) he established that Assessing the Operations of Procurement performance. The first procedure to be analyzed is a competitive auction in which the procuring agent contacts a group of bidders and sequentially lowers the proposed bid price until only one interested bidder is willing to sign the contract at that price. Thus the final contract price is a market-clearing price. An alternative arrangement is a sealed bid auction in which bidder’s tender sealed bids, and the contract is awarded to the lowest bidder. The final contract price is the low bid price, and therefore this is called a discriminatory auction. In Section I, the competitive auction is analyzed for a model in which all bidders have similar preferences and opportunities.

### 2.3 Conceptual Framework

<table>
<thead>
<tr>
<th>Competitive Bidding</th>
<th>Performance of Small and Medium Food Processing Enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Competitive pricing</td>
<td>- Market share</td>
</tr>
<tr>
<td>- Supplier selection</td>
<td>- Profitability</td>
</tr>
<tr>
<td>- Quality selection</td>
<td>- Customer satisfaction</td>
</tr>
</tbody>
</table>

### 3.0 METHODOLOGY

This study used descriptive research design. Descriptive research design is used to describe characteristics of a population or phenomenon being studied. It does not answer questions about how/when/why the characteristics occurred. Rather it addresses the question what are the characteristics of the population or situation being studied. The characteristics used to describe the situation or population is usually some kind of categorical scheme also known as descriptive categories. The unit of observation of the research consisted of Directors/Owners and procurement managers who are signed and responsible for the procurement activities and the unit of analysis was from Agricultural products industries, Horticulture industries, Oil refining industries, Fresh fruits and vegetables industries from Medium Food Processing Enterprises. The study collected primary data for analysis. Primary data was obtained by the use of structured questionnaires. The Questionnaires was selected upon because of its advantages of being able to collect huge amount of data in a cost effective way and at the same time. Data Analysis is the process of systematically applying statistical
and/or logical techniques to describe and illustrate, condense and recap and evaluate data. According to (Orodho, 2012) various analytic procedures “provide a way of drawing inductive inferences from data and distinguishing the signal (the phenomenon of interest) from the noise (statistical fluctuations) present in the data. The data was then be coded and checked for any errors and omissions. With the aid of Statistical Package for Social Sciences SPSS v 23.0, the research thus performed a multiple regressions analysis on primary data to estimate the beta values of factors and t-test to determine the significance of the coefficients at 95% confidence level. F–test statistics was used to determine the overall significance of the model at a confidence level of.

4.0 RESEARCH FINDINGS ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter entails the analysis and discussion of the data that was collected during the survey. The research findings are based on the questions that were asked to the participants through a questionnaire distributed to the selected sample. The study sought to examine the Influence of methods of Procurement and Performance of Small and Medium Food Processing Enterprises in Kenya. Specifically the study looked at Electronic Procurement, Competitive evaluation, Competitive Negotiation and Competitive Bidding and Performance.

4.2. Response Rate

The study focused on the Influence of methods of Procurement and Performance of Small and Medium Food Processing Enterprises in Kenya. A total of 110 respondents were issued with questionnaires, out of which, 93 questionnaires were filled and returned. This gave the questionnaire response rate of 84.5%. According to Kothari, (2012) a response rate of above 50% is acceptable to analyze and publish. Based on the above assertions of the studies, 84.5% response rate was considered adequate for the study; Table 4.2 shows the response rate.

Table 4.1: Response Rate

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Returned</td>
<td>93</td>
<td>94.5%</td>
</tr>
<tr>
<td>2 Unreturned</td>
<td>17</td>
<td>15.5%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>110</td>
<td>100%</td>
</tr>
</tbody>
</table>

4.3 Reliability Results

Table 4.2 illustrates the findings of the study concerning the reliability analysis. In this study, reliability was ensured through a piloted questionnaire that was subjected to a sample of 11 respondents. This represented 10% of the sample size. From the findings, the coefficient for Electronic Procurement was 0.7845, Cronbach’s alpha coefficients for Competitive evaluation was 0.7918, Cronbach’s alpha coefficients for Competitive Negotiation was 0.8521 and Cronbach’s alpha coefficients for Competitive Bidding was 0.7357. This implied that these were greater than 0.7 thresh hold for this study hence the instrument were very liable. The finding of study agreed Crowther (2016); the reliability is expressed as a coefficient between 0 and 1. The higher the coefficient, the more reliable is the test.
Table 4:2: Reliability Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s</th>
<th>No of Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic Procurement</td>
<td>0.7845</td>
<td>5</td>
</tr>
<tr>
<td>Competitive evaluation</td>
<td>0.7918</td>
<td>5</td>
</tr>
<tr>
<td>Competitive Negotiation</td>
<td>0.8521</td>
<td>5</td>
</tr>
<tr>
<td>Competitive Bidding</td>
<td>0.7357</td>
<td>5</td>
</tr>
</tbody>
</table>

4.4 Demographic Information

4.4.1 Gender of the respondents

The findings on gender of the respondents as indicated in Table 4.3, majority 74% of the respondents were male while 26% of the respondents were female. This implied that Small and Medium Food Processing Enterprises in Kenya employees include more men than women hence having gender disparity. The finding in this study are against those of Thirlwall (2013) that Gender equality means that the different behaviour, aspirations and needs of women and men are considered, valued and favoured equally.

Table 4:3: Gender of the Respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>69</td>
<td>74</td>
</tr>
<tr>
<td>Female</td>
<td>24</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100</td>
</tr>
</tbody>
</table>

4.4.2 Respondent’s Highest Level of Education

Table 4.4 indicate results on the highest level of education attained by the respondents. From the findings presented in Table 4.4, 37% of the respondents indicated that they had attained university level of education; with the majority 63% had attained college level of education. This implied that the directors and owners were educated and that their level of education was important to evaluate their best procurement methods and whether they were equipped with necessary skills and knowledge on matters concerning the procurement process within the operation of their Small and Medium Food Processing Enterprises in Kenya, the study concurred with the findings of Guçlu (2013) that pursuing higher education one may help organisation to become more sensitive to cultural and organisation probably be better able to spend money to stimulate the economy.

Table 4:4: Respondent’s Highest Level of Education

<table>
<thead>
<tr>
<th>Highest level of education</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>College</td>
<td>58</td>
<td>63</td>
</tr>
<tr>
<td>University</td>
<td>35</td>
<td>37</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100</td>
</tr>
</tbody>
</table>

4.4.3 Job Category

The respondents were requested to indicate their job category. From the findings in Table 4.5, 85% of the respondents indicated that they were Directors/Owners with only 15 % of the respondents indicated that they were in Procurement managers. This implied that data was collected from owners of the business hence
information was collected from individuals involved in managing daily task for Small and Medium Food Processing Enterprises in Kenya. The study concurred with finding of Adeoye, (2012) that in making an important or complex business decision, there are key stakeholders that should be involved in decision-making that some decisions are simple but complex decisions and need organized thinking that can help factor in a broad array of relevant issues

Table 4:5: Job Category

<table>
<thead>
<tr>
<th>Job Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directors/Owners</td>
<td>79</td>
<td>85</td>
</tr>
<tr>
<td>Procurement managers</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100</td>
</tr>
</tbody>
</table>

4.4.4 Medium Food Processing Enterprises

As summed up in the table 4.6 below, the study further obtained the Manufacturing Sector of the respondents picked from a sample of staff members involved in management of operations for the Small and Medium Food Processing Enterprises. The respondents were requested to indicate their Manufacturing Sector which they work for. From the findings in Table 4.5 which showed that the percentage of staff working in Agricultural products was 31.1% with 21.5% of the respondents working in Horticulture, 15.0% of the respondents working in Oil refining and the majority of the respondents working in Fresh fruits and vegetables at 32.4%. This implied that data was collected from staffs who were majorly involved in the management of the Food Processing Enterprises. The study finding agreed with those of Kioko and Were, (2014) on Factors affecting efficiency of the procurement function at the public institutions in Kenya in which the study concluded that procurement management was critical for the management of small and large institution.

Table 4:7: Medium Food Processing Enterprises

<table>
<thead>
<tr>
<th>Designation</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural products.</td>
<td>26</td>
<td>31.1</td>
</tr>
<tr>
<td>Horticulture.</td>
<td>20</td>
<td>21.5</td>
</tr>
<tr>
<td>Oil refining</td>
<td>14</td>
<td>15.0</td>
</tr>
<tr>
<td>Fresh fruits and vegetables</td>
<td>33</td>
<td>32.4</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.4.5 Respondents Period of Working

From the findings in the respondents had worked at Food Processing Enterprises as indicated in Table 4:7:, below, 51.5% had worked for a period of 6 to 15 years, followed by those who had worked for duration of 1 to 5 years, with an 19.3 %. With 21.7 % had worked for over 16 years. This is a clear indication that most of the respondents had worked long enough in Food Processing Enterprises and were well experience in the procurement. The findings concurred with those of Eriksson, (2011), That the period of working, delivering procurement within an operating model that connects commercial and technical capability to drive optimal operational excellence.
Table 4:8: Respondents Period of Working

<table>
<thead>
<tr>
<th>Years</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years</td>
<td>18</td>
<td>19.3</td>
<td>19.3</td>
</tr>
<tr>
<td>6-10 years</td>
<td>30</td>
<td>32.2</td>
<td>51.5</td>
</tr>
<tr>
<td>11-15 years</td>
<td>25</td>
<td>26.8</td>
<td>78.3</td>
</tr>
<tr>
<td>over 16 years</td>
<td>21</td>
<td>21.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

4.5 Descriptive Analysis

Descriptive statistics are brief descriptive coefficients that summarize a given data set, which can be either a representation of the entire or a sample of a population. Descriptive statistics are broken down into measures of central tendency and measures of variability spread. Measures of central tendency include the mean, median, and mode, while measures of variability include the standard deviation, variance, the minimum and maximum variables, and the kurtosis and skewness (Orodho, 2012).

4.5.1 Competitive Bidding

Supplier selection

Various statements on Supplier selection were identified and the respondents were asked to indicate the extent they agree with each of the identified statements using a scale of 1 to 5 where; 1= SD - Strongly Disagree 2=D - Disagree, 3=N - Neutral, 4=A - Agree and 5= SA - Strongly Agree. Mean and standard deviation were calculated for ease of comparison and generalization of findings. The finding is presented in Table 4.14. The respondents indicated that during supplier selection Small and Medium Food Processing Enterprises should Identifying suitable suppliers based on in the form of a Request for Quote (RFQ) or Request for Proposal (RFP) which was supported by mean of 4.09 and standard deviation 0.77. The study indicated that Confirmation of quality system status either by on-site assessment, a written survey or request for a certificate of quality system registration to the supplier should be carried out supported by mean of 3.89 and standard deviation of 0.87. The results of analyses indicated that respondents strongly agreed that Ability to meet current and potential capacity requirements, and do so on the desired delivery schedule with a mean of 3.59 and standard deviation of 0.51. From the study result implies that Supplier selection should be based on product specifications that’s meets customer requirements. The finding in this study agrees with those of (Orina, 2013) that when you strategically think about each supplier in your network and invest the time to examine all your options, you will set your organization up for success.

Table 4:8: Supplier selection

<table>
<thead>
<tr>
<th>Statement</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>StD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to meet current and potential capacity requirements, and do so on</td>
<td>1.00</td>
<td>3.00</td>
<td>3.59</td>
<td>0.51</td>
</tr>
<tr>
<td>the desired delivery schedule.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous experience and past performance with the product/service to be</td>
<td>1.00</td>
<td>4.00</td>
<td>3.82</td>
<td>0.62</td>
</tr>
<tr>
<td>purchased.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confirmation of quality system status either by on-site assessment, a</td>
<td>2.00</td>
<td>5.00</td>
<td>3.89</td>
<td>0.87</td>
</tr>
<tr>
<td>written survey or request for a certificate of quality system registration.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Technical support availability and willingness to participate as a partner in developing and optimizing design and a long-term relationship. Does your organization analyze proposals, qualify supplier proposals, and use supplier scorecards Identifying suitable suppliers based on in the form of a Request for Quote (RFQ) or Request for Proposal (RFP).

Competitive pricing

The respondents were requested to indicate the Competitive pricing practices that were in use to enhance performance of Small and Medium Food Processing. From the findings in Table 4.9 below, it can be observed that the Total cost of dealing with the supplier including material cost, communications methods, inventory requirements and incoming verification is required with 51.61% of the respondents strongly agreeing, 41.94% of the respondents agreeing and 3.23% of the respondents disagreed, only 2.15% of the respondents disagreed with the statement. The respondents further stated that requesting a formal quote, which includes providing the supplier with specifications and other requirements, was an aspect of evaluating supplier competitiveness in pricing with 37.63% of the respondents strongly agreeing, 41.94% of the respondents agreeing and only 3.23% of the respondents disagreed to the statement. They also stated that Confirmation of quality system status either by on-site assessment, a written survey or request for a certificate of quality system registration contributes to Competitive pricing, with 31.18% of the respondents strongly agreeing, 63.44% of the respondents agreeing with only 1.08% of the respondents disagreed with the statement. From the finding of this study, it can be established that competitive pricing contributes to low price products which results to competitive market prices.

The finding in this study concurred with those of Sharabati, & Salleh, (2014) of that Competitive procurement involves the buyer receiving bids from sellers or vendors and evaluating those bids before choosing a supplier. In competitive procurement, any company that could provide the good or service is able to submit a bid or proposal. This promotes competition and makes the procurement process more transparent.

Table 4:9: Competitive pricing

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requesting a formal quote, which includes providing the supplier with specifications and other requirements</td>
<td>3.23%</td>
<td>3.23%</td>
<td>13.98%</td>
<td>41.94%</td>
<td>37.63%</td>
</tr>
<tr>
<td>Total cost of dealing with the supplier (including material cost, communications methods, inventory requirements and incoming verification required)</td>
<td>2.15%</td>
<td>1.08%</td>
<td>3.23%</td>
<td>41.94%</td>
<td>51.61%</td>
</tr>
<tr>
<td>Confirmation of quality system status either by on-site assessment, a written survey or request for a certificate of quality system registration</td>
<td>1.08%</td>
<td>3.23%</td>
<td>1.08%</td>
<td>63.44%</td>
<td>31.18%</td>
</tr>
</tbody>
</table>

4.5.2 Performance of Small and Medium Food Processing Enterprises

The study sought the extent to which indicators of level of performance experienced by Small and Medium Food Processing in the last five years in terms of Market share, Profitability (Ksh) and customer satisfaction,
that is related to Electronic Procurement, Competitive evaluation, Competitive Negotiation and Competitive Bidding by taking year 2013 as the base year.

The Small and Medium Food Processing were found to increase in market share where in 2013 to 2017, it was 3%,5%,6%,8% respectively in 2017 the performance of Small and Medium Food Processing increase to 15%. Implementation of procurement methods contributed to steady increase in market share as in 2013 it was 3%,

The results indicated that Small and Medium Food Processing registered an increase in profitability level due to implementation of competitive procurement methods and price evaluations from 150,000 in 2013 to 175000 in 2014 to 300,000 in 2015 to 60000 in 2016 to and to 85000 in 2017 respectively. This implied that implementation of procurement methods contributed to cost saving as well reducing the total operating cost hence performance of Small and Medium Food Processing. On achievement of customer satisfaction, a 5 point Likert scale was adopted. The level of customer satisfaction in Small and Medium Food Processing was at 21%, in year 2013 it was 21% in the year 2014 it was 38%, in year 2015 it was 50% respectively. In the year 2016, customer satisfaction level was at 79% while in the year 2017 the customer satisfaction level was at 79%. Thus implies that procurement methods selected influence customer satisfaction a moderate extent.

Table 4: Performance of Small and Medium Food Processing Enterprises

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Performance levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2013</td>
</tr>
<tr>
<td>Market share</td>
<td>3%</td>
</tr>
<tr>
<td>Profitability (Ksh)</td>
<td>150000</td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td>21%</td>
</tr>
</tbody>
</table>

4.6 Model Summary

The study found in the table below, the R Square, which is the coefficient of determination, was used to measure the dependent variable variations and their effect on the dependent variables. As observed, The R Square value is 0.773; this value is between 0 and 1. Analytically, this shows that 77.3% of variations in the dependent variable can be explained by the independent variables. Analytically, 77.3% of variation in Small and Medium Food Processing Enterprises competitive bidding which are explained by: Quality selection, Supplier selection, Competitive pricing while the remaining 22.7% is associated with factors which are not within the scope of this study. The finding show that significant value of the R Square value, coupled with the Durbin-Watson value of 0.5, the four independent variables outlined above are very crucial and bear significant effect on the dependent variable.

4.7 Beta Coefficients

From the regression findings, the optimal model

\[ Y = 1.509 + 0.667X_1 + 0.295X_2 + 0.201X_3 + e \]

From the findings in the regression analysis, if the factors (Supplier selection, Quality selection, Competitive pricing) were held constant, Performance of Small and Medium Food Processing Enterprises in Kenya would be at 1.509

A unit increase in Supplier selection would lead to an increased Performance of Small and Medium Food Processing Enterprises by 0.667. The regression findings further indicated that there existed a significant
The relationship influence of Quality selection, and Performance of Small and Medium Food Processing Enterprises in Kenya as indicated by $\beta_2 = 0.295$, $p=0.000<0.05$, $t= 3.642$ This implied that an increase in Quality selection, would lead to an increase in Performance of Small and Medium Food Processing Enterprises firms as indicated by $\beta_2 = 0.295$.

The regression findings Regression results revealed that there existed a significant relationship influence of Competitive pricing and Performance of Small and Medium Food Processing Enterprises in Kenya as indicated by $\beta_3 = 0.201$, $p=0.001<0.05$, $t= 2.950$. This implied that an increase in Competitive pricing would lead to an increase in Performance of Small and Medium Food Processing Enterprises firms as indicated by $\beta_3 = 0.201$.

Table 4:9: Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.879a</td>
<td>.773</td>
<td>.765</td>
<td>.472</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Performance of Small and Medium Food Processing Enterprises in Kenya
a. Predictors: (Constant), Supplier selection, Quality selection, Competitive pricing

Table 4:12: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>1.509</td>
<td>.208</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>Supplier selection</td>
<td>.667</td>
<td>.213</td>
<td>.742</td>
<td>.002</td>
</tr>
<tr>
<td>Quality selection</td>
<td>.295</td>
<td>.081</td>
<td>.408</td>
<td>.000</td>
</tr>
<tr>
<td>Competitive pricing</td>
<td>.201</td>
<td>.211</td>
<td>.245</td>
<td>.001</td>
</tr>
</tbody>
</table>

From the regression findings, the optimal model will be

$Y = 1.509 + 0.667X_1 + 0.295X_2 + 0.201X_3 + e$

$Y =$ Performance of Small and Medium Food Processing Enterprises in Kenya

$\alpha =$ Constant

$\beta_1...\beta_3 =$ the slope representing the degree of change independent variable due to a unit change in an independent variable.

$X_1 =$ Supplier selection

$X_2 =$ Quality selection

$X_3 =$ Competitive pricing

$e =$ Error Term
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In this chapter, the researcher makes a summary of the study, then draws conclusions and gives recommendations based on the research findings and analysis done in the previous chapter. The summary provides a brief overview of the research process, while the conclusion reports the crucial findings, and the recommendations are suggestions and advice based on the research findings.

5.2 Competitive Bidding and Performance

The study also established that Competitive bidding is the best procurement practice that involves inviting multiple vendors or service providers to submit offers for any particular material or service. Competitive bidding allows transparency, equality of opportunity, and the ability to demonstrate that the outcomes represent the best value. Hence, high value acquisitions usually undergo the competitive bidding process. Vendors are solicited to present a proposal to meet the specifications published by the buyer. Such solicitations are referred to as requests for proposal (RFPs) or requests for quote (RFQs). Sellers present their bids in written form either routinely or, if the job bid is of some complexity, after discussions with the buyer. In many instances purchasing is from a pre-approved list of vendors; vendors get on these lists by answering requests for qualifications. In yet other instances, particularly in connection with preferential purchasing from women-owned or minority-owned enterprises, a frequently complicated bureaucratic process must first be followed to get on the list of qualified bidders; similar processes are involved in procurements under the Federal Government's small-business set-aside programs.

5.3 Conclusion

The study concludes that Competitive Bidding even if the evaluation score is not based on a technical evaluation, Small and Medium Food Processing Enterprises determination must be made that the technical solution proposed by a bidder is feasible, deliverable, and robust, that it is based on reliable technologies, that it meets all minimum technical requirements set and that the costs and financial structure are consistent with the technical solution and it is important to look at the proposed project management.

5.4 Recommendation of the study

The study recommends Competitive Bidding in Small and Medium Food Processing Enterprises. The buyer then selects from among those submitting packages vendors it will invite to bid on a job. In more routine situations, the buyer will tend to develop a list of trusted suppliers and will only ask those people to bid. Precisely because evaluating proposals can be time-consuming, especially when proposals are for some unusual program and are complex, buyers frequently begin with a formal qualification under which vendors are invited to submit packages defining their experience, personnel, and history of performance.

REFERENCES


