INFLUENCE OF CONTRACT ADMINISTRATION ON PERFORMANCE OF PARASTATALS IN KENYA

Josphat Mutua Kimeo and Dr. John Achuora
Influence of Contract Administration on Performance of Parastatals in Kenya

1*Josphot Mutua Kimeo
Post Graduate Student: Department of Procurement and Logistics, Jomo Kenyatta University of Agriculture and Technology

*Corresponding Author’s E-mail: josmkimeu@gmail.com

2Dr. John Achuora
Lecturer, Department of Procurement and Logistics, Jomo Kenyatta University of Agriculture and Technology

Abstract

Purpose: The study helped to unearth the influence of contract administration on performance of parastatals in Kenya.

Methodology: This study employed descriptive research design. The study reviewed both theoretical and empirical literature and then proposed the research methodology that addressed the gaps identified in literature as well as to validate the statistical hypotheses. The study preferred this method because it allows an in-depth study of the subject. The target population was all the 187 parastatals in Kenya. Questionnaires were administered to collect qualitative and quantitative data from a sample of 127 heads of procurement, who were selected using simple random sampling, from the four strata. After data collection, quantitative data was coded using Statistical Package for Social Science (SPSS) version 22. Data was analyzed through descriptive statistical methods such as means, standard deviation, frequencies and percentage. Inferential analyses were used in relation to correlation analysis and regression analysis to test the relationship between the four explanatory variables and the explained variable.

Results and conclusion: The results of regression analysis revealed there is a significant positive relationship between dependent variable and the independent variable. R square value of 0.647 means that 64.7% of the corresponding variation in performance of parastatals in Kenya can be explained or predicted by (management strategy, monitoring and evaluation, shareholder management and conflict resolution) which indicated that the model fitted the study data. The results of regression analysis revealed that there was a significant positive relationship between dependent variable and independent variable at ($\beta = 0.647$, $p=0.000 <0.05$).

Based on the study findings, the study concludes that performance of parastatals can be improved by management strategy, monitoring and evaluation, shareholder management and conflict resolution. First, in regard to management strategy, the regression coefficients of the study show that it has a significant influence on performance of parastatals.

Unique contribution to theory, policy and practice: The study recommended that public institutions should embrace contract administration so as to improve performance and further
researches should to be carried out in other public institutions to find out if the same results can be obtained.

Keywords: Management strategy, monitoring and evaluation, shareholder management and conflict resolution

1.1 INTRODUCTION

Contract administration is the process of monitoring whether the contract parties are complying and performing as per the agreement. It also involves handling of issues that include errors, payment, specifications, policy specifications, as well as any changes that may result in the course of the contract execution (Camén, Gottfridsson & Rundh, 2012). Contract administration entails a process of efficient and systematic management of contract creation, implementation, and analysis in order to maximize financial and operational performance, as well as minimize risks (Stucker, 2011).

Contract administration improves an organization’s operational performance as indicated by various measures, such as, quality, flexibility, speed, efficiency and supplier relationship (Cho & Pucick, 2015). Contract administration may be defined as the process that ensures both parties to a contract fully meet their respective obligations as efficiently and effectively as possible, in order to deliver the business and operational objectives required from the contract and in particular to provide value for money (Nguyen, 2013). As a result, developing and managing contracts is a skill required by almost all public sector entities. Rendon (2010) affirm that the quintessence of contract administration evolves proper planning, award, and administration of contracts and the monitoring of providers’ performance. Once this is deficient, it increases the risk of endangering value for money (Cropper, 2016).

1.2 Problem Statement

Contract administration is the process of monitoring whether the contract parties are complying and performing as per the agreement. It also involves handling of issues that include errors, payment, specifications, policy specifications, as well as any changes that may result in the course of the contract execution (Camén, Gottfridsson & Rundh, 2012). Contract administration entails a process of efficient and systematic management of contract creation, implementation, and analysis in order to maximize financial and operational performance, as well as minimize risks (Stucker, 2011). Contract administration improves an organization’s operational performance as indicated by various measures, such as, quality, flexibility, speed, efficiency and supplier relationship (Cho & Pucick, 2015). Contract administration may be defined as the process that ensures both parties to a contract fully meet their respective obligations as efficiently and effectively as possible, in order to deliver the business and operational objectives required from the contract and in particular to provide value for money (Nguyen, 2013). As a result, developing and managing contracts is a skill required by almost all public sector entities. Rendon (2010) affirm that the quintessence of contract administration evolves proper planning, award, and administration of contracts and the monitoring of providers’ performance. Once this is deficient, it increases the risk of endangering value for money (Cropper, 2016).
1.3 Objectives of the Study

i. To examine the influence of management strategy on performance of parastatals in Kenya.

ii. To establish the influence of monitoring and evaluation on performance of parastatals in Kenya.

iii. To determine the influence of shareholder management on performance of parastatals in Kenya.

iv. To evaluate the influence of conflict resolution on performance of parastatals in Kenya.

2.0 LITERATURE REVIEW

2.1 Contract Compliance Theory

Contract compliance theory is the act of conforming to contract agreements between buyers and sellers. Generally, the purchasing function is held responsible for all reasons of non-compliance. According to Aberdeen Group (2016) compliance may be internal or external. Internal compliance can be interpreted as either conforming to the rules in the agreement by purchasing organization such as payment terms and minimum order requirements or in purchasing from agreement only, that is, purchasing by using framework agreements for the entire company (Telgen, 2014).

According to Aberdeen Group (2016) the use of framework agreements for the entire company can assist maintaining high contract compliance and reduction in purchasing costs. This can in turn increase the probability of project success. As far as the projects as concerned, external contract compliance can take up several forms including unavailability of products services or qualified personnel, charging prices different from the contracted prices, or late delivery or delivering products that do not meet the contracted specifications. The theory of contract compliance augurs well with the monitoring and evaluation variable in this study.

2.2 CONTRACT ADMINISTRATION

2.2.1 Management Strategy

Contract administration involves maintaining an updated form of the contract; controlling and managing contract variations; paying the contractor; managing assets; drafting reports; and terminating the contract (Hansson & Longva, 2014). Contract administration, the formal governance of the contract, is concerned with the mechanics of the relationship between the parties.

The implementation of procedures defining the interface between them, and the smooth operation of routine administrative and clerical functions; and contract administration includes such tasks as contract maintenance and change control, charges and cost monitoring, ordering and payment procedures, management reporting, and so on (OGC, 2012).

2.2.2 Monitoring and Evaluation

Technical contract administration starts with contractor monitoring and evaluation management. This is vital in enabling the contracting organization to ascertain that the contractor is undertaking his duties and fulfilling his obligations in compliance with the contract. This also allows the contracting organization to pinpoint any issues or problems in advance that could arise and offer...
timely solutions (Elsey, 2012). Particularly, the outline of contractor monitoring and acceptance management includes: monitoring, controlling, and evaluating the contractor’s performance; evaluating the quantity and quality of services, works, or products delivered; and identifying and handling risks (Cropper, 2015).

2.1.3 Shareholder Management

Contract administration involves managing the contractor relationship with stakeholders. This refers to the actions and initiatives of the contracting company to create and maintain a positive relationship with the stakeholders (Piga & Treumer, 2013). This depends on the mutual trust, understanding, regular communication and timely management of possible problems in the contract. Thirdly, the practice includes contract administration. This procedure involves maintaining an updated form of the contract; controlling and managing contract variations; paying the contractor; managing assets; drafting reports; and terminating the contract (Hansson & Longva, 2014).

2.1.4 Conflict Resolution

Conflict is defined as any action or circumstance resulting from incompatible or opposing needs (Peña-Mora, 2013). A significant characteristic of conflict is that it usually presents two incompatible possibilities at the same time that result in difficulty for either party to make a choice (Fisher, 2014). Cheung and Suen (2002) stated that disputes are inevitable in construction projects and Dispute Resolution Procedures such as litigation, arbitration, mediation, dispute adviser and negotiation are widely practiced. A decision-making model was created using the Analytical Hierarchy Process (AHP) and Multi-Attribute Utility Technique (MAUT). The model comprises four parts: selection criteria, dispute resolution strategies, collection of utility factors and selection criteria weightings. These were gathered from an empirical data collected through an interview survey with selected experts in the field.
2.2 Conceptual Framework

| Independent Variables                  | Dependent Variable                  |
|----------------------------------------|--------------------------------------|
| Management Strategy                     | Performance of Parastatals           |
| • Change Management                    | • Cost Reduction                     |
| • Payment Schedules                    | • Lead Time Reduction                |
| • Handover Policy                      | • Profitability                      |
| Monitoring and Evaluation              |                                      |
| • Progress and Milestone Reports       |                                      |
| • Incentives and Consequences Policy   |                                      |
| • Contingency Channels                 |                                      |
| Shareholder Management                 |                                      |
| • Donor Relationship                   |                                      |
| • Contractor Relationship              |                                      |
| • Customer Relationship                |                                      |
| Conflict Resolution                    |                                      |
| • Arbitration                          |                                      |
| • Conciliation                         |                                      |
| • Litigation                           |                                      |

Figure 1: Conceptual framework

3.0 METHODOLOGY

This study employed descriptive research design. The study reviewed both theoretical and empirical literature and then proposed the research methodology that addressed the gaps identified in literature as well as to validate the statistical hypotheses. The study preferred this method because it allows an in-depth study of the subject. The target population was all the 187 parastatals in Kenya. Questionnaires were administered to collect qualitative and quantitative data from a sample of 127 heads of procurement, who were selected using simple random sampling, from the four strata. After data collection, quantitative data was coded using Statistical Package for Social Science (SPSS) version 22. Data was analyzed through descriptive statistical methods such as means, standard deviation, frequencies and percentage. Inferential analyses were used in relation to correlation analysis and regression analysis to test the relationship between the four explanatory variables and the explained variable.
4.0 RESULTS FINDINGS

4.1 Response Rate

A sample of respondents were interviewed using questionnaires that allowed the study to drop the questionnaires to the respondents and then collect them at a later date when they had filled the questionnaires. A total of 127 questionnaires were distributed to heads of procurement. Out of the population covered, 104 were responsive representing a response rate of 82%. This was above the 50% which is considered adequate in descriptive statistics according to (Kothari, 2014).

| Response          | Frequency | Percentage |
|-------------------|-----------|------------|
| Actual Response   | 104       | 82         |
| Non-Response      | 23        | 18         |
| **Total**         | **127**   | **100%**   |

4.3 Pilot Study

The cronbach’s alpha was computed in terms of the average inter-correlations among the items measuring the concepts. The rule of thumb for cronbach’s alpha is that the closer the alpha is to 1 the higher the reliability (Dunn, 2010). A value of at least 0.7 is recommended. Cronbach’s alpha is the most commonly used coefficient of internal consistency and stability. Consistency indicated how well the items measuring the concepts hang together as a set. Cronbach’s alpha was used to measure reliability. This was done on the four objectives of the study. The higher the coefficient, the more reliable is the test.

| Variable              | No. of Items | Respondents | \( \alpha=\text{Alpha} \) | Comment |
|-----------------------|--------------|-------------|--------------------------|---------|
| Management Strategy   | 9            | 13          | 0.893                    | Reliable |
| Monitoring and Evaluation | 9            | 13          | 0.987                    | Reliable |
| Shareholder Management | 9            | 13          | 0.974                    | Reliable |
| Conflict Resolution   | 9            | 13          | 0.976                    | Reliable |

4.4 Demographic Information

This section presents the personal details.

4.4.1 Distribution of Respondents by Gender

The study determined the gender distribution of the respondents. The results summarized in the figure below. The results revealed that majority of the respondent (51%) indicated that they were male, while only (49%) of the respondent indicated that they were female. The percentages may raise the issue of gender equity in public institutions in this country, but that is outside the scope of this study. A study on UK companies found that women and men do not differ in their ability
to perform operational tasks, but rather bring a different perspective to strategic decision making in procurement (Gianakis, 2012).

Figure 2: Distribution of Respondents by Gender

4.4.2 Distribution of Respondents by Age

The study determined the distribution of respondents by age. The results summarized in the table below. The results revealed that majority of the respondent (46.2%) were above 50 years old, (24%) were 31-40 years old, while (29.8%) were between 41-50 years. The findings are in agreement with those of Hall (2014) who established that there are two natural age peaks of the early 30s and mid 40s which correlated to employee performance and consequential performance of parastatals.

Table 3: Distribution of Respondents by Age

| Years            | Frequency | Percent |
|------------------|-----------|---------|
| 31-40 Years      | 25        | 24.0    |
| 41-50 Years      | 31        | 29.8    |
| 50 Years and above | 48    | 46.2    |
| Total            | 104       | 100.00  |

4.4.3 Distribution of Respondents by Level of Education

The respondents were asked to state their highest level of education and the results revealed that majority of the respondent (51%) indicated that their academic qualification was up to master’s level. The result further revealed that (49%) of the respondent indicated that their academic qualification was up to degree level. With majority respondents having degree and above, it is expected that their level of understanding of performance of parastatals is good. This is an indication that the results obtained from respondents interviewed in the present study can be relied upon. These findings concur those of Hatry (2016) who established that majority of who run public procurement are highly educated and that there is evidence linking education and performance in parastatals.
Table 4.: Distribution of Respondents by Level of Education

| Education Level | Frequency | Percent |
|-----------------|-----------|---------|
| Undergraduate   | 51        | 49      |
| Post-Graduate   | 53        | 51      |
| Total           | 104       | 100     |

4.4.4 Distribution of Respondents by Length of Service

The study determined the number of years the respondents had worked in their current office. The respondents were asked to indicate their work duration. The result revealed that majority of the respondents (31.7%) indicated that their work duration was 6-8 years. The result also showed that (30.8%) of the respondent indicated that their work duration was 9 and above years above. The findings of the study are in tandem with literature review by Joiner (2012) who indicated that a duration and experience of employee helps him or her to have better knowledge and skills which contribute to procurement performance.

Table 5: Distribution of Respondents by Length of Service

| Length of Service | Frequency | Percent |
|-------------------|-----------|---------|
| 3-5 Years         | 39        | 37.5    |
| 6-8 Years         | 33        | 31.7    |
| 9 Years and above | 32        | 30.8    |
| Total             | 104       | 100.0   |

4.5 Descriptive Statistics

4.5.1 Management Strategy

The first objective of the study was to assess the influence of management strategy on performance of parastatals in Kenya. The respondents were asked to indicate to what extent management strategy influenced performance among parastatals in Kenya. Results indicated that majority of the respondents 27% agreed that it was to a very effective, 25% said that it was effective, 29% said it was somehow effective, while ineffective was at 19%.

![Management Strategy](image)

Figure 3: Management Strategy
The respondents were also asked to comment on statements regarding management strategy influence on performance among parastatals in Kenya. The responses were rated on a Likert scale and the results presented in Table 4.6 below. It was rated on a 5-point Likert scale ranging from; 1 = strongly disagree to 5 = strongly agree. The scores of ‘strongly disagree’ and ‘disagree’ have been taken to represent a statement not agreed upon, equivalent to mean score of 0 to 2.5. The score of ‘neutral’ has been taken to represent a statement agreed upon, equivalent to a mean score of 2.6 to 3.4. The score of ‘agree’ and ‘strongly agree’ have been taken to represent a statement highly agreed upon equivalent to a mean score of 3.5 to 5.

The respondents were asked to indicate their responses on influence of management strategy on performance of parastatals in Kenya. The results revealed that majority of the respondent with a mean of (4.13) agreed with the statement that change management plays a significant role in cost reduction. The measure of dispersion around the mean of the statements was 0.94 indicating the responses were varied. The result revealed that majority of the respondent as indicated by a mean of (4.27) agreed with the statement payment schedules plays a significant role in cost reduction. The standard deviation for was 0.968 showing a variation. The result revealed that majority of the respondent (4.55) agreed with the statement that handover policy play a significant role in cost reduction. The results were varied as shown by a standard deviation of 0.5.

The average response for the statements on change management plays a great role in reducing lead time was (4.22). The results were varied as shown by a standard deviation of 0.955. The average response for the statements on payment schedules plays a great role in reducing lead time was (4.4). The results were varied as shown by a standard deviation of 0.704. The result revealed that majority of the respondent with a mean of (4.46) agreed with the statement that handover policy plays a great role in reducing lead time. The measure of dispersion around the mean of the statements was 0.787 indicating the responses were varied.

The result revealed that majority of the respondent as indicated by a mean of (4.44) agreed with the statement change management plays a great role in improving profitability. The standard deviation for was 0.786 showing a variation. The result revealed that majority of the respondent (4.21) agreed with the statement that payment schedules plays a great role in improving profitability. The results were varied as shown by a standard deviation of 0.942. The average response for the statements on handover policy plays a great role in improving profitability was (4.01). The results were varied as shown by a standard deviation of 0.81.

The average mean of all the statements was 4.01 indicating that majority of the respondents agreed on management strategy having an influence on performance of parastatals in Kenya. However, the variations in the responses were varied as shown by a standard deviation of 0.81. These findings imply that management strategy was at the heart of the organizations. The findings agree with Kinyanjui (2010) that using management strategy as contract administration practice is a smart move and can reduce expenses significantly.
Table 6: Management Strategy

| Statements                                           | Mean | Std. Deviation |
|------------------------------------------------------|------|----------------|
| Change management plays a great role in cost reduction | 4.1  | 0.94           |
| Payment schedules plays a great role in cost reduction | 4.27 | 0.968          |
| Handover policy plays a great role in cost reduction  | 4.55 | 0.5            |
| Change management plays a great role in reducing lead time | 4.22 | 0.955          |
| Payment schedules plays a great role in reducing lead time | 4.41 | 0.704          |
| Handover policy plays a great role in reducing lead time | 4.46 | 0.787          |
| Change management plays a great role in improving profitability | 4.44 | 0.786          |
| Payment schedules plays a great role in improving profitability | 4.21 | 0.942          |
| Handover policy plays a great role in improving profitability | 4.11 | 1.096          |
| **Average**                                          | **4.01** | **0.81**      |

4.5.2 Monitoring and Evaluation

The second objective of the study was to establish the influence of monitoring and evaluation on performance of parastatals in Kenya. The respondents were asked to indicate to what extent monitoring and evaluation influenced performance of parastatals in Kenya. Results indicated that majority of the respondents 25% agreed that it was to a very great extent, 27% said that it was to a great extent, 35% said it was moderate, while little extent and not all were at 5% and 8% respectively.

![Monitoring and Evaluation](image)

**Figure 4: Monitoring and Evaluation**

The respondents were also asked to comment on statements regarding monitoring and evaluation on performance of parastatals in Kenya. The results revealed that majority of the respondent with a mean of (3.58) agreed with the statement that progress and milestone reports play a significant role in cost reduction. The measure of dispersion around the mean of the statements was 1.0 indicating the responses were varied. The result revealed that majority of the respondent as indicated by a mean of (3.63) agreed with the statement incentives and consequences plays a significant role in cost reduction. The standard deviation for was 0.9 showing a variation. The result revealed that majority of the respondent (3.6) agreed with the statement that contingency
channels plays a significant role in cost reduction. The results were varied as shown by a standard deviation of 0.7. The average response for the statements on progress and milestone reports plays a great role in reducing lead time was (3.45). The results were varied as shown by a standard deviation of 1.2. The average responses for the statements on incentives and consequences policy plays a great role in reducing lead time was (3.5). The results were varied as shown by a standard deviation of 1.0. The results revealed that majority of the respondent with a mean of (3.61) agreed with the statement that contingency channels play a great role in reducing lead time. The measure of dispersion around the mean of the statements was 0.6 indicating the responses were varied.

The result revealed that majority of the respondent as indicated by a mean of (4.17) agreed with the statement progress and milestone reports plays a great role in improving profitability. The standard deviation for was 0.8 showing a variation. The result revealed that majority of the respondent (3.63) agreed with the statement that incentives and consequences policy plays a great role in improving profitability. The results were varied as shown by a standard deviation of 0.8. The average response for the statements on contingency channels play a great role in improving profitability plays a significant role in attaining timely deliveries was (3.66). The results were varied as shown by a standard deviation of 1. The average mean of all the statements was 3.77 indicating that majority of the respondents agreed on monitoring and evaluation having an influence on performance of parastatals in Kenya. However, the variations in the responses were varied as shown by a standard deviation of 1.134. These findings agree with Kirungu (2012) that through monitoring and evaluation, organizations can improve competitive positioning.

**Table 7: Monitoring and Evaluation**

| Statements                                      | Mean | Std. Deviation |
|-------------------------------------------------|------|----------------|
| Progress and milestone reports plays a great role in cost reduction | 3.58 | 1.0            |
| Incentives and consequences policy play a great role in cost reduction | 3.63 | 0.9            |
| Contingency channels play a great role in cost reduction | 3.6  | 0.7            |
| Progress and milestone reports plays a great role in reducing lead time | 3.45 | 1.2            |
| Incentives and consequences policy play a great role in reducing lead time | 3.5  | 1.0            |
| Contingency channels play a great role in reducing lead time | 3.61 | 0.6            |
| Progress and milestone reports plays a great role in improving profitability | 4.17 | 0.8            |
| Incentives and consequences policy play a great role in improving profitability | 3.63 | 0.8            |
| Contingency channels play a great role in improving profitability | 3.66 | 1.0            |
| **Average**                                    | **3.77** | **1.134**     |
4.5.3 Shareholder Management

There was also need to establish influence of shareholder management on performance of parastatals in Kenya as the third objective. Results indicated that majority of the respondents 47% agreed that it was to a very great extent, 45% said that it was to a great extent, 2% said it was moderate; little extent was 2% and not all at 4%.

Stakeholder Management

![Pie chart showing distribution of responses](image)

**Figure 5: Shareholder Management**

The respondents were asked to indicate their levels of agreement on statements regarding shareholder management. The results revealed that majority of the respondents with a mean of (3.8) agreed with the statement that donor relationship play a significant role in cost reduction. The measure of dispersion around the mean of the statements was 0.9 indicating the responses were varied. The result revealed that majority of the respondent as indicated by a mean of (4.9) agreed with the statement contractor relationship play a significant role in cost reduction. The standard deviation for was 0.9 showing a variation. The result revealed that majority of the respondent (3.4) agreed with the statement that customer relationship plays a significant role in cost reduction. The results were varied as shown by a standard deviation of 1.3.

The average response for the statements on donor relationship plays a great role in reducing lead time was (3.6). The results were varied as shown by a standard deviation of 1.2. The average response for the statements on contractor relationship plays a great role in reducing lead time was (4.1). The results were varied as shown by a standard deviation 0.8. The results revealed that majority of the respondent with a mean of (4.1) agreed with customer relationship play a great role in reducing lead time. The measure of dispersion around the mean of the statements was 0.9 indicating the responses were varied.

The result revealed that majority of the respondent as indicated by a mean of (4) agreed with the statement donor relationship plays a great role in improving profitability. The standard deviation for was 1 showing a variation. The result revealed that majority of the respondent (4.2) agreed with the statement that contractor relationship plays a great role in improving profitability. The
results were varied as shown by a standard deviation of 0.8. The average response for the statements on customer relationship play a great role in improving profitability was (3.9). The results were varied as shown by a standard deviation of 0.9.

Average mean of all the statements was 3.8 indicating that majority of the respondents agreed on shareholder management having an influence on performance of parastatals in Kenya. However, the variations in the responses were varied as shown by a standard deviation of 0.9. The results are in tandem with Lin and Lee (2011) who opine that an organization benefits greatly when shareholder management is embraced in their procurement department.

Table 8: Shareholder Management

| Statements                                           | Mean | Std. Deviation |
|------------------------------------------------------|------|----------------|
| Donor relationship plays a great role in cost reduction | 3.8  | 0.9            |
| Contractor relationship plays a great role in cost reduction | 4.9  | 0.9            |
| Customer relationship play a great role in cost reduction | 3.4  | 1.3            |
| Donor relationship plays a great role in reducing lead time | 3.6  | 1.2            |
| Contractor relationship plays a great role in reducing lead time | 4.1  | 0.8            |
| Customer relationship play a great role in reducing lead time | 4.1  | 0.9            |
| Donor relationship plays a great role in improving profitability | 4.0  | 1.0            |
| Contractor relationship plays a great role in improving profitability | 4.2  | 0.8            |
| Customer relationship play a great role in improving profitability | 3.9  | 0.9            |
| **Average**                                          | **3.8** | **0.9**        |

4.5.4 Conflict Resolution

There was also need to establish the influence of conflict resolution on performance of parastatals in Kenya. Results also showed that 3% of respondents indicated to very great extent, great extent was at 12%, moderate extent was 37%, while little extent was at 27% and not at all was at 21%.

Figure 6: Conflict Resolution
The respondents were asked to indicate their views on conflict resolution. The results revealed that majority of the respondent with a mean of (4.5) agreed with the statement that arbitration plays a significant role in cost reduction. The measure of dispersion around the mean of the statements was 0.5. The result revealed that majority of the respondent as indicated by a mean of (3.9) agreed with the statement conciliation plays a significant role in cost reduction the standard deviation for was 0.8 showing a variation. The result revealed that majority of the respondent (3.2) agreed with the statement that litigation plays a significant role in cost reduction. The results were varied as shown by a standard deviation of 1.4.

The average response for the statements on arbitration plays a great role in reducing lead time was (4.5). The results were varied as shown by a standard deviation of 0.5. The average response for the statements on conciliation plays a great role in reducing lead time was (4.4). The results were varied as shown by a standard deviation 0.6. The results revealed that majority of the respondent with a mean of (4.4) agreed with the statement Arbitration plays a great role in reducing lead time. The measure of dispersion around the mean of the statements was 0.9 indicating the responses were varied. The result revealed that majority of the respondent as indicated by a mean of (4.3) agreed with the statement Arbitration plays a great role in improving profitability. The standard deviation for was 0.7 showing a variation. The result revealed that majority of the respondent (4.5) agreed with the statement that Conciliation plays a great role in improving profitability. The results were varied as shown by a standard deviation 1.0. The average response for the statements on Litigation play a great role in improving profitability was (4.1). The results were varied as shown by a standard deviation of 1.0.

Average mean of all the statements was 4.2 indicating that majority of the respondents agreed on conflict resolution having an influence on performance of parastatals in Kenya. However, the variations in the responses were varied as shown by a standard deviation of 0.8. The results agree with Muge (2013) that an organization that embraces conflict resolution benefits greatly in its operations.

Table 9: Conflict Resolution

| Statements                                      | Mean | Std. Deviation |
|-------------------------------------------------|------|----------------|
| Arbitration plays a great role in cost reduction| 4.5  | 0.5            |
| Conciliation plays a great role in cost reduction| 3.9  | 0.8            |
| Litigation play a great role in cost reduction  | 3.2  | 1.4            |
| Arbitration plays a great role in reducing lead time | 4.5  | 0.5            |
| Conciliation plays a great role in reducing lead time | 4.4  | 0.6            |
| Litigation play a great role in reducing lead time  | 4.4  | 0.9            |
| Arbitration plays a great role in improving profitability | 4.3  | 0.7            |
| Conciliation plays a great role in improving profitability | 4.2  | 1.0            |
| Litigation play a great role in improving profitability   | 4.1  | 1.0            |
| **Average**                                      | **4.2** | **0.8**         |
4.6 Correlation Analysis

Correlation analysis was used to determine both the significance and degree of association of the variables and also predict the level of variation in the dependent variable caused by the independent variables. The correlation summary shown in Table 4.10 indicates that the associations between each of the independent variables and the dependent variable were all significant at the 95% confidence level. The correlation analysis to determine the relationship between contract administration and performance of parastatals in Kenya, Pearson correlation coefficient computed and tested at 5% significance level.

The results indicate that there is a positive relationship \((r=.509)\) between management strategy and performance of parastatals in Kenya. In addition, the researcher found the relationship to be statistically significant at 5% level \((p=0.000, <0.05)\). The results also indicate that there is a positive relationship \((r=.398)\) between monitoring and evaluation and performance of parastatals in Kenya. In addition, the researcher found the relationship to be statistically significant at 5% level \((p=0.000, <0.05)\). The results indicate that there is a positive relationship \((r=.678)\) between shareholder management and performance of parastatals in Kenya. In addition, the researcher found the relationship to be statistically significant at 5% level \((p=0.000, <0.05)\). The results indicate that there is a positive relationship \((r=.685)\) between conflict resolution and performance of parastatals in Kenya. In addition, the researcher found the relationship to be statistically significant at 5% level \((p=0.000, <0.05)\). Hence, it is evident that all the independent variables could explain the changes in performance of parastatals in Kenya, on the basis of the correlation analysis.
Table 10: Summary of Pearson’s Correlations

| Correlations               | Management Strategy | Monitoring and Evaluation | Shareholder Management | Conflict Resolution | Performance of Parastatals |
|----------------------------|---------------------|---------------------------|------------------------|---------------------|----------------------------|
| Management Strategy        | Sig. (2-Tailed)     | 1                         |                        |                     |                            |
| Monitoring and Evaluation  | Pearson Correlation | .263**                    | 1                      |                     |                            |
| Shareholder Management     | Sig. (2-Tailed)     | .350**                    | .346**                 | 1                   |                            |
| Conflict Resolution        | Pearson Correlation | .363**                    | .516**                 | .543**              | 1                          |
| Performance of Parastatals | Pearson Correlation | .509**                    | .398**                 | .678**              | .685**                     |

**Correlation is Significant at the 0.05 Level (2-Tailed).

4.7 Regression Analysis

In this study, multivariate regression analysis was used to determine the significance of the relationship between the dependent variable and all the independent variables pooled together. Regression analysis was conducted to find the proportion in the dependent variable (performance of parastatals in Kenya) which can be predicted from the independent variables (management strategy, monitoring and evaluation, shareholder management and conflict resolution).

Table 11 presents the regression coefficient of independent variables against dependent variable. The results of regression analysis revealed there is a significant positive relationship between dependent variable and the independent variable. R square value of 0.647 means that 64.7% of the corresponding variation in performance of parastatals in Kenya can be explained or predicted by (management strategy, monitoring and evaluation, shareholder management and conflict resolution) which indicated that the model fitted the study data. The results of regression analysis revealed that there was a significant positive relationship between dependent variable and independent variable at ($\beta = 0.647$, p=0.000 <0.05).
Table 11: Model Summary

| Model | R     | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------|----------|-------------------|---------------------------|
| 1     | .805a | .647     | .633              | .166295                   |

a. Predictors: (Constant), Management Strategy, Monitoring and Evaluation, Shareholder Management and Conflict Resolution

b. Dependent Variable: Performance of Parastatals

Table 12: ANOVA

| Model | Sum of Squares | df | Mean Square | F         | Sig. |
|-------|----------------|----|-------------|-----------|------|
| 1     | Regression     | 4  | 1.257       | 44.892    | .000b|
|       | Residual       | 99 | 0.028       |           |      |
| Total | 7.765          | 103|             |           |      |

a) Predictors: (Constant), Management Strategy, Monitoring and Evaluation, Shareholder Management and Conflict Resolution

b) Dependent Variable: Performance of Parastatals

The significance value is 0.000 which is less than 0.05 thus the model is statistically significant in predicting how management strategy, monitoring and evaluation, shareholder management and conflict resolution influence performance of parastatals in Kenya. The F critical at 5% level of significance was 23.5. Since F calculated which can be noted from the ANOVA table above is 44.892 which is greater than the F critical (value= 23.5), this shows that the overall model was significant. The study therefore establishes that; management strategy, monitoring and evaluation, shareholder management and conflict resolution were all important contract administration aspects influencing performance of parastatals. These results agree with Rotich (2011) results which indicated a positive and significant influence of prudent contract administration on performance of parastatals.

Table 13: Coefficients of Determination

| Model       | Unstandardized Coefficients | Standardized Coefficients | t     | Sig. |
|-------------|-----------------------------|---------------------------|-------|------|
|             | β                           | Std. Error                | Beta  |      |
| 1           | (Constant)                  | 2.353                     | 0.202 | 11.69| 0.000|
| Management  | Strategy                    | 0.183                     | 0.037 | 0.392| 4.948| 0.000|
| Monitoring  & Evaluation | 0.158                     | 0.045                     | 0.232 | 3.546| 0.001|
| Shareholder | Management                  | 0.121                     | 0.023 | 0.383| 5.272| 0.000|
| Conflict    | Resolution                  | 0.001                     | 0.036 | 0.001| 0.027| 0.040|

a) Predictors: (Constant), Management Strategy, Monitoring and Evaluation, Shareholder Management and Conflict Resolution
b) Dependent Variable: Performance of Parastatals

The research used a multiple regression model

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon \]

The regression equation will be;

\[ Y = 2.353 + 0.183X_1 + 0.158X_2 + 0.121X_3 + 0.001X_4 \]

The regression equation above has established that taking all factors into account (management strategy, monitoring and evaluation, shareholder management and conflict resolution) constant at zero, performance of parastatals in Kenya will be an index of 2.353. The findings presented also shows that taking all other independent variables at zero, a unit increase in management strategy will lead to a 0.183 increase in performance of parastatals. The P-value was 0.000 which is less than 0.05 and thus the relationship was significant. The study also found that a unit increase in monitoring and evaluation will lead to a 0.158 increase in performance parastatals. The P-value was 0.001 and thus the relationship was significant. In addition, the study found that a unit increase in shareholder management will lead to a 0.121 increase in performance of parastatals. The P-value was 0.000 and thus the relationship was significant.

Lastly, the study found that conflict resolution will lead to a 0.001 increase in performance of parastatals. The P-value was 0.04 and hence the relationship was significant since the p-value was lower than 0.05. The findings of the study show that, management strategy contributed most to the performance of parastatals.

**5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS**

**5.1 Summary of the Findings**

The findings of the study indicated that management strategy, monitoring and evaluation, shareholder management and conflict resolution have a positive relationship with performance of parastatals in Kenya.

**5.2 Conclusion**

First, in regard to management strategy, the regression coefficients of the study show that it has a significant influence on performance of parastatals. This implies that increasing levels of management strategy by a unit would increase the levels of performance of parastatals. This shows that management strategy has a positive influence on performance of parastatals.

Second in regard to monitoring and evaluation, the regression coefficients of the study show that it has a significant influence on performance of parastatals. This implies that increasing levels of monitoring and evaluation by a unit would increase the levels of performance of parastatals. This shows that monitoring and evaluation has a positive influence on performance of parastatals.

With regard to shareholder management, the regression coefficients of the study show that it has a significant influence on performance of parastatals. This implies that increasing levels of shareholder management by a unit would increase the levels of performance of parastatals. This shows that shareholder management has a positive influence on performance of parastatals.
Lastly, in regard to the fourth objective, the regression coefficients of the study show that it has a significant influence on performance of parastatals. This implies that increasing levels of conflict resolution by a unit would increase the levels of performance of parastatals. This shows that conflict resolution has a positive influence on performance of parastatals.

Drawing on this research, lack of management strategy, monitoring and evaluation, shareholder management and conflict resolution in parastatals is leading to poor performance. Though the parastatals are striving hard to improve their performance there are still issues of poor-quality products, long lead time and high cost of projects. It was articulated that the current phenomenon of poor performance in the public sector can be reversed if the government and other stakeholders ensure management strategy, monitoring and evaluation, shareholder management and conflict resolution are embraced in the procurement function.

5.3 Recommendations

The study recommended that public institutions should embrace contract administration so as to improve performance and further researches should to be carried out in other public institutions to find out if the same results can be obtained.

REFERENCES

Agaba, E., & Shipman, N. (2010). Public Procurement Reform in Developing Countries: The Ugandan Experience. Boca Raton, FL: Pr Academics Press.

Akech, J.M. (2015). Development partners and governance of public procurement in Kenya: enhancing democracy in the administration of aid. Int. law Politics, 37(4), 829-868.

Al Awad, M. (2010). “The role of manufacturing in promoting sustainable economic growth in the GCC”, Working paper, Institute for Social & Economic Research (ISER), Zayed University, Knowledge Village, Dubai.

Alsaaty, F.M., & Sawyer, G. (2012). “The competitive advantage of the United States versus China in the Gulf Cooperation Council (GCC) Countries”, Journal of International Business Research, 11(1), 121-131.

Alzahrani, J.I., & Emsley, M.W. (2013). The impact of contractors’ attributes on construction project success: A post construction evaluation. International Journal of Project Management, 31(2), 313-322.

Amayi, F.K. (2011). Factors Affecting Procurement in the Public Service: a Case Study of the State Law Office. Eldoret: Moi University.

Andreasen, P. (2012). The Dynamics of Procurement Management: A Complexity Approach. Frederiksberg: Copenhagen Business School [PhD].

Armstrong, M., & Baron, A. (2014). Managing performance: performance management in action. London: Chartered Institute of Personnel and Development.

Arrow, S. (2018). An overview of EC policy on public procurement: European journal of Operation research, 2(1), 16-24.
Artley, W., & Stroh, S. (2017). *The Performance-Based Management Handbook: A Six- Volume Compilation of Techniques and Tools for Implementing the Government Performance and Results Act*, 9(3), 2-15.

Awino, B., & Wainaina, G., (2017). “An empirical investigation of supply chain management practices in large private manufacturing firms in Kenya” unpublished PhD thesis. University of Nairobi.

Baldry, D., & Amaratunga, D., (2012). *Performance Measurement in Facilities Management and its Relationships with Management Theory and Motivation*, Facilities, 20(10), 327-336.

Balogun, M.J. (2015). *Performance Management and Agency Governance for Africa Development: The search for common cause on Excellence in the Public Service*. UNCEA, Addis Ababa.

Basheka, B.C., & Bisangabasaija, E. (2010). Determinants of unethical public procurement in local government systems of Uganda: a case study. *Int. J. Procurement Manage.* 3(1), 91-104.

Belz, C., & Wuensche, M. (2017). “Classification of performance contracting solutions: a managerial typology”, paper presented at the 2nd International Conference on Business Market Management.

Bjorkman, M. (2016). *Public Funding in the Educational Sector and Its Effect on Test Scores in Essays on Empirical Development Economics: Education, Health and Gender*, IIES Monograph Series No 56, Stockholm University.

Cachon, G. (2013). *Supply chain coordination with contracts*. Handbooks in Operations Research and Management Science: Supply Chain Management. North Holland, Amsterdam, 8(9), 229–339.

Carayannis, E.G., & Popescu, D. (2015). *Profiling a Methodology for Economic Growth and Convergence: Learning from the EU e-Procurement Experience for Central and Eastern European Countries*, 25(1), 1-14.

Cheung, C.F., Wang, W.M., & Lo, V., (2014). *An agent oriented and knowledge based system for strategic e-procurement*. Expert Systems, 21(1), 11-19.

Choi, T.Y., & Krause, D. (2015). "The supply base and its complexity: Implications for transaction costs, risks, responsiveness, and innovation". *Journal of Operations Management*, 2(4), 637-652.

Chris, M., & Adam, D. (2017). "Using SPC to measure a national supermarket chain's suppliers' performance", *International Journal of Operations & Production Management*, 27(8), 874–900

Christopher, M., & Peck, H. (2014). "Building the Resilient Supply Chain". *International Journal of Logistics Management*, 15(2), 1-13.
CIPS (2015). How do we measure up? *An Introduction to Performance Measurement of the Procurement Profession*. Retrieved September 17, 2017, from Chartered Institute of Purchasing and Supply.

Clemons, E.K., Reddi, S.P., & Row, M.C. (2010). “The Impact of Information Technology on the Organization of Economic Activity: The „Move to the Middle“ Hypothesis,” *Journal of Management Information Systems*, 10(2), 9-35.

Cousins, P., & Speckman, R. (2015). Strategic supply and the management of inter- and intra-organizational relationships, *Journal of Physical Distribution & Logistics Management*, 9(1), 19-29.

Cox, A., (2015). Understanding buyer and supplier power: a framework for procurement and supply competence. *The Journal of Supply Chain Management* 37(2), 8-15.

Cox, A., Lonsdale, C., Watson, G., & Wu, Y. (2010). Supplier relationship management as an investment: evidence from UK study, *Journal of General Management*, 30(4), 27-42.

Crawford, P., & Bryce, H. (2013). Project Monitoring and Evaluation: a method for enhancing the efficiency and effectiveness of aid project implementation. *International Journal of Project Management*, 34(2), 363-383.

Danese, P., Romano, P., & Formentini, M. (2013). *The Impact of Supply Chain Integration on Responsiveness: The Moderating Effect of using an International Supplier Network*. Transportation Research 49(1), 125–140.

Dean, A.M., & Kiu, C. (2012). “Performance monitoring and quality outcomes in contracted services”, *International Journal of Quality & Reliability Management*, 19(4), 396-413.

Desouza, K.C. (2015). The neglected dimension in strategic sourcing: security, Strategic outsourcing: An international journal, 1(3), 288-292.

Dorward, A. (2010). “The effects of transaction costs, power and risk on contractual arrangements: a conceptual framework for quantitative analysis”, *Journal of Agricultural Economics*, 52(2), 59-73.

Dyer, J.H., & Nobeoka, K. (2010). "Creating and managing a high-performance knowledge-sharing network: the Toyota case", *Strategic Management Journal*, 21(3), 345-367.

Edler, J., & Georghiou, L. (2010). *Public procurement and innovation*. Resurrecting the demand side. Research Policy, 3(6), 949-963.

Evenett, S.J., & Hoekman, B.M., (2014). *International disciplines on government procurement: a review of economic analyses and their implications*, Centre for Economic Policy Research, 4(3), 24-38.

Kannan, V.R., & Tan, K.C. (2017). Buyer-supplier relationships, The impact of supplier selection and buyer-supplier engagement on relationship and firm performance. *International Journal of Physical Distribution & Logistics Management*, 36(10), 755-786.

Kasomo, D. (2017). *Research Methods in Humanities and Education*, Eldoret; Zapf Chancery.
Klakegg, O.J., & Williams, T. (2015). “Governance frameworks for public project development and estimation.” *Project Management Journal*, 3(9), 27-42.

Kombo, D., & Tromp, D. (2010). *Proposal and Thesis Writing, an introduction*. Nairobi: Pauline Publications Africa.

Kothari, C.R. (2017). *Research methodology: Methods and Techniques*. 2Ed, New Age International.

Kumar, R., & Markeset, T. (2015). “Development of performance-based service strategies for the oil and gas industry: a case study”, *Journal of Business & Industrial Marketing*, 2(2), 4-18.

Kusek, J., & Rist, C. (2014). *Ten Steps to a Results-based Monitoring and Evaluation System: A Handbook for project managers*. World Bank Publications.

Larry, H. (2013). *Advanced Statistics in Research: Reading, Understanding, and Writing Up Data Analysis Results*. Publisher: Shadow Finch Media LLC.

Lazear, E. P. (2010). *Performance pay and productivity*. Amer. Econom. Rev. 90(5), 1346–1361.

Liker, J., & Choi, T. (2010). *Building deep supplier relationships*. Harvard business review on supply chain management.

Malta, V., Schapper, R., Calvo-Gonzale, O., & Berroa, D. (2011). *Old Rules, New realities: Are existing public procurement systems addressing current and future needs?* Washington, D.C.: The World Bank.

Matanda, M.J., & Ndubisi, N.O. (2017). “Market orientation, supplier perceived value and business performance of SMEs in a Sub-Saharan African nation”, *Journal of Enterprise Information Management*, 22(4), 384-407.

Ngechu, M. (2017). Understanding the Research Process and Methods. *An Introduction to Research Methods*. Acts press, Nairobi.