INFLUENCE OF CONTRACT MANAGEMENT ON PROCUREMENT PERFORMANCE IN MANUFACTURING FIRMS OF KENYA; A CASE BIDCO OIL REFINERIES LTD

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ABSTRACT
The purpose of this study was to examine the influence of contract management practices on procurement performance in manufacturing firms in Kenya. The study employed descriptive research design with target population of 130 and using census. The study used primary data which was collected using a comprehensive questionnaire. Quantitative data collected was analysed by the use of descriptive statistics using SPSS (version 23) as the tool of choice. According to the model it was notable that the independent variables and dependent variable had a strong positive correlation coefficient of 0.788. The R squared which is the coefficient of determination was 0.620. This indicated that the four independent variables jointly 62.00% variation in the procurement performance in the manufacturing firms. The remaining 38.00% could be accounted by other variables which the study recommended for further research. Therefore, it was concluded that contract relationship management, contract administration, contract dispute resolution and contract closure greatly need to be enhanced to boost procurement performance in the manufacturing firms of Kenya. The study recommended that there was need for manufacturing firms to create and maintain a good relationship with the contractors. There should be a mutual trust between the contractor and manufacturing firms. The study recommended that the manufacturing firms control and manage contract changes efficiently by ensuring that the contractors are paid in time. The study recommended that the manufacturing firms should ensure that each party is free to express its concerns. There should be a win-win situation for both the manufacturing firms and contractor. There is need to evaluate the degree of successful contract execution and achieve the expected results and both parties should terminate the contracts effectively.

Key Words: Contract Management, Contract Administration, Contractor Relationship, Dispute Resolution, Contract Closure

INTRODUCTION
Contract management as deeds of a buyer during a certain period to ensure that all parties fulfil their contractual obligation (Bailey, 2008). On the other hand, contract life cycle management is can be said to be the process of methodically and professionally supervising the contract implementation, implementing the contract and analysing enhancing functions and financial performance and reducing risks (Elsey, 2007). Thus, contract management mainly entails negotiation to arrive an acceptable outcome that will be less expense. This is based on facts that contract management consumes time and it is expensive. Additionally, managing contracts should encompass contract creation, execution and analysed whose sole purpose aims at increasing financial operation while at the same time reducing risks.

In the United States federal government continues to increase its level of public spending for supplies and services. Within the federal government, the Department of Defence (DoD) is the largest contracting agency, procuring approximately $370 billion in FY2009 (FPDS, 2010). This was an increase from $133 billion in FY2000. The DoD acquisition workforce professionals are responsible for managing over 3 million contract actions for the procurement of critical supplies and services, ranging from commercial-type supplies, professional and administrative services, highly complex information technology systems, and major defence weapon systems (FPDS, 2010).

Oliveira (2015) in a study on the management of construction agreements in South Africa has examined the concept of contract management. The study notes that contract management is a process enabling the contractual parties involved to meet their obligations. This is with a view of delivering the objectives arising in terms of the contract by proactively managing the contract so as to anticipate future needs and react to situations that may arise. In Uganda the need for training personnel particularly to contract management can only be established after what is known about the same has been established. Public Procurement Authorities must continuously formulate and implement strategies to address the existing capacity gaps within PDEs especially in the area of contract award and management. This evidenced by the PPDA Capacity Building Report (2010) which noted that some PDEs had serious constraints in execution and monitoring of contracts.

In Kenya, the Public Procurement and Disposal Act, of 2005 was assented to on 26th October 2005 and was revised in 2009 to establish procedures for procurement and the disposal of unserviceable, obsolete or surplus stores and equipment by public entities (Mwangi, 2009). With the gazettement of the subsidiary legislation, the PPDR of 2006, the law became operational on 1st January, 2007 (Kirugu, 2010). The Act established three independent bodies; an oversight body, the PPOA, Public Procurement Oversight Advisory Board (PPOAB) and the Public Procurement Administrative Review Board (PPARB).

Statement of the Problem
Contract management entails a process of efficient and systematic management of contract creation, implementation, and analysis in order to maximize financial and procurement performance, as well as minimize risks. Procurement performance measurement is critical in ensuring that overall strategic objectives of a firm are effectively and efficiently achieved. Contract management improves an organization’s procurement performance as indicated by various measures, such as, quality, flexibility, speed, efficiency, and supplier relationship (Cho & Pucick, 2005).

However, according to PPOA (2015), most of the tendered products/services in many public
manufacturing firms have a mark-up of 60 per cent on the market prices. Daniel (2010) reports that the manufacturing firms lost 4.2 billion Kenyan shillings in the year 2010 and in the year 2011, a total of Ksh. 33,061,925 is said to have been embezzled from the procurement funds. Moreover, the study by Tom (2009), shows that there are various acts of inefficiency and ineptness within the overall implementation of contract management practices in many public manufacturing firms which in overall contributes to loss of over Ksh.50 million on annual basis. Despite the inefficiencies recorded, procurement expenditure could be minimized through proper implementation of contract management practices (Victor, 2012).

As CMKN (2012) and Investment Climate Statement (2013), Transformation Index - Kenya (2014) reveal, Kenya loses a lot of taxpayers’ money to improper contract management practices. This is common in private manufacturing firms and some of the causes include corruption, litigations, contract cancellations and substandard service or product delivery. Therefore, there is an urgent need to solve this problem by making appropriate policies and decisions to save the situation. Besides, the manufacturing firms requires to realize its value for money in the process of the serving its people, hence the requirement for every manufacturing firms is required to account for its expenses. Consequently, this makes contract management an inevitable aspect of procurement as it ensures that service or products delivery is undertaken as per the contractual terms and conditions. The study would help unearth the effect of effective contract management practices on procurement performance in manufacturing firms in Kenya.

Objectives of the Study
The general purpose of the study was to examine the influence of contract management practices on procurement performance in manufacturing firms in Kenya. The specific objectives were:-
- To establish the influence of contract administration on procurement performance in manufacturing firms in Kenya
- To examine the influence of contractor relationship management on procurement performance in manufacturing firms in Kenya
- To evaluate the influence of contractor dispute resolution on procurement performance in manufacturing firms in Kenya
- To determine the influence of contract closure on procurement performance in manufacturing firms in Kenya

LITERATURE REVIEW
Theoretical Review
McNeils Relation Contract Theory
This theory was developed by Iain McNeils in U.S.A. This theory has been the object of theoretical research in common law Jurisprudence. It contracts legal formalism to a certain extent and is based on the assumption that all the contracts can fall along a relational range from discrete-mere transaction-to highly relational. Although no relation can be totally separate from relational elements, the isolation of the contract from a relational context and the complete and exact planning of the relationship presentation, although having a great importance for contracts law, cannot explain totally modern contractual relationships. Highly relational contracts are these, the effect of which is strongly based on a specific social and economic context, on an ongoing relation usually of trust between the parties, which influences the scope and content of the contract (Diathesopoulos, 2010).

The Principal-Agency Theory
According to Chiappori and Salanie (2003) as cited by Salim (2013); and Oluka and Basheka (2012) the underlying principle of the principal-agency theory is that there should be a clear understanding of the
needs of the principal and ability of the agent to meet these needs competently. Principal must closely monitor agents’ performance; create reward structures that reinforce desired performance (Ketchen and Hult, 2006). Indeed, when procurement contract is well defined and planned, the principal and agents find it easy to meet needs of each other in an efficient way resulting into timely execution of the contract (Oluka and Basheka, 2012). The principal-agent theory can proudly be applied to this study with a case company as a principal and contractors or service providers or suppliers as agents. The theory becomes significant to the study as it highlights the need for robust contract requirements and specifications as well as the objectively process of monitoring contractor’s performance. When contract requirements, CM team roles and responsibilities and KPIs are well defined, the principal and agents will find it easy to meet needs of each other in an efficient way resulting into timely execution of the contract in predetermined performance level.

The General Systems Theory
The most widely employed conceptual framework in the policy sciences is the systems model (Easton, 1953; Dye 1966), which may be seen as an application of general system theory (Bertalanffy, 1968) to public policy. For many social science applications, this model is referred to as an “open systems” model, which reflects the idea that all elements of the model are open to influences from the external environment. Thus, outputs and feedback are functions not only of the conversion element, but of other environmental factors as well. In this study, the contract management is considered to be influenced by factors which include: staff training and motivation, service market and government policy. Thai (2000) adapts the systems model to capture “the whole scope of public procurement”. Thai places the policy-making function with management executives at the top level of a procurement system. This has the effect of discounting the importance of policy roles that may be played in other elements of his model, for example, his “regulations” element or his “operations” element. The theory therefore was appropriate in explaining the policy issues in public procurement contract management and therefore very necessary for this study.

The Will Theory
Traditionally defending the view that rights necessarily involve discretion, or control, over another’s duties, the Will theory, otherwise known as the Choice theory, has been elaborated throughout the second half of the twentieth century by scholars such as H.L.A Hart and Carl Wellman. Will theorists argue that the purpose of rights is to grant the right-holder the freedom to control the duties that others owe to him. Essentially, the purpose of rights is to protect and foster individual autonomy. Will theory emphasises the idea that all rights consist in the enjoyment of opportunities for individual choices, and furthermore, that having a right is having an opportunity to make a choice.

The distribution of freedom, which the Will theory allows, is an appealing aspect in suggesting that it is a plausible theory to adopt when discussing the function and nature of rights. Jeremy Waldron, in The light to Private Property’ claims, “The Will theory is essentially connected to a certain distribution of freedom”. Also, the Will theory captures the distinctive link between rights and normative control. Will theorists argue to have a right is having the ability to determine what other’s may or may not do. Finally, the Will theory emphasises the power that our ability to make rational choices has. Rights function as a power that the right holder exercises over others. This appealing aspect of the theory makes it a plausible theory to adopt, however, many would argue that holding such power could be considered a destructive element. The basis of contract is the meeting of the minds of the parties (that is the will of the parties). Hutchison et al., (2009) narrated that if one party is in fault as regard
to one of the important elements of the agreement there is no real agreement. The result is neither party is bound nor each party may reclaim whatever it has performed. This theory maintains that commitments in project contracts are enforceable because the promisor has "willed" or chosen to be bound by his or her commitment(s).

**Conceptual Framework**

![Conceptual Framework Diagram]

**Independent Variable** | **Dependent Variable**
--- | ---
Contract Administration | Procurement Performance
- Contract Changes
- Contract terms

Contractor Relationship Management | Cost reduction
- Regular Communication
- Mutual trust

Contract Dispute Resolution | Customer satisfaction
- Win-win situation
- Professional ethics

Contract Closure | Lead time
- Contract Execution
- Effective contract termination
- Customer satisfaction
- Flexibility

**Empirical Literature**

**Contract Administration**

Gupta, Karayil and Rajendran (2008) reveal that poor contract management causes substantial loss of savings. They also argue that 30 to 70% of each dollar of savings that is negotiated by a strategic outsourcing is lost. This happens through spend-leakage and the subsequent non-compliance. They further argue that poorly managed contracts affect the purchasing firm’s credibility through a snowball effect. This implies the difficulty to internally sell and enforce future contracts. For many years, businesses got the whole concept of contract management wrong, hence the heavy fine for non-compliance. It is also important to note that the implementation of a sound contract management process incurs time, cost, and management effort (Sieke, 2008).

First, contract managers experience a challenge regarding unforeseen work. This implies that contract management may result in work that is contrary to the contract terms and conditions. Therefore, it is essential for an organization to define its expectations clearly in the contract. The business requirements should be well documented and that people at all organizational levels and end users should be involved in the development of the requirements and documenting them in the SOW (Young, 2008). Moreover, budget or timeline constraints hamper effective contract management. Angeles and Nath (2007) reveal that contract managers often face this challenge due to unclear project scope, and unrealistic timeline and budgets. Thus, to salvage this challenge, it is important to have clearly defined scope, budget, and timeline for the contract.

**Contractor Relationship Management**

Kakwezi (2012) in a study on the procurement contract management in public procurement noted that contract management activities can be divided into three broad sections that is service delivery management, relationship management, and contract administration. In this context, the service delivery management involves the full management of all the contractual deliverables, performance levels of the contract as well as the contract quality. Silvana (2015) in a study on the contract management on private public partnership indicates that the aim of contract management is the optimization of the efficiency, effectiveness and economy of service in contractual relationship, balancing costs against risks and actively manages the relationship between procurement parties.
According to Project Management Institute (2013), all legal contractual relationships generally fall into one of two broad families: either fixed-price or cost reimbursable. There is a third hybrid type commonly in use called time and materials contract. The fixed-price contract type is recommended, although some projects also prepare team contracts to define ground rules for the project. However, in practice it is not unusual to combine one or more types into a single contract document. Once the contract has been signed, both parties must meet their obligations under the contract. The contract administrator is responsible for compliance by the contractor to the buyer’s contractual terms and conditions and to make sure that the final product of the project meets requirements.

**Contract Dispute Resolution**
Choy, Chow, Lee and Chan (2007) state that conflicts regarding payments hinders an organization from practicing proper contract management. To solve this, it is necessary to define ways and processes in the contract to penalize or award on the basis of compliance with the agreement. It is also significant to devise ways of measuring progress and set actual acceptance standards. Panesar and Markeset (2008) also point out that change can be challenging to a contract management team especially if it lacks appropriate measures of handling it. Contract management challenges include lack of cooperation and inflexibility (Wang & Bunn (2004; Nysten-Haarala, Lee & Lehto, 2010). The right way of preparing for change by through structuring the contract in such a way that allows the team to properly identify and review risks weekly. Besides, the contract must incorporate requirements of assessing risks and identifying their solutions. Additionally, an official change control approach need to be integrated in the contract.

**Contract Closure**
One of the key determinants as applicable in successful service delivery involves allocation of resources through elaborate decision making processes. Such aspect demands that such key resources as time, financial resources, skills and knowledge are evenly distributed to ensure effective customer relationship management that eventually allows productivity. Strategic sourcing focuses on obtaining value for money for the public sector through partnership working between buying organisations, Centres of Expertise (CoEs) and suppliers. Strategic sourcing draws on expertise across the public sector to leverage volumes and secure benefits from economies of scale through harnessing combined sector purchasing power. The constructs under strategic sourcing will include contract management, customer relationship management and customer service (Rajasekar, 2014).

**METHODOLOGY**
This study adopted a descriptive research design. A research design is the blue print for the collection, measurement, analysis of data and a plan to obtain answers to research questions (Coppers & Schindler, 2006). The target population in this study was 130 employees; the study targeted each division that was involved in the procurement process at the Bidco Oil Refinery Ltd. The study selected five categories that resulted in dividing the target population into five categories, these categories were classified as Human
resource & Administration, Finance & control, legal, procurement and Audit divisions. The study used questionnaires to collect primary data from the respondents as research tools (Kothari, 2005). Young, (2009) points out that, questionnaires are appropriate for studies since they collect information that is not directly observable as they inquire about feelings, motivations, attitudes, accomplishments as well as experiences of individuals. The study collected both qualitative and quantitative data and was analyzed using both quantitative and qualitative methods with the help of (SPSS)version. The qualitative data was analyzed by the use of content analysis which helped the study in giving recommendation in line with the conclusions drawn for the whole population understudy. The Multiple Regression model that aided the analysis of the variable relationships was as follows: 

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

Where;

- \( Y \) = Procurement Performance (dependent variable);
- \( \beta_0 \) = constant (coefficient of intercept);
- \( X_1 \) = Contract administration (independent variable);
- \( X_2 \) = Contract relationship management (independent variable);
- \( X_3 \) = Contract dispute resolution (independent variable);
- \( X_4 \) = Contract closure (independent variable);
- \( \varepsilon \) = Error term;
- \( \beta_1...\beta_4 = \) regression coefficient of four variables.

**FINDINGS**

**Contractor Relationship Management**

The study sought to assess the influence of contractor relationship management on procurement performance in manufacturing firms of Kenya. The study findings were analyzed as presented in a Likert scale with statements categorized as (where 1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5= Strongly Agree). The study findings were presented with the scores of ‘strongly disagree’ and ‘disagree’ represented a statement disagreed on a mean score of 1 to 2.4. The score of ‘Neutral’ was represented by a mean score of 2.5 to 3.4. The score of ‘agree’ and ‘strongly agree’ were represented by a mean score of 3.5 to 5.0. According to the study results in Table 1 presented the findings as tabulated, a majority of respondents were found to be neutral that the organization had created and maintained a good relationship with the contractor(2.487). There was mutual trust between the contractor and organization (2.453); There was regular communication between the organization and contractor (2.543); There was timely management of possible problems in the contract (2.215).

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organization has created and maintained a good relationship with the contractor</td>
<td>2.487</td>
<td>.987</td>
</tr>
<tr>
<td>There is mutual trust between the contractor and organization</td>
<td>2.453</td>
<td>.765</td>
</tr>
<tr>
<td>There is regular communication between the organization and contractor</td>
<td>2.543</td>
<td>.326</td>
</tr>
<tr>
<td>There is timely management of possible problems in the contract</td>
<td>2.215</td>
<td>.543</td>
</tr>
</tbody>
</table>

**Contract Administration**

The study sought to examine the influence of contract administration on procurement performance in manufacturing firms of Kenya. The study findings were analyzed as presented in a Likert scale with statements categorized as (where 1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5= Strongly Agree). The study findings were presented with the scores of ‘strongly disagree’ and ‘disagree’ represented a statement disagreed on a mean score of 1 to 2.4. The score of ‘Neutral’ was represented by
a mean score of 2.5 to 3.4. The score of ‘agree’ and ‘strongly agree’ were represented by agreed by a mean score of 3.5 to 5.0.

According to the study results in Table 2 presented, the study results tabulated, a majority of respondents were found to be neutral that the organization controls and manages contract changes (2.234). The organization ensures that the contractor is paid in time (2.231); There is regular communication between the organization and contractor (2.145); The organization had ensured that the contract terms were well adhered to (2.341). The organization maintained an updated form of the contract (2.341); The draft and final reports were always well maintained (2.109).

**Table 2: Contract Administration and Procurement Performance**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organization controls and manages contract changes</td>
<td>2.234</td>
<td>.345</td>
</tr>
<tr>
<td>The organization ensures that the contractor is paid in time</td>
<td>2.231</td>
<td>.126</td>
</tr>
<tr>
<td>The organization has ensured that the contract terms are well adhered to</td>
<td>2.145</td>
<td>.432</td>
</tr>
<tr>
<td>The organization maintains an updated form of the contact</td>
<td>2.341</td>
<td>.268</td>
</tr>
<tr>
<td>The draft and final reports are always well maintained</td>
<td>2.109</td>
<td>.325</td>
</tr>
</tbody>
</table>

**Contract Dispute Resolution**

The study sought to determine the influence of contract dispute resolution on procurement performance in manufacturing firm of Kenya. The study findings were analyzed as presented in a Likert scale with statements categorized as (where 1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5= Strongly Agree). The study findings were presented with the scores of ‘strongly disagree’ and ‘disagree’ represented a statement disagreed on a mean score of 1 to 2.4. The score of ‘Neutral’ was represented by a mean score of 2.5 to 3.4. The score of ‘agree’ and ‘strongly agree’ were represented by agreed by a mean score of 3.5 to 5.0.

According to the study results in Table 3, a majority of respondents were found to disagree with the statement that the organization ensured that each party was free to express its concerns (2.212). There was a win-win situation for both the organization and contractor (2.316); In case of a dispute the appropriate procedures were dully followed to resolve the possible differences (2.232); There was cooperation by both parties to resolve the possible disputes (2.241). Their professional ethics were adhered to resolve the possible differences when they arose by both parties (2.223).

**TABLE 3: Contractor Dispute Resolution and Procurement Performance**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organization ensures that each party is free to express its concerns</td>
<td>2.212</td>
<td>.126</td>
</tr>
<tr>
<td>There is a win-win situation for both the organization and contractor</td>
<td>2.316</td>
<td>.325</td>
</tr>
<tr>
<td>In case of a dispute the appropriate procedures are dully followed to resolve the possible differences</td>
<td>2.232</td>
<td>.316</td>
</tr>
<tr>
<td>There is cooperation by both parties to resolve the possible disputes</td>
<td>2.241</td>
<td>.261</td>
</tr>
<tr>
<td>There professional ethics are adhered to resolve the possible differences when they arise by both parties</td>
<td>2.223</td>
<td>.264</td>
</tr>
</tbody>
</table>

**Contract Closure**

The study sought to investigate the influence of contract closure on procurement performance in manufacturing firms of Kenya. The study findings were analyzed as presented in a Likert scale with statements categorized as (where 1 = Strongly
disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree). The study findings were presented with the scores of ‘strongly disagree’ and ‘disagree’ represented a statement ‘disagreed’ on a mean score of 1 to 2.4. The score of ‘Neutral’ was represented by a mean score of 2.5 to 3.4. The score of ‘agree’ and ‘strongly agree’ were represented by ‘agreed’ by a mean score of 3.5 to 5.0.

According to the study results in Table 4, a majority of respondents were found to disagree with the statement that the organization ensured that it controlled and certifies that both contracting parties had honoured the contractual responsibilities (2.325). The organization controls and certifies activities involved in evaluating degree of successful contract execution (2.223); The organization ensured that there was achievement of the expected results (2.221); The organization ensured that both parties terminated the contracts effectively (2.321).

Table 4: Contractor Closure and Procurement Performance

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organization ensures that it controls and certifies that both contracting parties have honored the contractual responsibilities</td>
<td>2.325</td>
<td>.235</td>
</tr>
<tr>
<td>The organization controls and certifies activities involved in evaluating degree of successful contract execution</td>
<td>2.223</td>
<td>.321</td>
</tr>
<tr>
<td>The organization ensures that there is a of the expected results</td>
<td>2.221</td>
<td>.251</td>
</tr>
<tr>
<td>The organization ensures that both parties terminates the contracts effectively</td>
<td>2.321</td>
<td>.238</td>
</tr>
</tbody>
</table>

Procurement Performance

The study determined whether the procurement performance of the manufacturing firms in terms of reduction of costs, lead time, customer satisfaction and reduction of stock out. The data was collected from the different indicators of the variable procurement performance which was ordinal categorical. The data was therefore presented in frequency tables with the mode being used as the appropriate measure of central tendency. The results were presented in Table 5. The first indicator for the dependent variable required to know what the organization level of cost reduction, 60% of the respondents had indicated 0-9%, 5% indicated 10-19%, 10% indicated 20-39%, 20% indicated stated 40-49%, 8% indicated over 50%. The modal class was of the respondents who had 0%-9% level on lead time in the organization. The median was found to be 1 which implied that on average the level of lead time in the organization for the last one year was between 0%-9%.

Further, the study also established the extent of customer satisfaction (complements) was, 64% of the respondents indicated 0-9%, 10% stated 10-19%, 8% indicated 20-39%, 10% stated 40-49%, 18% indicated over 50%. The modal class is of the respondents stated 0%-9% level on customer satisfaction (complements) in the organization. The modal class was found to be 1 which implies that on average the level of customer satisfaction (complements) in the organization for the last one year was between 0%-9%.

Finally, the study also sought to examine the extent of level of reduction of stock out in the organization.
According to the study results, 62% of the respondents indicated 0-9%, 20% stated 10-19%, 12% indicated 20-39%, 3% stated 40-49%, 3% indicated over 50%. The modal class is of the respondents’ stated 0%-9% level of reduction of stock out in the organization.

The modal class was found to be 1 which implies that on average the level of reduction of stock out in the organization for the last one year was between 0%-9%.

Table 5: Procurement Performance

<table>
<thead>
<tr>
<th>Statement</th>
<th>0%-9%</th>
<th>10%-19%</th>
<th>20%-39%</th>
<th>40%-49%</th>
<th>Over 50%</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the level of cost reduction in organization?</td>
<td>60</td>
<td>5</td>
<td>10</td>
<td>20</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>What is the level of increase in timely deliveries of procured goods and services in the organization?</td>
<td>58</td>
<td>4</td>
<td>12</td>
<td>18</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>What is the level of increase in customer satisfaction in the organization?</td>
<td>64</td>
<td>10</td>
<td>8</td>
<td>10</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>What is the level of reduction of stock out levels in the organization?</td>
<td>62</td>
<td>20</td>
<td>12</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

Multiple Regression Analysis

In order to establish the relationship between the independent variables (contract relationship management, contract administration, contract dispute resolution and contract closure) and procurement performance, the study adopted multiple regression analysis. According to the model summary Table 6, it was notable that the independent variables and dependent variable had a strong positive a correlation coefficient of 0.788. The R squared which the coefficient of determination was 0.620. This indicated that the four independent variables jointly 62.00% variation in the procurement performance in the organization. The remaining 38.00% could be accounted by other variables which the study recommended for further research. Therefore, it was concluded that contract relationship management, contract administration, contract dispute resolution and contract closure greatly needed to be enhanced to boost procurement performance in the manufacturing firms of Kenya.

Table 6: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.788</td>
<td>.620</td>
<td>.598</td>
<td>.002</td>
</tr>
</tbody>
</table>

Further, the study adopted Analysis of Variance (ANOVA) to establish whether truly the independent variables (contract relationship management, contract administration, contract dispute resolution and contract closure) had a significant relationship with the procurement performance. According to the F-Test, the study established that F-calculated (50.765) was greater than the F-Table value (13.456). Therefore it was concluded that contract relationship management, contract administration, contract dispute resolution and contract closure included in the model jointly influenced procurement performance. Thus the contract relationship management, contract administration, contract dispute resolution and contract closure played a
significant role in the procurement performance in the manufacturing firms of Kenya.

Table 7: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>d.f</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>40.268</td>
<td>4</td>
<td>10.067</td>
<td>50.765</td>
<td>.001</td>
</tr>
<tr>
<td>Residual</td>
<td>19.830</td>
<td>100</td>
<td>.1983</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>60.098</td>
<td>104</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NB: F-critical Value = 13.456

The regression coefficients as indicated showed that independent variables against the procurement performance in the manufacturing firms of Kenya. As per the SPSS generated table above, the regression model was; Whereby Y = Procurement Performance, X₁= Contractor relationship management, X₂= Contract administration, X₃= Contract dispute resolution and X₄= Contract closure. B₀=Constant term while β₁, β₂, β₃ and β₄ are coefficients of determination and finally ε represents the Error term (standard error). This becomes:

\[ Y = 4.974 + 0.835X₁ + 0.794X₂ + 0.787X₃ + 0.714X₄. \]

It was established that contractor relationship management (X₁) had a coefficient of 0.835 with t statistic value of 5.765>1.96 which has a p-value of 0.000<0.05. This implies that the contractor relationship management (X₁) is significant at 0.05 level of significance. This inferred that contractor relationship management (X₁) had a significant positive influence on procurement performance in the manufacturing firms of Kenya.

The study found out that contract administration (X₂) had a coefficient of 0.794 with t statistic value of 5.090>1.96 which has a p-value of 0.002<0.05. This implies that the contract administration (X₂) is significant at 0.05 level of significance. It was concluded that contract administration (X₂) had a significant positive influence on procurement performance in the manufacturing firms of Kenya.

Table 8 further showed that contract dispute resolution (X₃) had a coefficient of 0.787 with t statistic value of 4.987>1.96 which had a p-value of 0.000<0.05. This implied that the contract dispute resolution (X₃) was significant at 0.05 level of significance. It was concluded that contract dispute resolution (X₃) had a significant positive influence on procurement performance in the manufacturing firms of Kenya.

The contract closure (X₄) had a coefficient of 0.714 with t statistic value of 4.326>1.96 which had a p-value of 0.005<0.05. This implied that the contract closure (X₄) is significant at 0.05 level of significance. It was concluded that contract closure (X₄) had a significant positive influence on procurement performance in the manufacturing firms of Kenya.
CONCLUSIONS
The study concluded that there was a significant relation between the contract management practices and procurement performance in the manufacturing firms of Kenya. Contract relationship management was found to have a significant positive influence on procurement performance in the manufacturing firms of Kenya. This can be deduced to conclude that increasing levels of contract relationship management would increase the levels of procurement performance in the manufacturing firms of Kenya.

The study results showed that contract administration was found to have a significant positive influence on procurement performance in the manufacturing firms of Kenya. This can be deduced to conclude that increasing levels of contract administration would increase the levels of procurement performance in the manufacturing firms of Kenya.

Further, the study findings established that contract dispute resolution mechanisms was found to have a significant positive influence on procurement performance in the manufacturing firms of Kenya. This can be deduced to conclude that increasing levels of contract dispute resolution mechanisms would increase the levels of procurement performance in the manufacturing firms of Kenya.

Finally, the study findings established that contract dispute resolution mechanisms was found to have a significant positive influence on procurement performance in the manufacturing firms of Kenya. This can be deduced to conclude that increasing levels of contract dispute resolution mechanisms would increase the levels of procurement performance in the manufacturing firms of Kenya.

RECOMMENDATIONS
The study recommended that there was need for manufacturing firms to create and maintain a good relationship with the contractors. There should be a mutual trust between the contractor and manufacturing firms. There is need to enhance regular communication with the contractor and timely management of possible problems in the contract.

The study recommended that the manufacturing firms control and manage contract changes efficiently by ensuring that the contractors are paid in time. There should be regular communication between the manufacturing firms and contractor. The manufacturing firms should ensure that the contract terms were well adhered to and final reports always well maintained.

The study recommended that the manufacturing firms should ensure that each party is free to express its concerns. There should be a win-win situation for both the manufacturing firms and contractor. In case of a dispute the appropriate procedures should be dully followed to resolve the possible differences.

The study recommended that manufacturing firms should ensure that it controls and certifies that both contracting parties honour the contractual responsibilities. There is need to evaluate the degree of successful contract execution. There is need to ensure that the manufacturing firms achieve the expected results and both parties should terminate the contracts effectively.

Areas for Further Research
The study established that contract management practices influence procurement performance in the manufacturing firms of Kenya. The contract
management practices such as contract relationship management, contract administrative, contract dispute resolution and contract closure accounted for the 62.00% of procurement performance of the manufacturing firms of Kenya. There is need to establish other factors which account for 38.00% of procurement performance of the manufacturing firms of Kenya. There was need also to establish whether the contract management practices influence procurement in the private sector.

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