PROCUREMENT CONTRACTING PRACTICES AND SERVICE DELIVERY OF GOVERNMENT OWNED ENTITIES IN THE MINISTRY OF TRANSPORT AND INFRASTRUCTURE IN KENYA

BAKARI Gabriel Chone[1] DR. OBARA Magutu Peterson[2],

[1]MBA Student: School of Business, University of Nairobi
[2]Lecturer: University of Nairobi

Abstract: The use of different procurement contracting practices can negatively or positively influence service delivery in government owned entities. In the recent past procurement contracting practices have been facing various challenges, which include increase in cost, political interference, lack of stakeholders involvement, compliance with best practices as well as professionalism of procurement workforce. The objectives of this study were to establish the procurement contracting practices used by government owned entities in the Ministry of Transport and Infrastructure in Kenya and to determine the relationship between procurement contracting practices and service delivery of government owned entities in the Ministry of Transport and Infrastructure in Kenya. This study used a descriptive research design. The target population of this study was all the 351 staff working in the procurement departments in government owned entities under the ministry of transport and infrastructure. Stratified random sampling was used to select 50% of the target population in this study. The study used primary data, which was collected by use of semi structured questionnaires. The questionnaires in this study will generate both qualitative and quantitative data. Qualitative data was analzed by use of thematic content analysis presented in a prose form. Quantitative data was analysed by use of descriptive and inferential statistics through the help of Statistical Package for Social Sciences (SPSS) version 21. Descriptive statistics included percentages, frequencies, measures of central tendencies (mean) and measures of dispersion (standard deviation). Data was then presented in graphs and tables. Further, a correlation analysis and multivariate regression analysis was used to establish the relationship between the dependent and the independent variables. The study established that government owned entities were using competitive procurement contracting practices, relational procurement contracting practices, non-competitive procurement contracting practices and negotiated procurement contracting practices. The study also found that all the four procurement contracting practices were significantly influencing service delivery in government owned entities. However, competitive contracting practices had the most significant influence on service delivery in government owned entities most, followed by relational procurement contracting practices, non-competitive contracting practices and negotiated procurement contracting practices. Although competitive contracting practices, relational procurement contracting practices and negotiated procurement contracting practices had a positive influence on service delivery, non-competitive contracting practices had a negative influence. The study recommends that the government of Kenya should formulate more policies to emphasize on the use of competitive procurement contracting practices as they will help to reduce corruption, ensure quality and low cost as well as improve service delivery.

Key Words: Procurement Contracting, Competitive Procurement, Noncompetitive Procurement

Negotiated Procurement, Relational Procurement

Introduction

The public sector is under pressure from both internal and external sources to demonstrate improvements in their performance and service delivery (Kumarappan & Joshi, 2014). In the recent past, government institutions have adopted procurement contracting practices in an effort to improve supply chain performance. Reeves and Barrow (2009) indicate that procurement contracting practices influence supply chain performance in public institutions by reducing lead time and retendering cost, which in turn influences public service delivery. The efficiency theory indicates that the main goal of using procurement contracting practices is to minimize contractual transaction costs, broadly understood as obstacles to efforts to shift resources to their most valuable use so as to improve efficiency in service delivery (Bower, 2012). The efficiency theory focuses on ex ante efficient contracting, that is, the rules in various procurement contracting practices that encourage parties to enter into deals that are efficient and wealth maximizing.

The procurement problem has attracted much attention in the economics literature (Entwistle & Martin, 2005; Steane & Walker, 2000). The main focus of this literature has been on procurement by the public sector, in part because of its sheer importance to the economy: procurement by federal, state, and local government accounts for at least 10% of gross domestic product. Many private-sector transactions are also governed by procurement contracts. Prominent examples include electronics components, custom software, automobile production, and building construction (Parkera & Hartley, 2003).

A procurement contract is an agreement in which a buyer agrees to acquire goods or services from a seller in exchange for consideration. Most of these contracts are written agreements that specify each party's obligations in relation to the transaction. Generally, one includes business provisions, detailed price lists, payment information, and other legal terms and conditions applicable to the transaction. Chesang (2013) argues that procurement contracting practices include non-competitive contracting, competitive contracting, negotiated contracting and relational contracting. In competitive procurement contracting the provision of public services or products is awarded competitively. Government institutions seek competitive bids to provide particular goods of services. in relation to noncompetitive contracting the contracting process is without choices from market competition and candidates are not chosen through competitive processes (Agagu, 2008). The most important disadvantage of using negotiated contracting is that it will be virtually impossible to prove that the client has selected the lowest, qualified bid. Relational contracting involves informal agreements and unwritten codes of conduct that powerfully affect the behaviors of individuals within firms. Parkera and Hartley (2003) indicate that one of the main challenges facing procurement contracting practices is increase in corruption and collusion due to the use of noncompetitive procedures. Other challenges include public-private contracting, uncontrolled agency costs, misaligned incentives, costs akin to negative externalities, market failures, lack of stakeholders involvement, compliance with best practices; top management support, types of goods and services, professionalism or quality of procurement workforce (Ware & Kynoch, 2013).

Statement of the Problem

The use of different procurement contracting practices can negatively or positively influence service delivery in government owned entities (Reeves & Barrow, 2009). In the recent past procurement contracting practices have been facing various challenges, which include increase in cost, political interference, lack of stakeholders involvement, compliance with best practices as well as professionalism of procurement workforce (Entwistle & Martin, 2005). Kenya has in the recent past embraced various procurement contracting practices and these are increasingly being used in a number of sectors, including transport, aviation, building and public works among others (Nyambane, 2013). In 2013 the Public Procurement Oversight Authority (PPOA) estimated that procuring entities were buying at an average of 60% above the prevailing market price, an indicator that public procurement in Kenya does not receive the benefit of competitive procurement. With the increasing public procurement in the central government over the years, it is important to understand how various procurement contracting practices influence the main goal of public institutions, which is service delivery.

Various studies have been conducted in relation to public procurement both globally and in Kenya. Globally, Arney et al. (2014) conducted a study on strategic contracting practices to improve procurement in public institutions in the United States and found that an opportunity for substantial improvements in procurement efficiency and commodity availability. In addition, Wimmer (2003) conducted a study on procurement contracting for Performance in United Kingdom and established that the shrinking workforce, coupled with ever-tightening budgets, has forced government to seek alternatives to labor-intensive procurement practices. In a study to evaluate public procurement systems in Kenya, Agagu (2008) established that public procurement was not operating efficiently and effectively and the state was losing a lot of money through inappropriate deals, which negatively affects public service delivery. However, this study does not focus on procurement contracting practices. Nyambane (2013) did a study on deciding on the best way to procure contracts in Kenya and save the local contractors from foreign giants. Kipkemoi (2013) conducted a study on the elements of public procurement contracting practices in Kericho District and found that the most common was competitive contracting practice. Islam (2007) conducted a study on public procurement and contracting practices and found that competitive and relational procurement contracting practices were the most common. Chesang (2013) did a study on public procurement Contacting practices policy implications in selected ministries headquarters in Nairobi County and found that collusion of suppliers and procurement officers led to increased commodity pricing, tax payers' money was wasted due to procurement malpractices. Mwangi (2014) conducted a study on the impact of public procurement contracting policy on teaching and learning in public secondary schools in Kahuro district and found that it had improved access to quality goods and services. However, these studies do not outline the effect of procurement contracting practices on service delivery in government owned entity. This study therefore sought to answer the question: what is the effect of procurement contracting practices on service delivery in government owned entity in Kenya?

The objectives of this study were:-

   i.   To establish the procurement contracting practices used by government owned entities in the Ministry of Transport and Infrastructure in Kenya

ii.   To determine the relationship between procurement contracting practices and service delivery of government owned entities in the Ministry of Transport and Infrastructure in Kenya

Theoretical Review

Building upon the work of Ronald Coase and Guido Calabresi, Richard Posner first laid the groundwork for efficiency theory in the 1970s. He argued for the "allocation of resources in which value is maximized." It followed that the goal of contract doctrine should be "to minimize contractual transaction costs, broadly understood as obstacles to efforts voluntarily to shift resources to their most valuable use." Parties trade efficiently when, and only when, the value of the exchanged performance to the buyer exceeds the cost of performance to the seller. These types of deals are "efficient" (Harry et al., 2006).

A central tenet of efficiency theory is that parties will make rational, wealth-maximizing choices. Efficiency theory assumes that parties value assets more or less correctly and that their transacting choices are motivated solely by wealth maximization goals (Harry et al., 2006). The third related assumption of efficiency theory is the absence of negative externalities. An externality is an effect that a transaction between one set of parties puts on other parties who were not a part of the deal (and presumably had no say in the matter). Externalities may be negative or positive (Ware & Kynoch, 2013). A positive externality is a benefit to non-parties, whereas a negative externality imposes costs on non-parties. If a transaction has a negative externality, then the true cost of the transaction is higher than that paid by the parties. The classic example of a negative externality is pollution generated by a productive enterprise that negatively affects the public, but the cost of which was not internalized by the transaction. Efficiency theory is typically applied "to contracts between firms that do not create externalities." In the absence of externalities, and where there is a competitive market, economic theory states that efficient transacting occurs (Bower, 2012).

Agency theory is a particular application of efficiency theory. It focuses on the issues that arise when an agent carries out work on behalf of a principal, and the interests of the two parties do not coincide (Kumarappan & Joshi, 2014). Efficiency theory predicts that in a well-functioning market, where there is perfect information and the ability to monitor, there should be little difficulty aligning incentives between principals and agents. If the principal is able to sufficiently monitor the agent's performance, it can design sanctions and incentives to encourage optimal behavior. Further, if the agent knows that the principal will become aware of poor performance, and there are switching options in the marketplace, the agent will be dissuaded from performing poorly. The agent will also be concerned about reputational effects of poor quality service provision. Agency problems are often said to arise between the shareholders of a firm (the principals) and its managers (the agents) (Ware & Kynoch, 2013).

In relation to public procurement contracting, agencies refer to the various suppliers and contractors that provide products and services on behalf of the government. The use of contractors and suppliers helps to improve service delivery in the public sector. It helps the government to closely monitor service delivery and provide efficient, affordable and consistent services to the public (Khayota, 2014).

Procurement Contracting Practices and Service Delivery

The shift toward market delivery of public services, particularly contracting out, was conceived as a means to promote efficiency, better align managerial objectives with citizen concerns, and promote local economic development. The superiority of market delivery is based on public choice assumptions (increased choice, efficiency). However, recognition of the importance of transactions costs on contracting has led to empirical analysis looking at the nature of the service and of the contracting process, as well as the differential nature of public sector response by geography (Miller, 2014).

The potential of private markets for public services has turned the sourcing dilemma into a central one faced by public managers. Understanding the sourcing decision, to make or buy, is a fundamental question in industrial economics. The theoretical analysis of privatization and contracting out uses the concept of transactions costs to include administrative costs as well as costs of contracting. Li et al. (2015) imagine a continuum from public, to mixed, to private production depending on the nature of the service. Nyambane (2013) used transactions costs to classify local government services and assess the form of delivery. Building on Arney, Yadav, Miller and Wilkerson (2014), theory suggests that the decision to make or buy a service will be determined primarily by service characteristics: the level of specific physical infrastructure or technical expertise and difficulty in contract specification and monitoring. Transactions costs have been used to explain government choice in the decision to contract out. Some authors find that transactions costs in the market are important in explaining decisions regarding service delivery choice (Steane & Walker, 2000). Others argue that the costs inside bureaucracy are higher than those found under contracting (Reeves & Barrow, 2009). These might include political rents, budget maximizing behaviors, and perverse incentives due to lack of competition within public bureaucracies.

Conceptual Model

The independent variables will be competitive procurement contracting practices, noncompetitive procurement contracting practices, negotiated procurement contracting practices and relational procurement contracting practices. The dependent variable will be service delivery in government owned entities in Kenya.
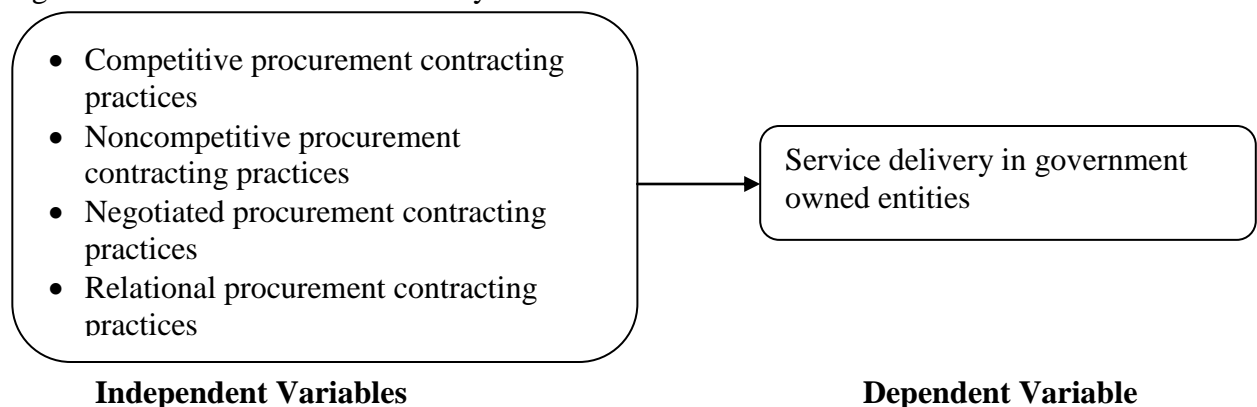

- Competitive procurement contracting practices
- Noncompetitive procurement contracting practices
- Negotiated procurement contracting practices
- Relational procurement contracting practices

Service delivery in government owned entities

  Independent Variables   **Dependent Variable**
Figure 1: Conceptual Model

Research Methodology

This study used a descriptive research design. The target population of this study was the staff working in the procurement departments in government owned entities under the ministry of transport and infrastructure (Kenya Ferry Services Limited, Kenya National Shipping Line Ltd, Kenya ports Authority, Kenya railways corporation, Kenya Civil Aviation Authority, Kenya Airports Authority, Kenya Maritime Authority, Kenya National Highways Authority (KeNHA), Kenya Pipeline Company, Kenya Roads Board, National Transport and Safety Authority (NTSA)). The target population was therefore 351 procurement officers.

Stratified random sampling was used to select 50% of the target population in this study. According to Greener (2008), for a population for between 100 and 500 (100<N<500) a 50% a sample size should be selected. Stratified random sampling we used in this study as it produces estimates of overall population parameters with greater precision and ensures a more representative sample is derived from a relatively homogenous population. The sample size of this study was 176 procurement officers.

Table 1: Sample Size

Government owned entites	Target Population	Sample Size
Kenya Ferry Services Limited	23	12
Kenya National Shipping Line Ltd	34	17
Kenya ports Authority	43	22
Kenya railways corporation	23	12
Kenya Civil Aviation Authority	25	13
Kenya Airports Authority	23	12
Kenya Maritime Authority	27	14
Kenya National Highways Authority (KeNHA)	29	15
Kenya Pipeline Company	32	16
Kenya Roads Board	38	19
National Transport and Safety Authority (NTSA)	54	27
Total	**351**	176

The study used primary data, which was collected by use of semi structured questionnaires. The questionnaires encompassed both closed ended or open ended questions so as to enable the respondent to express their view without being affected by the researcher. The structured questions were used in an effort to conserve time and money as well as to facilitate an easier analysis as they are in immediate usable form (Greener, 2008). On the other hand, the unstructured questions were used as they encourage the respondent to give an in-depth and felt response without feeling held back in revealing of any information.

The questionnaires in this study will generate both qualitative and quantitative data. Qualitative data was analzed by use of thematic content analysis presented in a prose form. Quantitative data was analysed by use of descriptive and inferential statistics through the help of Statistical Package for Social Sciences (SPSS) version 21. Descriptive statistics included percentages, frequencies, measures of central tendencies (mean) and measures of dispersion (standard

deviation). Data was then presented in graphs and tables. Further, a correlation analysis and multivariate regression analysis was used to establish the relationship between the dependent and the independent variables (Competitive procurement contracting practices, Noncompetitive procurement contracting practices, Negotiated procurement contracting practices and relational procurement contracting practices).

The multivariate regression model was:

$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$

Where:

Y = Service delivery in government owned entities

β_0 = Constant Term;

$\beta_1, \beta_2, \beta_3$ and β_4 = Beta coefficients;

$X_1 - X_4$ = Independent variables

Research Findings

The study had a sample size of 176 procurement officers, out of which 168 responses were obtained, giving a response rate of 95.45%. The study did not achieve a 100% response rate as some of the questionnaires were half way filled by the respondents and hence could not be used in the study. However, according to Orodho (2003) any response of 50% and above is adequate for analysis thus 95.45% response rate was excellent.

Procurement Contracting Practices

Procurement contracting practices are agreements in which a buyer agrees to acquire goods or services from a seller. This study sought to establish the procurement contracting practices used by government owned entities in the Ministry of Transport and Infrastructure in Kenya.

Competitive Contracting Practices

Competitive contracting is the provision of a public service through a competitively awarded contract. The respondents were asked to indicate the extent to which their government owned entities used the stated competitive contracting practices in an effort to improve service delivery. Where 5 was Very Great Extent, 4 was great Extent, 3 was Moderate Extent, 2 was Small Extent and 1 was Very Small Extent. The findings were as indicated in table 4.2.

Table 1: Competitive Contracting Practices

	Mean	Std. Deviation
The government owned entity seeks to provide services at the least possible cost through the use of competitive bids	4.369	.722
The use of competitive bids has helped the government owned entity in reforms in the areas such as costs, productivity and quality	4.351	.767
The government owned entity awards a contract to the lowest responsible and responsive proposer who demonstrates an ability to provide quality services and products.	4.345	.692
Through competitive bids, the government owned entity ensures conquering with specifications from user departments	4.273	.689
The government owned entity selects one or more producer to provide a specific services for a period of time.	4.142	.768
The government owned entity has ensured smooth delivery of goods and services in the right quantity and quality through competitive bids.	3.863	.978
The government owned entity always seeks competitive bids from its suppliers for service provision over a particular period of time.	3.684	.666
Overall Mean	4.147	0.755

To a great extent (3.684≤Mean≥4.369) indicated that government owned entity seeks to provide services at the least possible cost through the use of competitive bids (4.369), the use of competitive bids has helped the government owned entity in reforms in the areas such as costs, productivity and quality (4.351), government owned entities award a contract to the lowest responsible and responsive proposer who demonstrates an ability to provide quality services and products (4.345), through competitive bids, the government owned entity ensures conquering with specifications from user departments (4.273), selects one or more producer to provide a specific services for a period of time (4.142), ensure smooth delivery of goods and services in the right quantity and quality through competitive bids (3.863) and always seeks competitive bids from its suppliers for service provision over a particular period of time (3.684). This shows that government owned entities were using competitive contracting procurement practices to a great extent with an overall mean of 4.147. These findings are in line with Entwistle and Martin (2005) argument that competitive contracting not only results in lower costs for the public services competitively contracted, it also induces improved internal public cost performance.

Noncompetitive Contracting Practices

In non-competitive contracting practices, the contracting process is without choices from market competition and candidates are not chosen through competitive processes. The respondents were also asked to indicate the extent to which their government owned entity used the stated noncompetitive contracting practices in an effort to improve service delivery.

Table 2: Noncompetitive Contracting Practices

	Mean	Std. Deviation
The government owned entity used noncompetitive bids to avoid delays occasioned if a competitive procurement was to be used	4.244	.950
The government owned entity uses noncompetitive bids to procure unique contractor expertise or services	4.107	1.116
The government owned entity used noncompetitive bids when the requirements are of such an unusual and compelling urgency that the government would suffer serious financial or other injury.	3.869	.823
Noncompetitive bids in the government owned entity are based on previous contractor experience	3.631	1.052
The government owned entity uses noncompetitive bids in the procurement of some products and services	3.261	.883
Overall mean	**3.822**	**0.965**

To a great extent (3.261≤Mean≥4.244) the respondents indicated that government owned entities used noncompetitive bids to avoid delays occasioned if a competitive procurement was to be used (4.244), used noncompetitive bids to procure unique contractor expertise or services (4.107), used noncompetitive bids when the requirements are of such an unusual and compelling urgency that the government would suffer serious financial or other injury (3.869) and noncompetitive bids are based on previous contractor experience (3.631). To a moderate extent the respondents indicated that government owned entity uses noncompetitive bids in the procurement of some products and services (3.261). This shows that government owned entities use non-competitive procurement contracting practices to a great extent as shown by an overall mean of 3.822. These findings are in line with Entwistle and Martin (2005) argument that noncompetitive of sole source procurements are frequently justified on the basis of such factors as unique contractor expertise, previous contractor experience with the agency of time exigencies. According to Steane and Walker (2000), previous contractor experience is often cited by agencies as a reason why a specific provider should continue to provide services on a sole source basis.

Negotiated Procurement Contracting Practices
In negotiated procurement contracting practices, there is only one bidder and that one bidder will not be afraid to ask questions about the plans, make alternative suggestions, and explain their assumptions, since the specter of competitive bidding advantages from one contractor to another has been eliminated. The respondents were asked to indicate the extent to which their government owned entity used the stated negotiated procurement contracting practices in an effort to improve service delivery. The findings were as indicated in table 4.4.

Table 3: Negotiated Procurement Contracting Practices

	Mean	Std. Deviation
With the use of negotiated procurement contracting it is possible to develop a rapport and communication protocol that will be important in the delivery of quality products and services	4.351	.684
The use of negotiated procurement contracting in the government owned entity comes with a greater opportunity for fast track scheduling	4.267	.858
With the use of negotiated procurement contracting in the government owned entity it is impossible to prove that the lowest qualified bid has been selected.	4.089	.914
With the use of negotiated procurement contracting the government owned entity spend less money on detailed plans.	3.898	.879
The government owned entity uses negotiated procurement where only one bidder is involved.	3.678	.760
Overall mean	**4.057**	**0.819**

To a great extent (3.678≤Mean≥4.352) the respondents indicated that the use of negotiated procurement contracting it is possible to develop a rapport and communication protocol that will be important in the delivery of quality products and services (4.351), the use of negotiated procurement contracting in the government owned entity comes with a greater opportunity for fast track scheduling (4.267), with the use of negotiated procurement contracting in the government owned entity it is impossible to prove that the lowest qualified bid has been selected (4.089), with the use of negotiated procurement contracting the government owned entity spend less money on detailed plans (3.898) and the government owned entity uses negotiated procurement where only one bidder is involved (3.678). This implies that government owned entities in the ministry of transport and infrastructure use negotiated procurement contracting practices to a great extent as shown by an overall mean of 4.057. These findings agree with Li, Ryan and Sun (2015) argument that negotiated contracting has some advantages – less money spent on detailed plans, less risk entering into contracts with people whom the client may not like or trust, and a greater opportunity for fast-track scheduling.

Relational Procurement Contracting Practices

Whether vertical or horizontal, these relational contracts influence the behaviors of firms in their dealings with other firms. Relational contracts within and between firms help circumvent difficulties in formal contracting (i.e., contracting enforced by a third party, such as a court). The respondents were further asked to indicate the extent to which government owned entity used the stated Relational procurement contracting practices in an effort to improve service delivery. The results were as indicated in table 4.5.

Table 4: Relational Procurement Contracting Practices

	Mean	Std. Deviation
Relational contracts in the government owned entity helps circumvent difficulties in formal contracting.	4.333	.893
A relational contract in the government owned entity allows parties to utilize their detailed knowledge of their specific situation and to adapt to new information as it becomes available	4.333	.831
A relational contract in the government owned entity are based on outcomes that are observed by only the contracting parties	3.994	.822
Our government owned entity uses informal agreements and unwritten codes of conduct in the products and services.	3.375	.976
Overall Mean	**4.009**	**0.881**

To a great extent (3.375≤Mean≥4.333) the respondents indicated that the relational contracts in the government owned entity helps circumvent difficulties in formal contracting (4.333), relational contract allows parties to utilize their detailed knowledge of their specific situation and to adapt to new information as it becomes available (4.333) and relational contracts in the government owned entity are based on outcomes that are observed by only the contracting parties (3.994). To a moderate extent the respondents indicated that their government owned entity uses informal agreements and unwritten codes of conduct in the products and services to a moderate extent (3.375). This implies that government owned entities in the ministry of transport and infrastructure use relational procurement contracting practices to a great extent as shown by an overall mean of 4.0009. These findings concur with Miller (2014) findings that relational contracts within and between firms help circumvent difficulties in formal contracting. The findings also agree with Miller (2014) argument that a relational contract thus allows the parties to utilize their detailed knowledge of their specific situation and to adapt to new information as it becomes available.

Service Delivery

The respondents were asked to provide information on service delivery, The results were as indicated in table 4.6.

Table 5: Service Delivery

	Mean	Std. Deviation
Customer satisfaction (percent)	66.023	3.325
Efficiency of service delivery (percent)	65.592	3.622
Service delivery innovations (number)	4.919	.378
Responsiveness (percent)	65.192	3.787

From the findings, customer satisfaction in all the government owned entities in the Ministry of Transport and Infrastructure for the period between the year 2010 and 2014 was 66.023% on average with a standard deviation of 3.325. In addition, the average efficiency of service delivery

was 65.592%. Further, the average service delivery innovations were 5 with a standard deviation of 0.378. Also, the average responsiveness was 65.192% with a standard deviation of 3.787.

Procurement Contracting Practices and Service Delivery

The second objective of this study was to determine the relationship between procurement contracting practices and service delivery of government owned entities in the Ministry of Transport and Infrastructure in Kenya. This study used both correlation analysis and regression analysis to establish the relationship between the independent variables and the dependent variable.

Correlation Analysis

This study made use of Pearson product-moment correlation analysis to determine whether there is a relationship between the independent variables and the dependent variable. A correlation is defined as a number between -1 and +1 that measures the degree of association between two variables. A positive value for the correlation implies a positive association. A negative value for the correlation implies a negative or inverse association. A coefficient of zero means there is no relationship between the two items and that a change in the independent item will have no effect in the dependent item.

Table 6: Correlation Analysis

		Service delivery	Negotiated procurement contracting practices	Competitive contracting practices	Relational procurement contracting practices	Non-competitive contracting practices
Service delivery	Pearson Correlation	1				
	Sig. (2-tailed)					
Negotiated procurement contracting practices	Pearson Correlation	0.112	1			
	Sig. (2-tailed)	0.021				
Competitive contracting practices	Pearson Correlation	.462	.665	1		
	Sig. (2-tailed)	0.001	0			
Relational procurement contracting practices	Pearson Correlation	.303	.661	.416	1	
	Sig. (2-tailed)	0.007	0	0.003		
Non-competitive contracting practices	Pearson Correlation	-0.277	.434	0.264	0.255	1
	Sig. (2-tailed)	0.017	0.002	0.069	0.08	

According to the findings, there is a positive association between negotiated procurement contracting practices and service delivery in government owned entities in the Ministry of Transport and Infrastructure as shown by a correlation coefficient of 0.112 and a p-value of 0.021. The p-value is less than 0.05 and hence the association was significant. In addition, there is a positive and significant association between competitive procurement contracting practices and service delivery in government owned entities in the Ministry of Transport and Infrastructure as shown by a correlation coefficient of 0.462 and a p-value of 0.001. Further, the findings show

that there is a positive significant association between relational procurement contracting practices and service delivery in government owned entities in the Ministry of Transport and Infrastructure. This is shown by a correlation coefficient of 0.303 and a p-value of 0.007. Lastly, the findings show that there is an inverse association between non-competitive contracting practices and service delivery in government owned entities in the Ministry of Transport and Infrastructure as shown by a correlation coefficient of -0.277 and a p-value of 0.017, where the p-value was less than 0.05 and hence the association was significant.

Regression Analysis

Regression analysis involves identifying the relationship between a dependent variable and one or more independent variables. A multivariate regression analysis was used to determine the relationship between the dependent and the independent variables. The multivariate regression model was:

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$

Where: Y = Service delivery in government owned entities; β_0 = Constant Term; $\beta_1, \beta_2, \beta_3$ and β_4 = Beta coefficients; $X_1 - X_4$ = Independent variables

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.7563	0.57199	0.52761	2.56741

The R-Squared is the proportion of variance in the dependent variable which can be explained by the independent variables. The R-squared in this study was 0.572, which shows that the four independent variables (Competitive procurement contracting practices, Noncompetitive procurement contracting practices, Negotiated procurement contracting practices and relational procurement contracting practices) can explain 57.2% of the dependent variable.

Table 8: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.7930	4	5.9483	67.1956	0.000
	Residual	14.4290	163	0.0885		
	Total	38.2220	167			

The analysis of variance in this study was used to determine whether the model is a good fit for the data. From the findings, the p-value was 0.000 which is less than 0.05 and hence the model is good in predicting how the three independent variables (Competitive procurement contracting practices, Noncompetitive procurement contracting practices, Negotiated procurement contracting practices and relational procurement contracting practices) influence service delivery in government owned entities in the Ministry of Transport and Infrastructure. Further, the F-calculated (67.1956) was more than the F-critical (4.35) which shows that the model was fit in predicting the influence of the independent variables on the dependent variable.

Table 10: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	6.797	2.024		3.358	0.000
Competitive contracting practices	0.454	0.091	0.345	4.989	0.000
Non-competitive contracting practices	-0.235	0.093	-0.212	-2.527	0.019
Negotiated procurement contracting practices	0.213	0.085	0.198	2.506	0.021
Relational procurement contracting practices	0.385	0.120	0.235	3.208	0.000

From the findings, there is a positive significant relationship between competitive procurement contracting practices and service delivery in government owned entities in the Ministry of Transport and Infrastructure as shown by a regression coefficient of 0.454. The p-value (0.000) was less than the significance level (0.05), hence the relationship was significant. The results also indicate that there is an inverse significant relationship between non-competitive procurement contracting practices and service delivery in government owned entities in the Ministry of Transport and Infrastructure as indicated by a regression coefficient of 0.235. The relationship was significant as the p-value (0.019) was less than the significance level (0.05).

The results also indicate that there is a positive relationship between negotiated procurement contracting practices and service delivery in government owned entities in the Ministry of Transport and Infrastructure. The relationship was found to be significant as the p-value (0.021) was less than the significance level (0.05). Lastly, the results show that there is a positive significant relationship between relational procurement contracting practices and service delivery in government owned entities in the Ministry of Transport and Infrastructure as shown by a regression coefficient of 0.385. This relationship was significant as the p-value (0.000) was less that of the significance level (0.05).

Discussion of the Findings

The study found that government owned entities seek to provide services at the least possible cost through the use of competitive bids to a great extent. The use of competitive bids has helped the government owned entities in reforms in the areas such as costs, productivity and quality to a great extent. The study established that government owned entities award a contract to the lowest responsible and responsive proposer who demonstrates an ability to provide quality services and products. These findings are in line with Entwistle and Martin (2005) argument that competitive contracting not only results in lower costs for the public services competitively contracted, it also induces improved internal public cost performance. In addition, the study found that through

competitive bids, the government owned entities ensure conquering with specifications from user departments to great extent.

Further, the study established that government owned entities select one or more producer to provide a specific services for a period of time to a great extent. These findings agree with Khayota (2014) argument that competitive markets respond to the invitation of the public agency, and one or more producer is selected to provide a specific service for a period of time.
Also, the study established that government owned entities have ensured smooth delivery of goods and services in the right quantity and quality through competitive bids to a great extent. These findings concur with Parkera and Hartley (2003) argument that through competitive contracting private and public organizations to ensure that goods and services of a defined quantity and quality are produced for the lowest possible cost. Further, the study found that government owned entities always seeks competitive bids from its suppliers for service provision over a particular period of time. These findings concur with Khayota (2014) argument that competitive contracting is the provision of a public service through a competitively awarded contract.

The study also established that government owned entities uses noncompetitive bids to procure unique contractor expertise or services to a great extent. In addition, government owned entities used noncompetitive bids to avoid delays occasioned if a competitive procurement was to be used. These findings are in line with Entwistle and Martin (2005) argument that noncompetitive of sole source procurements are frequently justified on the basis of such factors as unique contractor expertise, previous contractor experience with the agency of time exigencies. In addition, government owned entities use noncompetitive bids when the requirements are of such an unusual and compelling urgency that the government would suffer serious financial or other injury.

In addition, the study established that noncompetitive bids in government owned entities are based on previous contractor experience to a great extent. According to Steane and Walker (2000), previous contractor experience is often cited by agencies as a reason why a specific provider should continue to provide services on a sole source basis. It would appear that if firms secure sole source contracts and subsequently use the knowledge gained to establish a unique ability to perform another contract, then they have secured an advantage over other prospective bidders. Further, the study found that government owned entities use noncompetitive bids in the procurement of some products and services to a moderate extent. As indicated by Parkera and Hartley (2003), in non-competitive contracting the contracting process is without choices from market competition and candidates are not chosen through competitive processes.

The study revealed that with the use of negotiated procurement contracting it is possible to develop a rapport and communication protocol that will be important in the delivery of quality products and services to a great extent. In addition, the study found that with the use of negotiated procurement contracting in government owned entities it is impossible to prove that the lowest qualified bid has been selected. These findings agree with Nyambane (2013) findings that without the competitive bids, it will be virtually impossible to prove that the client has selected the lowest, qualified bid.

Further, the study established that with the use of negotiated procurement contracting government owned entities spend less money on detailed plans. The study also found that the use of negotiated procurement contracting in government owned entities comes with a greater opportunity for fast track scheduling to a great extent. These findings agree with Li, Ryan and Sun (2015) argument that negotiated contracting has some advantages – less money spent on detailed plans, less risk entering into contracts with people whom the client may not like or trust, and a greater opportunity for fast-track scheduling. Also, the study found that government owned entities use negotiated procurement where only one bidder is involved to a great extent. These findings agree with Nyambane (2013) argument that in negotiated contracting, plans can be less detailed and less accurate, since there is only one bidder.

The study revealed that relational contracts in the government owned entities help circumvent difficulties in formal contracting to a great extent. These findings concur with Miller (2014) findings that relational contracts within and between firms help circumvent difficulties in formal contracting. The study also revealed that a relational contract in government owned entities allows parties to utilize their detailed knowledge of their specific situation and to adapt to new information as it becomes available. These findings agree with Miller (2014) argument that a relational contract thus allows the parties to utilize their detailed knowledge of their specific situation and to adapt to new information as it becomes available. In addition, the study established that a relational contract in government owned entities are based on outcomes that are observed by only the contracting parties to a great extent. Also, the study found that government owned entities use informal agreements and unwritten codes of conduct in the products and services. These findings agree with Li, Ryan and Sun (2015) argument that relational contracting are characterized by informal agreements and unwritten codes of conduct that powerfully affect the behaviors of individuals within firms.

Conclusion

This study concludes that government owned entities were using competitive procurement contracting practices, relational procurement contracting practices, non-competitive procurement contracting practices and negotiated procurement contracting practices. The study also found that all the four procurement contracting practices were significantly influencing service delivery in government owned entities. However, competitive contracting practices had the most significant influence on service delivery in government owned entities most, followed by relational procurement contracting practices, non-competitive contracting practices and negotiated procurement contracting practices. Although competitive contracting practices, relational procurement contracting practices and negotiated procurement contracting practices had a positive influence on service delivery, non-competitive contracting practices had a negative influence.

Recommendations for Policy and Practice

The study established that competitive procurement contracting practices had the most significant influence on service delivery. The study therefore recommends that the government of Kenya should formulate more policies to emphasize on the use of competitive procurement

contracting practices as they will help to reduce corruption, ensure quality and low cost as well as improve service delivery.

The study also found that government owned entities use noncompetitive bids to procure unique contractor expertise or services. The study recommends that where unique products and services are required a noncompetitive procurement contracting practice can be used. This will help in saving time and reduce the cost of tendering.

The study established that with negotiated procurement contracting in government owned entities it is impossible to prove that the lowest qualified bid has been selected. The study therefore recommends that the government of Kenya should formulate policies to discourage the use of negotiated procurement contracting as this will lead to collusion and corruption, which in turn leads to low quality and poor service delivery to the public.

The study also found that the study found that government owned entities use informal agreements and unwritten codes of conduct in the products and services. The study recommends that more policies should be formulated to discourage the use of relational procurement contracting practices as they can lead to collusion and corruption.

Areas for Further Research

The study found that the four procurement contacting practices considered in this study could only explain 57.2% of service delivery in government owned entities. This study therefore suggests that further studies should be conducted on other factors influencing service delivery in government owned entities. The study was also limited to government owned entities in the Ministry of Transport and Infrastructure. The study therefore suggests similar studies to be conducted in other government ministries and parastatals in Kenya. The study also suggests further studies on the challenges facing the implementation of procurement contracting practices in government owned entities in Kenya.

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