ROLE OF SUPPLIER COLLABORATION ON ORGANIZATION PERFORMANCE: A CASE OF KENYA URBAN ROADS AUTHORITY

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Abstract

Purpose: The study aimed at determining the role of supplier collaboration on organization performance in Kenya Urban Roads Authority.

Materials and methods: Descriptive research design was 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 what question. This study targets the Kenya Urban Roads Authority’s departments with over 141 members of Staff at the headquarters located on 5th Ngong Road Avenue – IKN Building, Nairobi – Kenya, due to centralization of all procurement activities at the head office. The study employed a census approach to collect data from the all the 141 respondents mainly involved in the management of supplier operation hence no sampling techniques were used.

The process of data analysis involved several stages. Each response was analyzed and their frequency tabulated quantitatively to present a more detailed interpretation. Raw data collected from the field was sorted and summarized in tables and diagrams. Completed questionnaires were edited for completeness and consistency. The data will then code and checked for any errors and omissions. With the aid of Statistical Package for Social Sciences SPSS v 22.0, 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 were used to determine the overall significance of the model at a confidence level of 95%. The results of analyzed data were presented using tables and charts with a brief description thereafter.

Results: The study established that effective supplier collaboration on organizational performance of Kenya Urban Roads Authority’s from the finding it can there be concluded that supplier collaboration platform connects buyers, suppliers, and all their processes in the day to day operations

Recommendations: The study recommends that Demand/Supply Planning and Management to Balance resources with requirements to establish and communicate plans to align the supply chain Supplier Collaboration plan with corporate financial objectives. Management of business rules/stage gate process for Supply chain performance objectives in from the findings.

Keywords: supplier collaboration, organization performance, Managed competition, Value based compensation, Urban Roads Authority

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1.0 INTRODUCTION

1.1 Background to the Study

The Chartered Institute of Purchasing and Supply (CIPS) define Supplier Relation Management as a “process for managing these two aspects in the interaction between two entities - one being the supplier of goods or services and the other is the customer/end-user organization”. (CIPS Journal, June 2014). The supplier relationship management is a mutually beneficial two-way process in the sense that it should improve the performance of both the buying and the supplying organizations and involves proactively developing relationships with particular suppliers.

The CIPS also notes that supply, sourcing, and purchasing professionals in organizations nationwide believe strongly that more and stronger supplier partnerships are critical to achieving competitive corporate performance. The partnership involves “a mutual commitment over an extended time to work together to the mutual benefit of parties, sharing relevant information and the risks and rewards of the relationship” (Institute for Supply Management, January 2015).

One aspect that is key to successful supply chain performance improvement is the element of cooperation and mutual decision making between trading partners. Companies that collaborate with customers in demand and replenishment planning have a better chance of meeting demand. Firms that give accurate information may also gain visibility of customer requirements and inventory levels. This process spurs the improvement cycle as the supplier can then reduce their own inventory stocks and as such, with the synchronized operations with customers, the supply chain is more responsive to the marketplace with less waste.

The SRM is focused on joint value creation based on trust, open communication, and collaboration with a limited number of key suppliers. On the other hand, leveraging on supplier capabilities is mentioned as the most important objective of SRM because organizations are aware that they don’t have the means to finance all activities on their own.

1.1.1 Global perspective on Supplier Relationship Management

Manufacturers across the globe have adopted supplier performance management plans to reduce costs, lower supply chain risk factors and promote continuous improvement. When Supplier Performance Management (SPM) is successful, it identifies potential supply chain execution issues early enough, giving manufacturers the opportunity to quickly resolve them (Maina and James, 2010). Suppliers that are examined under a Supplier Performance Management plan are typically measured against two factors: the expectations agreed upon in their original contract and the current performance norms of their particular marketplaces (Johnson, 2011). Supplier Performance Management also highlights any performance gaps and failures to meet previously agreed upon expectations.

Ultimately, Supplier Performance Management can extend the lifetime of a supplier contract by ensuring that certain levels of performance are met during the beginning of a partnership and on a continuous basis afterward. Supplier Performance Management is particularly crucial for companies dealing with a complex or global supplier network. Several writers, in the USA and the UK, recognize that there is a trend among manufacturing companies to reduce their supplier base There is however little empirical research on supplier management in other leading industrialized countries, such as Germany, Japan, and China.

1.1.2 Regional perspective on Supplier Relationship Management

In the South African public sector, procurement is a regulated process defined and controlled by numerous laws, rules and regulations, judicial and administrative decisions, policies and procedures (National Treasury 2005). A framework for supply chain management (SCM) governs the way in which procurement is conducted in the public
sector and is informed by the Public Finance Management Act, the Preferential Procurement Policy Framework Act 5 of 2000, the Municipal Finance Management Act 56 of 2003 and the Broad-Based Black Economic Empowerment Act 53 of 2003 (National Treasury 2005).

This framework is applicable to all government departments, constitutional institutions and public institutions. The objective of the framework is to provide value-added goods and services to government customers and it defines supplier relationships with government departments (National Treasury 2005). However, despite the SCM processes that were intended to boost service delivery, many departments in the public sector are still not efficient and effective in implementing these processes. Furthermore, the development of sound supplier relationships is a challenge.

1.1.3 Local perspective on supplier relationship management

In Kenya, Supply Relationship Management gained attention in early 2000 (Macharia, 2010). Although having good suppliers is important, surveys show that Kenyan organizations continue to struggle with buyer-supplier management. A study on the Ministry of Special Programs showed that it has not achieved high levels of suppliers performance necessary for delivering competitive market advantage (G.o.K, 2006) because it did not have one system to periodically evaluate the performance of its suppliers.

In Kenya, over seventy percent (70%) of public sector organizations experience supply chain management challenges, and this negatively affects effective delivery of services. The Ministry of Finance was ranked seventh in performance according to the performance contracting secretariat report. As a strategic ministry in charge of financial policy formulation and implementation in public sector, the ministry was supposed to do better.

1.1.4 Kenya Urban Roads Authority

The Kenya Urban Roads Authority, commonly referred to as KURA is parastatals at the Ministry of Transport and Infrastructure. The mandate of KURA as defined in the Kenya Roads Act, 2007 includes the management, development, rehabilitation, and maintenance of all public roads in the cities and municipalities in Kenya except where those roads are national roads.

Its core functions includes: constructing, upgrading, rehabilitating and maintaining roads under its control, controlling urban road reserves and access to roadside developments, implementing roads policies in relation to roads, ensuring adherence by motorists to the rules and guidelines on axle load control prescribed under the Traffic Act and under any regulations under this Act and ensuring that the quality of road networks is in accordance with such standards as may be defined by the minister.

In collaboration with the ministry responsible for transport and the police department, overseeing the management of traffic and road safety on urban roads, monitoring and evaluating the use of urban roads, planning the development and maintenance of urban roads, collecting and collating all such data related to the use of urban roads as may be necessary for efficient forward planning under the Roads Act. Also included as part of the tasks is preparing the road works programs for all urban roads, liaising and coordinating with other road authorities in planning and on operations in respect of roads, advising the Minister on all issues relating to urban roads and performing such other functions related to the implementation of the Kenya Roads Act as may be directed by the Minister.

1.2 Statement of the problem

Procurement is still primarily seen as a contributor to cost-cutting initiatives. This perception is often reflected in the way companies establish and manage their Supplier Relation Management program: a focus on cost reduction and accompanying performance indicators (Mania and
The Supplier Relationship Management (SRM) provides a consistent way of interacting and managing suppliers that promote collaboration and continuous improvement from the supply base. A comprehensive SRM program can offset supply chain risk, enhance supplier services and support, maintain and improve upon the value acquired during original sourcing event. (Johnson, 2012).

In spite of having many Supply Chain Management studies undertaken by various scholars, none of the studies have drawn much emphasis on how public sector organizations should improve the effectiveness of the supply chain management practices. Hence, this has created a knowledge gap amongst procurement and logistics practitioners in public sector organizations. Many public organizations encounter difficulties in initiating, developing and managing partnerships. In particular, leadership and soft skills are primary reasons for failure, alongside technical and functional competencies (Mania and James, 2006).

Many organizations in the public sector have not been able to adequately integrate the concept of supplier relationship management in their day-to-day operations. This has led to a situation whereby they are not seen as the customer of best choice by many suppliers (KIPPRA, 2013). Many suppliers have encountered challenges in dealing with the public organization during pre-contract, contract and post contract phases including but not limited to lack of poor communication, poor response to complaints and lack of commitment and equality.

Adoption and implementation of supplier relationship management program aim to clear those bottlenecks witnessed in the public sector procurement. This study sought to establish whether Kenya Urban Roads Authority (Public Entity organization) had adopted Supplier Relationship Management and whether the adoption has had an effect in the improvement of the entity’s overall performance.

1.3 General Objectives
To evaluate the Role of supplier collaboration on organization performance: a case of Kenya urban roads authority

1.3.1 Specific objectives
i. To find out the effect of Collaborative processes on Supplier collaboration in Kenya Urban Roads Authority.

ii. To establish the effect of Managed competition on Supplier collaboration in Kenya Urban Roads Authority.

iii. To find out the effect of Value based compensation on Supplier collaboration in Kenya Urban Roads Authority.

2.1 Theoretical foundation and Literature
A theory is a contemplative and rational type of abstract or generalizing thinking or the result of such thinking (Oxford Dictionary). Depending on the context, the results might, for example, include a generalized explanation of how nature works (Mania and James 2006).

2.1.1 Cooperative game theory
The Cooperative game theory will assist the study in determining the effect of supplier collaboration on organization overall performance of Kenya Urban Roads Authority.

According to Ronald Fisher, (2013) A cooperative game consists of two elements: (i) a set of players, and (ii) a characteristic function specifying the value created by different subsets of the players in the game. The cooperative theory starts with a formalization of games that abstracts away altogether from procedures and concentrates, instead, on the possibilities for agreement. There are several reasons that explain why cooperative games came to be treated separately. One is that when one does build negotiation and enforcement procedures explicitly into the model. Cooperative games consider the set of joint actions that any group of players can take. The outcome of a cooperative game specified by which group of
player’s forms and the joint action that that group takes. These groups of players are usually referred to as coalitions. This theory supports the variable supplier collaboration.

Pacheco & Rodrigues, (2010). States that supplier collaboration means working with decision-makers at a supplier level to determine improvements that can be made that will have a measurable, positive financial impact for both organizations. An example of supplier collaboration would be jointly redesigning a product.

2.2.2 Organizational performance

According to Richard et al. (2009) defines that organizational performance encompasses specific areas of firm outcomes which include financial performance, quality output for a product market performance and shareholder return total shareholder return, economic value added. Organizational performance involves the recurring activities to establish organizational goals, monitor progress toward the goals, and make adjustments to achieve those goals more effectively and efficiently (McKeown, & Bradner, 2014). Those recurring activities are much of what leaders and managers inherently do in their organizations. Organizational performance includes regular recurring activities to establish organizational goals, monitor progress toward the goals, and make adjustments to achieve those goals more effectively and efficiently. Typically, these become integrated into the overall recurring management systems (McKeown, & Bradner, 2014).

Awayshesh & Klassen, (2010). Performance management focuses on enhancing organizations systems including people to increase an organization’s capacity for performance. Includes extensive use of principles of systems theory. In and of itself, this is not an overall comprehensive process assured to improve performance. Its effectiveness toward reaching overall results for the organization depends on how well the enhanced ability to learn is applied in the organization (Mahmood, 2010).

According to Chahdi, (2013) Performance Management (PM) is more than the end of the year appraisal. It’s about translating goals into results. Performance Management focuses not only on individual employees but also on teams, programs, processes and the organization as a whole. A well-developed PM program addresses individual and organizational performance matters necessary to properly create and sustain a healthy and effective results-oriented culture. Poluha, (2016) explains that public agencies have a greater challenge to define and measure results than private sector organizations, whose results are almost exclusively tied to financial goals. Public agencies are also required to comply with complex regulations that govern their performance management programs. Effective PM will help your organization raise individual performance, foster ongoing employee and supervisor development, and increase overall organizational effectiveness (Mamad, & Chahdi, 2013).

2.2.3 Supplier collaboration

Collaboration with suppliers and customers is the fourth pillar along the pathway to building a strategy to deliver supply chain excellence (Slone Reuben 2004). Supplier collaboration means working with decision-makers at a supplier level to determine improvements that can be made that will have a measurable, positive financial impact for both organizations. An example of supplier collaboration would be jointly redesigning a product that a supplier custom manufacturers for your organization.

Pacheco & Rodrigues, (2010) states that, in order to prepare a business world with rapidly changing markets and customer demands, strategically rethinking manufacturing and supply chain strategies has become standard practice in order for firms to succeed. Often, margins of manufacturers and suppliers are razor-thin due to the traditional adversarial approach from the manufacturer based on "just getting the best price" from suppliers.
This approach creates short term relief and does nothing to truly improve either party’s competitive position. High commodity volatility continues to create a roadblock in supply and demand and is increasing the strain on manufacturers and suppliers. Without a win-win manufacturer/supplier relationship, pricing and production remain difficult. (Siddiquei, 2015).

2.2.4 Supplier collaboration

Collaboration in inter-organizational relationships is often hampered by poor communication (Dyer et al., 2001). According to Amabire, (2001) organizations must set up procedures such as communication and coordination of processes for collaboration. He further opines that not all communication mechanisms, however, are equally effective or efficient. A continuum of media richness has been proposed for various modern modes of communication ranging from person to person meetings for standardized data transfer, such as electronic data interchange (EDI).

Plane and Green (2011) conducted a study on Buyer-supplier collaboration and the aim of Facilities Management procurement. The study established that there emerged a consensus that a more relational procurement process has a positive influence on the relationship established and also that the perceived benefits of relational approaches included clarity of service requirements, value delivery, and cultural alignment. This study, however, did not show how buyer-supplier relationships affect organizational performance.

Amuhaya, (2014) concluded that buyer/supplier collaboration enhances procurement performance hence creating a competitive advantage through sharing information making a joint decision, inter-organizational relationship. This indicates that the level of supply chain collaboration has an important interaction effect on the relation between external resources and buying firm performance, where collaborative forms of buyer-supplier exchange facilitate greater access to external resources. The findings are a pointer to the responsiveness, flexibility, commitment and the belief of the trading partners are willing to devote energy to sustaining the relationship.

2.2 Conceptual Framework

![Figure 1](image)

3.0 METHODOLOGY

Descriptive research design was 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 what question. This study targets the Kenya Urban Roads Authority’s departments with over 141 members of Staff at the headquarters located on 5th Ngong Road Avenue – IKN Building, Nairobi – Kenya, due to centralization of all procurement activities at the head office. The study employed a census approach to collect data from the all the 141 respondents mainly involved in the management of supplier operation hence no sampling techniques were used.

The process of data analysis involved several stages. Each response was analyzed and their frequency tabulated quantitatively to present a more detailed interpretation. Raw data collected from the field was sorted and summarized in tables and diagrams. Completed questionnaires were edited for completeness and consistency. The data will then code and checked for any errors and omissions. With the aid of Statistical Package for Social Sciences SPSS v 22.0, 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 were used to determine the overall significance of the model at a confidence level of 95%. The results of analyzed data were presented.
using tables and charts with a brief description thereafter.

4.0 RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

The study sought to find out the role played by supplier relationship management in an organization’s overall performance specifically the Kenya Urban Roads Authority. Data was collected from supply chain managers, assistant supply chain managers, supply chain officers, finance managers and operation managers. This research employed the survey research method where researcher used both open ended and closed questions in order to obtain detailed information and the findings are as follows:

4.2 Response Rate

Table 4.1 indicated that a sample size of 141 respondents was targeted for this study, with 123 respondents returning fully filled questionnaires. Orodho (2003) defines response rate as the extent to which the final data set includes all. This response rate was considered adequate as recommended by Babbie (2002), who states that knowledge of the population, its elements, and the nature of research aims has to be used to get an accurate response rate.

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returned questionnaires</td>
<td>123</td>
<td>87.23</td>
</tr>
<tr>
<td>Unreturned questionnaires</td>
<td>18</td>
<td>12.76</td>
</tr>
<tr>
<td>Total</td>
<td>141</td>
<td>100</td>
</tr>
</tbody>
</table>

4.3 Demographic information

To obtain a better understanding of the population structure from which the sample was taken, a preliminary analysis of demographic data was carried. In this case, the researcher sought the respondents’ gender, age, level of education and the duration of work in the organization.

4.3.1 Gender

Figure 4.2 clearly shows that there were more male than female respondents. Male respondents comprised 56% of the total while the female respondents were 44%. From the findings male respondents were more than female this was because the field is majorly dominate by men.

![Gender](image)

Figure 4.1: Gender

4.3.2 Level of Education

Table 4.2 illustrated that 45.5% of the respondents had attained bachelor’s degree education this was followed by 26.8% of the respondents who had attained diplomas. 18.6% of the respondents had attained master’s qualification with only 8.9% having attained their Ph.D. degree. This implied that the respondents were qualified and understood the objectives of the study as well as offering reliable information in respect to supplier relationship on organizational performance. Klasse n (2010) States that education comprehensive and better analytical interpretation of outcome in life occurrences.

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>33</td>
<td>26.8</td>
</tr>
<tr>
<td>Bachelors</td>
<td>56</td>
<td>45.5</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>23</td>
<td>18.6</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>11</td>
<td>8.9</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.2: Level of Education

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4.3.3 Age

From the results presented in Table 4.3 show that, the majority of the respondents were in 30 to 49 years’ age bracket with 68.2%. With only 22.76% aged 20-29 years and 8.9 % aged over 50 years. From the findings it can be interpreted that majority of the respondents were of age and could articulate objectively and benefit of the research in supplier relationship management.

Table 4.1: Age

<table>
<thead>
<tr>
<th>Years</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29</td>
<td>28</td>
<td>22.76%</td>
</tr>
<tr>
<td>30-39</td>
<td>32</td>
<td>26.0</td>
</tr>
<tr>
<td>40-49</td>
<td>52</td>
<td>42.2</td>
</tr>
<tr>
<td>Over 50</td>
<td>11</td>
<td>8.9</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.3.4 Job designation of the respondents

In the findings from table 4.4 below 23% of the respondents were supply chain officers, 13% were technical advisory and 23% were supply chain practitioners working in warehousing function the study show another respondent not in supply chain at 8.6%. This implied that supplier relation management in KURA was across all major departments. Kurt (2013) states that professional services involve providing specialist business support to businesses of all sizes and in all sectors supporting a company with accounting, IT services or providing management advice.

Table 4.2: Job designation of the respondents

<table>
<thead>
<tr>
<th>Designation</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement and Supply</td>
<td>36</td>
<td>23.0</td>
</tr>
<tr>
<td>Technical Advisory</td>
<td>14</td>
<td>13.4</td>
</tr>
<tr>
<td>Quality Assurance</td>
<td>21</td>
<td>8.6</td>
</tr>
<tr>
<td>Warehousing function</td>
<td>34</td>
<td>23.0</td>
</tr>
<tr>
<td>Finance function</td>
<td>18</td>
<td>8.6</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.3.5 Respondents’ Working Duration

The findings in table 4.5 indicated that 20.8 of the respondents had worked for 1 to 5 years, with the majority having worked for 6 to 10 years at 62.5 %.12.5% of the respondents worked for a period of 11-15 years. Further findings indicate that not all occupied one position for the whole duration rather changed but still in the field of supply chain management. It implied that majority were skilled enough to interpret the supplier relationship at different levels. Bradner (2014), states that skilled labour involves tackling complicated tasks that require specific skill sets, education, training and experience, and may involve abstract thinking.

Table 4.3: Respondents’ Working Duration in KURA

<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>5</td>
<td>20.8</td>
<td>20.8</td>
</tr>
<tr>
<td>6-10 years</td>
<td>15</td>
<td>62.5</td>
<td>83.3</td>
</tr>
<tr>
<td>11-15 years</td>
<td>3</td>
<td>12.5</td>
<td>95.8</td>
</tr>
<tr>
<td>over 16 years</td>
<td>1</td>
<td>4.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

4.4 Descriptive analysis

Descriptive statistics are a set of brief descriptive coefficients that summarizes a given data set, which can either be a representation of the entire population or a sample. The measures used to describe the data set are measures of central tendency and measures of variability or dispersion.

4.4.1 Supplier collaboration

i. Managed competition

The findings in the Table 4.6 show that Managed competition was highly ranked with a mean of 3.75 indication that majority accepted that processes, policies/rules, performance measures (KPIs) lead to a structured and procedure managed completion with a standard deviation of 1.02 then with a mean of 3.59. With a standard deviation of 1.06 of respondents at great extent accepting that setting develops Continuous Process Improvement Program methods methodologies was effective for
the managed completion for supplier collaboration for KURA procurement performance.

The study support the findings of this study that supplier collaboration is fundamental in organization performance Odhiambo (2014) that both parties work towards mutual improvements to eliminate no value-adding activities. To meets all operational and some of the strategic needs of the buying, organization reacts positively to initiatives of the purchaser to improve the current situation. (Rodrigues, 2010).

**Table 4.6: Managed competition**

<table>
<thead>
<tr>
<th>Statements</th>
<th>Managed competition</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processes, performance measures (KPIs)</td>
<td>1</td>
<td>5</td>
<td>3.75</td>
<td>1.02</td>
<td></td>
</tr>
<tr>
<td>Develops a Continuous Improvement Program methods</td>
<td>1</td>
<td>5</td>
<td>3.59</td>
<td>1.06</td>
<td></td>
</tr>
<tr>
<td>Portfolio management techniques</td>
<td>2</td>
<td>5</td>
<td>3.61</td>
<td>1.04</td>
<td></td>
</tr>
</tbody>
</table>

**Rating scale**

Where 1= very small extent; 2 = small extent; 3= moderate extent; 4 =large extent; 5 = very large extent

**ii. Value based compensation**

The respondents were requested to indicate the kind of Supplier collaboration for long term supplier relation affects organizational performance from the findings in table 4.7. Based on the study show that, 52.85 % of the respondents to great extent accepted that purchasing economies of scale from suppliers for quantity discounts was a good reward to both buyer and supplier with. Then at 25.20% of the respondents agreeing to a great extent while only 3.25% were neutral 35.77 % of the respondents agreed to large extent that gives a useful general perspective costs versus inflation similar approach to market rate on price and value leveraged the supplier financial operations with 10.57 % of the respondents at moderate extend and 4.07 % respondents been neutral.

This study was in line with Karikari (2016), that valuable indicative cost base pool relatively small but growing fast cost base pool based on the market rate actual costs agency favorite but almost impossible to verify that give a useful general perspective costs.

**Table 4.7: Value based compensation**

<table>
<thead>
<tr>
<th>Statements</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Give a useful general perspective costs vs. Inflation similar approach to market rate on price and value</td>
<td>0.81%</td>
<td>4.07%</td>
<td>10.57%</td>
<td>35.77%</td>
<td>48.78%</td>
</tr>
<tr>
<td>Purchasing economies of scale from suppliers for quantity discounts</td>
<td>3.25%</td>
<td>3.25%</td>
<td>15.45%</td>
<td>25.20%</td>
<td>52.85%</td>
</tr>
<tr>
<td>Low prices relative to other firms that compete within the target market</td>
<td>0.00%</td>
<td>4.88%</td>
<td>17.89%</td>
<td>24.39%</td>
<td>52.85%</td>
</tr>
</tbody>
</table>

**Rating scale**

Where 1= very small extent; 2 = small extent; 3= moderate extent; 4 =large extent; 5 = very large extent

**4.4.2 Organizational performance**

**i. Effectiveness & Efficiency**

The study endeavored to find out the overall influence of supplier relationship management practices on the attributes of supply chain performance such as Effectiveness & Efficiency in the operations from the findings in table 4.8 indicates that at 43.09 % of the respondent to large extent accepted that supplier relationship lead to supply base that demonstrates continuous improvement in defect rates with 26.83 % of the respondents at moderate extent. While 36.59% of the respondent’s at large extent currying that Measures compliance to contract service level agreements (SLA’s), contract terms and conditions, and pricing agreements. While 7.32 % of respondents were neutral with 1.63 % of the respondents at very small extent hence there for
been concluded that supplier collaboration improved procurement performance extensively while reducing operational errors.

Tarhandeh (2014), supports the findings of this study that getting the maximum output with minimum input (objective performance) takes into consideration the present state, doing things consistently with focuses on the process effectiveness which measures if actual output meets desired output and takes into consideration the long term strategy.

Table 4.8: Effectiveness & Efficiency

<table>
<thead>
<tr>
<th>Statements</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery to (original) schedule</td>
<td>2.44%</td>
<td>6.50%</td>
<td>21.14%</td>
<td>43.09%</td>
<td>26.83%</td>
</tr>
<tr>
<td>Supply base has demonstrated continuous improvement in defect rates</td>
<td>2.44%</td>
<td>4.07%</td>
<td>26.83%</td>
<td>26.83%</td>
<td>39.84%</td>
</tr>
<tr>
<td>Measures compliance to contract terms and conditions, and pricing agreements</td>
<td>1.63%</td>
<td>7.32%</td>
<td>17.89%</td>
<td>36.59%</td>
<td>36.59%</td>
</tr>
</tbody>
</table>

Rating scale
Where 1 = very small extent; 2 = small extent; 3 = moderate extent; 4 = large extent; 5 = very large extent

ii. Cost

The respondents were requested to indicate the kind of cost impacts for long term supplier relation affect organizational performance from the findings in table 4.9. Based on the study show that, the supplier’s cost is typically locked at the time of negotiation, for the entire life of the contract with a mean of 3.67, 1.33 standard deviation keeping cost on the agreed framework hence avoiding conflict. With a mean of 3.95 and 1.01 standard deviation of respondents emphasis on developing and executing sourcing strategies to reduce total cost of ownership organization capability to cut operational cost.

Arani (2015), supports the findings of this study that cost performance measures compliance to contract service level agreements (SLA’s), contract terms, conditions, and pricing agreements. This metric is used to benchmark supplier’s compliance with the standards they have negotiated.

Table 4.9: Cost

<table>
<thead>
<tr>
<th>Statements</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The supplier’s cost is typically locked at the time of negotiation, for the entire life of the contract</td>
<td>1</td>
<td>5</td>
<td>3.67</td>
<td>1.13</td>
</tr>
<tr>
<td>Emphasis on developing and executing sourcing strategies to reduce Total Cost of Ownership Organization Capability</td>
<td>1</td>
<td>5</td>
<td>3.95</td>
<td>1.01</td>
</tr>
<tr>
<td>Focus on reducing transaction cost and tracking compliance through Technology tools used to</td>
<td>1</td>
<td>5</td>
<td>3.62</td>
<td>1.07</td>
</tr>
</tbody>
</table>

Rating scale
Where 1 = very small extent; 2 = small extent; 3 = moderate extent; 4 = large extent; 5 = very large extent

iii. Quality

The study endeavoured to evaluate the overall influence of supplier relationship management practices on the attributes of supply chain performance such as, quality management in the operations from the findings in table 4.10 shows that with a mean of 3.69 and 0.98 standard deviation at large extent the respondents agreed that managing supplier quality performance objectively on quality against original quality requirements and performance requirements in contracts. With a mean of3.57 and 0.97 standard deviations the respondents that quality in design for supplier assurance & performance measurement quality control in supplier performance on supplier audits.
This was in line with Bradner (2014), stating that setting procurement process requires supplying equipment, materials and other resources to carry out in constructing industrial project right at the first time and every time.

Table 4.10: Quality

<table>
<thead>
<tr>
<th>Statements</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Value Chain Representation</td>
<td>3.57</td>
<td>0.97</td>
</tr>
<tr>
<td>Provide integrated project &amp; programmed life cycle quality assurance &amp; control services managing supplier quality</td>
<td>3.69</td>
<td>0.98</td>
</tr>
<tr>
<td>performance objectively on quality against original quality requirements</td>
<td>3.51</td>
<td>0.97</td>
</tr>
<tr>
<td>Assurance &amp; Performance Measurement Quality Control Supplier performance at Execution System Assurance and Supplier Audits</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Rating scale
Where 1= very small extent; 2 = small extent; 3= moderate extent; 4 = large extent; 5 = very large extent

Table 4.11: Regression Analysis model

The R2 is the coefficient of determination. This value explains how conflict of interest varied, Collaborative processes, Managed competition, Value based compensation. The model summary table shows that three predictors can explain 81.3 % of change in Collaborative processes, Managed competition, Value based compensation an implication that the remaining 18.7 % of the variation in Supplier collaboration could be accounted for by other factors.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.902</td>
<td>0.813</td>
<td>0.808</td>
<td>0.487</td>
</tr>
</tbody>
</table>

4.5.2 Beta coefficients

The constant 1.186 represented the constant which predicted value of organization performance in The Kenya Urban Roads Authority. When all effects of Supplier collaboration remain constant at zero (0). This implied that Supplier collaboration in Kenya Urban Roads Authority would be at 1.186 holding Collaborative processes, Managed competition or Value based compensation at zero (0).

Regression results revealed that Collaborative processes has positive influence in organization performance in The Kenya Urban Roads Authority. As indicated by $\beta_1 = 0.014$, $p=0.000<0.05$, $t= 3.115$. The implication is that an increase in Collaborative processes leads to increase in organization performance.

Regression results revealed that Managed competition has positive influence in Supplier collaboration in The Kenya Urban Roads Authority. As indicated by $\beta_2 = 0.169$, $p=0.000<0.05$, $t= 2.068$. The implication is that an increase in Collaborative processes leads to increase in organization performance.

Regression results revealed that Value based compensation has positive influence in organization performance in The Kenya Urban Roads Authority. As indicated by $\beta_3 = 0.679$, $p=0.022<0.05$, $t= 6.688$. The implication is that an increase in Collaborative processes leads to increase in organization performance.
Table 4.12 Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>1.186</td>
<td>0.161</td>
<td>7.376</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Collaborative processes</td>
<td>0.014</td>
<td>0.125</td>
<td>316</td>
<td>3.115</td>
<td>.000</td>
</tr>
<tr>
<td>Managed competition</td>
<td>0.169</td>
<td>0.082</td>
<td>227</td>
<td>2.068</td>
<td>.000</td>
</tr>
<tr>
<td>Value based compensation</td>
<td>0.679</td>
<td>0.102</td>
<td>681</td>
<td>6.688</td>
<td>.022</td>
</tr>
</tbody>
</table>

a Dependent Variable: organization performance

b Predictors: (Constant), Collaborative processes, Managed competition, Value based compensation

\[ Y = 1.186 + 0.014 X_1 + 0.169 X_2 + 0.679 X_3 + e \]

Where:

\( Y = \text{Supplier collaboration} \)

\( \beta_0 = \text{Constant of Regression} \)

\( X_1 = \text{Collaborative processes} \)

\( X_2 = \text{Managed competition} \)

\( X_3 = \text{Value based compensation} \)

\( e = \text{Error of Regression} \)

5.2 Supplier Collaboration

The study established that effective supplier collaboration on organizational performance of Kenya Urban Roads Authority’s from the finding it can there be concluded that supplier collaboration platform connects buyers, suppliers, and all their processes in the day to day operations. Collaboration helps businesses transform the way they work with suppliers done – and adapt to whatever the future brings. All Your Suppliers On-board fast & collaborate in real time with entire organization supply chain network. Powerful Platform Respond to KURA growing business needs with help on their flexible, open platform.

5.3 Conclusions

The study concludes that supplier collaboration build your own custom vendor management program enables the organization to Maximize value at each stage of the vendor relationship. Control exposure to vendor-related risks and reduce the effort needed to manage vendors, hence reduce contracting complexity. That has implications throughout the organization performance.

5.4 Recommendations

The study recommends that Demand/Supply Planning and Management to Balance resources with requirements to establish and communicate plans to align the supply chain Supplier Collaboration plan with corporate financial objectives. Management of business rules/stage gate process for Supply chain performance objectives in from the findings.

REFERENCES


KIPPRA, (2013) challenges encountered in Public procurement in Kenya


Maina and James, (2010) Public procurement in Kenya, research paper


