

Role of Public Private Partnership on Procurement Performance among State Corporations in Kenya: A Case of Geothermal Development Corporation

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Abstract: This study was to establish the role of public private partnerships in procurement performance among state corporations in Kenya. The paper uses Geothermal Development Company as a case study. The research topic was purposely selected because whilst the Government of Kenya has sound procurement policies and state corporations have moved a step further by developing comprehensive procurement procedure, inefficiencies and irregularities in the administration of the procurement function has generated multi-billion losses. In this regard, the general objective of the study was to investigate the role of public private partnership on procurement performance among state corporations in Kenya. The specific objectives were to determine the influence of capital base on PPP, to find out if technological infrastructure affects performance of PPP, to assess if labor competence affects performance of PPP, and to establish if reliability and legitimacy of suppliers affect PPP among state corporations in Kenya. The study used descriptive research design through a cross-section survey within Geothermal Development Company. GDC has four departments namely: Finance, Human Resource, Supply Chain, and Drilling and Infrastructure. The target population for the study is the 650 employees of the company. Furthermore, the research used stratified sampling to narrow down from the 650 target population to 65 sample population. Primary and secondary quantitative and qualitative data was collected through questionnaire, interview, and online published documents. Quantitative data was analyzed using Statistical Package of Social Sciences (SPSS) version 21. Result indicates a strong positive relationship between PPP variables and procurement performance. Capital base had the strongest correlation while supplier legitimacy had the weakest correlations with procurement performance.

Keywords: Public Private Partnership (PPP), Performance, Corporation.

1. BACKGROUND TO THE STUDY

According to South African Institute of International Affairs (2005), private public partnership (PPP) is a contract between a private party and a public sector institution, in which the former assumes significant operational, technical, and financial risk in financing or implementing a project (Amayi, 2011). On the other hand, Asian Development Bank (2010) indicates that PPP is any form of collaboration between private sector and public agencies for provision, management, and construction of a public service project (Amayi, 2011). Blagescu & Young (2005) define partnership as a relationship that brings together two parties who agree to work together to achieve set goals and objectives. The relationship gives each party distinct roles and influence on how the ultimate goal was achieved.

Therefore, PPP invariably creates a mutual beneficial relationship between the public and private sectors (Amayi, 2011). Notably, the private sector has higher operating efficiency, is more cost-efficient, offers better quality and reliability, accepts transfer of risk, offers better value for money, and provides transparency and accountability as argued out by Asian Development Bank (2010).

This notwithstanding, tenders continue to be awarded to private companies that are not competitive through unfairly and irregularly disqualifying other bidders (Thai, 2009). World Bank (2006) explains that the basic principle of good procurement practices reflects, first, accountability, which calls for effective mechanisms that enable procurement entities to make use of the limited resources carefully (Christopher, 2005). Second, competitive supply must be upheld. It dictates that procurement should be conducted in a competitive environment (Amayi, 2011).

GLOBAL PERSPECTIVE PPP:

PPP has been used extensively as a strategic development tool across the globe. Amayi (2011) explain that PPPs account for roughly 15% of annual central government expenditure but there is great variation across countries (Asian Development Bank, 2010). According to Mahmood (2010), procurement systems are central to achieving effectiveness of development expenditure. National governments translate budgets into services majorly through the states purchase of goods and services (Asian Development Bank, 2010). Statistics estimate that 18.42 of the global GDP is spent on procurement (Thai, 2001). Additionally, further estimates indicate that procurement accounts for 10% to 15% of the GDP of the developing economies. For instance, in Angola, Malai, and Uganda, procurement accounts for 58%, 40%, and 70% of the GDP respectively). However, note that procurement is largely affected by internal factors (Asian Development Bank, 2010).

KENYAN PERSPECTIVE OF PPP:

In Kenya, the need for PPPs was triggered by the backdrop of inadequacies on the public sector to offer public goods independently, in an effective and efficient way, owing to the fact that these sectors lack sufficient resources and proper management (Maina, 2011). These factors resulted to evolution of a range of conflicts between citizens and non-governmental institutions on one side and state corporations on the other side (Mwangi, 2014). In light of the conflicts, the national government resorted to bring together organizations with mandate to provide public goods and services on one hand, and other institutions that could promote achievement of this goal by offering technical expertise, resources, and outreach on the other hand (Orodho, 2005). The former institutions comprises of government and intergovernmental agencies while the latter is made up of private institutions (Farlam, 2005). Even though this kind of partnership has provided a powerful and effective mechanism of addressing public sector challenges by leveraging on the strengths of strategic partners, they also bring complex ethical and procedural challenges (Orodho, 2005). The complicated institutional nature of awarding partnership tenders sometimes go contrary t global principles and norms (Maina, 2011). Nonetheless, Kenyan government has benefited greatly from PPPs as evidenced by the successful completion of the following projects: construction of Mtwapa and Nyali bridges in 1959, the 75MW Tsavo independent power project in 1995, Kenya Railways Corporations freight service in 2006, Rabai Independent Power Project in 2006, Nairobi Urban Toll Road construction in 2009; and the Outer Ring Road Project in 2016 among others (Mwangi, 2014).

It is worth noting that the awarding of public project tenders follow government dictated procurement process (Republic of Kenya, 2005). In this regard, public sector procurement is large and complex and Aberdeen (2011) explains that it accounts for roughly 20% to 30% of the gross domestic product. On the other hand, Thai (2005) further expounds that government procurement is a procedural process that seeks to preserve transparency and accountability, and thus it integrates complex legal and regulatory framework designed to take interest of the public (Republic of Kenya, 2005). Whilst procurement in the private sector is governed by provisions of individual firm, procurement in the public sector must observe a set of regulations and policies put in place to achieve desirable social and economic financial requirement. This is the key reason why the Government of Kenya (GoK) established the Private Public Partnership Unit (PPPU) under section 8 of the PPP Act of 2013 (Mburu & Njeru, 2014). PPPU is a special purpose unit monitored by the National Treasury of the GoK. Its key mandate is serving as the secretariat and technical branch of the PPP Committee, which is responsible for reviewing and approving PPP projects (Maina, 2011).

Just like other developing countries, the GoK has a great role to play as far as economic development is concerned (Ombaka, 2009). The Government's total expenditure as a proportion of GDP to market price in financial year 2000/01

was 22%, it rose to 34% in financial year 2004/05 (Maina, 2011). Nonetheless, there has been no significant change in the percentage of money spent by the government on social issues compared to economic services. Government expenditure on social services compared to economic issues has stagnated at 10% and 30% respectively from financial year 2004/5 to 2011/12. Additionally, Nyakundi, et al., (2012) indicates that the proportion of public services contracted out to private firms is fairly low. Thus, Kenya still offers a great opportunity to pursue PPPs thereby increasing interaction of the Government and the private sector.

GoK has faced increasing pressure to cut down public expenditure, which has forced it to turn to the private sector (Ombaka, 2009). Over the last one decade where competition in procuring public projects has not been stiff and remained largely monopolistic, evidence propose that where private institutions are contracted to implement public projects, they give better results than the most credible public sector alternative (Maina, 2011; Nyakundi, et al., 2012; Ombaka, 2009). Thus, to make services favor the poor, GoK needs to review its mechanisms of service delivery and the sectors that offer the services. Lucky enough, the current government has embraced digital technology, which has completely overhauled how goods and services are delivered (Ombaka, 2009). Note that the rapid development of ICT has created opportunities in matters concerning service delivery, resulting to intensified international competition (Nyakundi, et al., 2012).

Regardless of the level of corruption in public procurement process, GoK has made several steps towards making PPP the best alternative for service delivery (Ministry of Energy, 2013). A good illustration of the effort made by the Government is the enactment of the Privatization Act no. 2 of 2005, the Public Procurement and Disposal Act, No. 3 of 2005, and Public Procurement and Disposal Act 2015 (Republic of Kenya, 2005; Nyakundi, et al., 2012). The Privatization Act gives PPPs due recognition by explaining that privatization is the transfer to private firms the operational control and operations of public assets. Sec. 18 (1) of the Act mentions benefits of the interaction and Sec. 25 (b) defines how the relationship should be created. Encouragingly, Sec 3 established the Privatization Commission (PC) as a functional body mandated to manage privatization programme. PC sets the institutional structure of PPPs implementation (Amayi, 2011).

On the other hand, the Public Procurement and Disposal Act 2005 and 2015 describe procurement and disposal procedures of obsolete, unserviceable, or surplus public entity equipments (Republic of Kenya, 2005. GDC, 2016). Sec. 4 (1) and (b) of the act describes what needs to be done when the Government wishes to contract private entities to implement projects on its half. Where there is any conflict with other Acts in matters public procurement, the Act prevails. Sec. 92 (1) of the Act gives specific regards to PPPs (Republic of Kenya, 2005). It explains that a state corporation must follow procedures permitted by Acts of parliament in contracting private entities to run a public project (Ministry of Energy, 2013).

GEOHERMAL DEVELOPMENT COMPANY:

This study uses Geothermal Development Company (GDC) as a case study. GDC was incorporated in 2008 (Ministry of Energy, 2013). It is a 100% state owned corporation and a Special Purpose Vehicle for the government tasked to undertake exploration of geothermal fields, appraisal and production drilling, enter into joint development teams, manage proven steam fields, and sale steam across the country (Republic of Kenya, 2005).

According to the Ministry of Energy (2013), Kenya has geothermal potential of up to 10000 MW but there has been a marked slowdown in exploration since 2009 after the 2007/08 financial crisis. The Ministry of Energy (2013) indicates that majority of the projects envisioned in 2009 and 2010 are yet to be pursued. Some potential sites include Eburru-Badlands, Arus-Bogoria, Menengai, Silali, Emuruagokolak, Olkaria, Namarunu, Lake Baringo, Korosi, and Longonot. Wells have been drilled in Olkari and Eburru but so far exploitation is in Olkaria, Baringo-Silali, Suswa, and Menengai(GDC, 2016). At the end of 2012, only 212.5 MW of the geothermal energy was added to the national grid (GDC, 2016). In response to this shortcoming and in an effort to fulfill the promise to install 5,000 MW by the year 2030, GoK incorporated GDC in 2008 to conduct a rapid exploration of the geothermal energy to accommodate independent power producers (IPPs) to construct power stations to not only increase electricity capacity in the country but also diversify the national electricity grid (Ministry of Energy, 2013).

According to Musembi (2016), several geothermal projects are being developed under PPP relationship between GDC and Independent Power Producers (IPP). Table 1 illustrates some of the projects. The contracted IPP are Ormat International, Quantum Power EA, and Sosian Energy. Additionally, African Development Bank (2016) notes that it has given GDC funding worth USD 124 million for geothermal energy production. GDC has also received USD 125 million funding from Climate Investment Funds to finance the projects.

Table 1

PROJECT	SIZE	COMMISSIONING
460MW Menengai	100MW	Dec-15
	60MW	Jun-16
	100MW	Dec-16
	100MW	Dec-16
	100MW	Dec-16
150MW Suswa	200MW	Dec-16
200MW Baringo-Silali	200MW	Dec-16
560MW Olkaria	560MW	Dec-16

Geothermal Projects Developed under PPP Model:

GDC has developed a procurement process that conforms to the 2005 Public Procurement Act. The institution invites public application for tenders by asking eligible applicants to fill and hand-in application documents at the Manager Supply Chain in Kawi House (GDC, 2016).

In 2006, the Kenyan legislative arm enacted the Energy Act No. 12 (GoK, 2015). The act unbundled the energy sector into the following five sub-sectors: generation, distribution, transmission, regulation, and policy (Ministry of Energy, 2013). From the colonial period to early 2000s, the country over depended on hydroelectric energy supplied by limited generators. The limitation of unpredictable rainfall patterns experienced in the late 1990s and early 2000s, the levels of water in rivers that provided hydroelectric energy fell and the country experienced a marked reduction in electric output (GDC, 2016).

STATEMENT OF THE PROBLEM:

Procurement is the backbone of performance in both private and state corporations. It implies that survival or good performance of any institution is anchored to a tight procurement process. The GoK implemented the Public Procurement Act 2005 and enacted other subsequent guidelines and regulations (Republic of Kenya, 2005). Even though the regulations were meant to make procurement process transparent, it has faced many challenges as explained by Nyakundi et al., (2012). Even after implementation of e-procurement in many state corporations, procurement process still faces many challenges such as neglect, poor co-ordination, lack of direction, a lot of bureaucracy, lack of transparency and open competition, low level cadre of trained procurement officials, and high level of corruption. Mburu & Njeru (2014) point out that the 2010 corruption perception index ranked Kenya in position 139 out of 176 with the most corrupt countries at the bottom of the list. This status is not astonishing because literature documents several corruption scenarios in Kenya including the Maize scandal where the country lost sh. 23 billion, the Anglo-Leasing Scandal, the Chicken-gate Scandal, the Euro-bond Scandal, the Triton Scandal, and the NYS Scandal among others (Deloitte, 2016; Anyanzwa, 2016). These are just a few scandals witnessed recently where the GoK lost billions of money. Two common phenomena in all the scandals are PPP and lack of transparency in the procurement process. Having mentioned this, it is prudent to conclude that the Kenyan procurement process is not transparent, is marred with corruption, and thus it has failed terribly. Kenyans are hopeful that this bad state can be better in future (Ombaka, 2003)

Even though most of the state corporations are corrupt, some are managed by ethical leaders who are trying their best to take care of the public interest. Public procurement has significant political and economic implications and that is why it should ensure that the process is economical and efficient (Public Procurement Oversight Authority, 2007). The 2005 Public Procurement Act requires that main players in the process including professional associates, stakeholders, the general public, and academic entities understand the entire process (The Star (2015). Unfortunately, most state corporations still shrouds the process with inefficiency, secrecy, and corruption as illustrated by Nyakundi (2012). For instance, even with the well-defined procurement process GDC is still marred with procurement irregularities. Business Daily (2016) reported that the Ethics and Anti-Corruption Commission (EACC) probed the company's sh. 10 billion deals (The Star (2015). Furthermore, the Star (2015) reported that a parliamentary committee asked the EACC to hasten its investigation on allegation of procurement irregularities at GDC where it is suspected that billions of money was lost.

Stakeholders are still raising questions why the GDC had to delay some projects in Menengai until 2017. Ritcher (2015) notes that the IPP projects in Menengai developed by Quantum East Africa, Sosian Energy, and OrPower 22 were have

been delayed for roughly 2 years. Even though GDC explains that the delay was caused by failure of governmental and other stakeholders to provide risk guarantees, the media and general public suspect that it is because of procurement irregularities (Public Procurement Oversight Authority, 2007). This status prompted this research. The researcher expects to establish the role of PPP on procurement performance among state corporations in Kenya.

SPECIFIC OBJECTIVES:

- To determine the influence of capital base on PPP among state corporations in Kenya;
- To find out if technological infrastructure affects performance of PPP among state corporations in Kenya;
- To assess if labor competence affects performance of PPP among state corporations in Kenya; and
- To establish if reliability and legitimacy of suppliers affect PPP among state corporations in Kenya.

2. LITERATURE REVIEW

SUPPLY CHAIN OPERATIONS REFERENCE THEORY (SCOR):

To establish if reliability and legitimacy of suppliers affect PPP in state corporations in Kenya this study used SCOR model. SCOR is a management framework widely used to address, improve, and communicate decisions in matters supply chain management within the company as well as with customers and suppliers (Bauhof, 2004). Besides describing business processes needed to satisfy customer needs, the model explains the processes along the entire supply chain and provides basis of improving them. SCOR model is a result for a collaborative effort between the supply chain council with the help of 70 of the world's leading manufacturers (Huan et al., 2004). So far, the model remains to be the most promising supply chain strategic decision making tool

RESOURCE BASED VIEW THEORY (RBV):

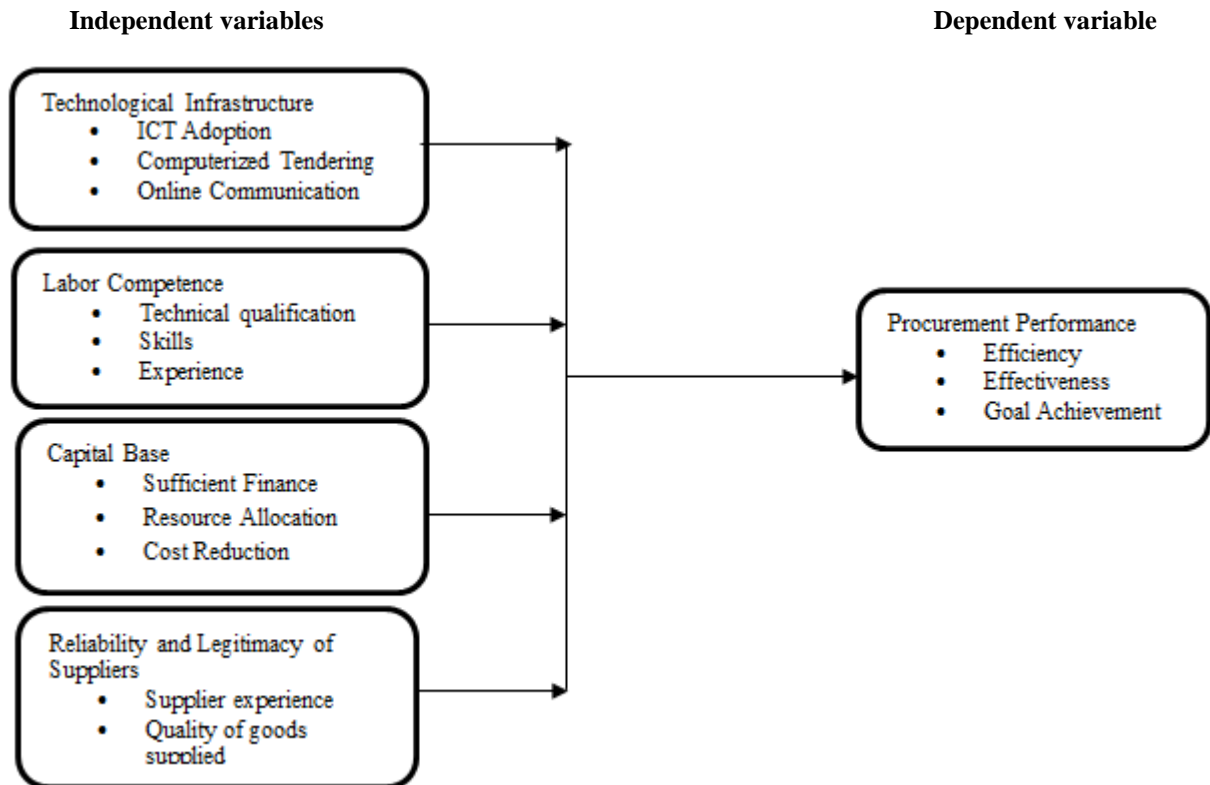
This study used RBV to assess if labor competence affects performance of PPP in state corporations in Kenya. The theory proposes that resources are the most imperative determinants of firm performance (Hax, n.d). However, for resources to be superior, they must demonstrate VRIO attributes; valuable, rare, costly to imitate, and organized to capture value (Wernerfelt, 1984). With these attributes, the resources give a firm sustainable competitive advantage. The model was pioneered by Wernerfelt, B., Prahalad and Hamel, and Barney in their publications: The Resource-Based View of the Firm, The Core Competence of The Corporation, and Firm Resources and Sustained Competitive Advantage respectively (Wernerfelt, 1984). The model postulates that firm resources are most important aspects that determine its performance.

TECHNOLOGICAL ACCEPTANCE MODEL (TAM):

TAM is an information system theory that models how technology advancement is accepted and used. The theory is focused on how ICT is adopted and more precisely on determinants of user acceptance of new information technologies. Two major theoretical frameworks in the model include Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) (Kelchner, 2015). According to Hax (n.d), PU is the extent to which a user believes that using a specific system is bound to improve job performance while PEOU refers to the level of easiness people have in interacting with information systems. Proponents of the theory propose that PU influences both attitude and satisfaction towards accepting technology while PEOU influences PU and adoption intentions

TRANSACTION COST THEORY (TCT):

TCT explains the basic existence of organizations and why firms expand or outsource activities to external environment (Maina, 2011). The theory proposes that firms try to minimize the costs of exchanging resources with the external environment besides minimizing bureaucratic costs of exchanges within the organization (Saunders et al., 2012). Thus, companies weigh the cost of outsourcing against the bureaucratic costs of performing activities in-house. In this regard, the theory perceives firms and markets as different forms of coordinating and organizing economic transactions (Saunders et al., 2012). When the external transaction cost is higher than the internal bureaucratic cost, the company is likely to grow because the organization is in a position to perform internal activities cheaply. If the reverse is true, the company is likely to downsize (Maina, 2011). In reference to PPP, GoK welcomed private partners in executing public projects because private partners do it at a less cost and are more competent and experienced. However, it is important to note that the projects are supposed to be developed within the allocated time and money. Supplementary expenditure must be minimized for the public to yield ultimate benefits (Leftie, 2016).



Empirical Review:

An empirical review is an overview of existing literature and theories concerning the topic under study (Ismail & Ajija, n.d). It gives the historical background of the topic. An empirical review is important because it demonstrates researcher’s understanding of the topic or field he/she is studying (Balgescu & Young, 2005).

Second, empirical review demonstrates that the topic being studied has not been covered before.

World Economic Forum (2005) reiterates that in the recent years PPP model has gained favor of most governments across the world as a preferred procurement alternative as governments commit to tackle better service delivery. This form of partnership has already proved that it can deliver. Globally, PPPs have been used to promote social and economic development in areas such as infrastructural and health development (Amos & Worthington, 2008).

PPPs affect procurement in various ways and thus this paper uses previous studies to establish factors that affect performance of PPPs. The sources analyzed bring together several other publications on the topic under examination. For instance, Ismail & Ajija (n.d) conducted a study on factors affecting PPP implementation in Malaysia (Jeffrey, 2011). The study found out that some of these factors include commitment and responsibility, good corporate governance, favorable legal framework, strong and good private consortium, sound economic policy, project technical feasibility, transparent procurement process, and availability of financial market (Amos & Worthington, 2008).

On the other hand, several other studies have reviewed factors affecting procurement process. Amos & Worthington (2008) identified five key success factors that influence performance of procurement, namely; effective management of control system, clear procurement strategy, development of expertise, entrepreneurial and proactive approach, and a role in corporate management.

Jeffrey (2011) explain that another important fundamental element is communication the organization’s key success factor and defining the boundaries of a procurement strategy to attain continuous improvement in value of money. It should be done of the basis of quality, total cost, and promoting competitiveness among suppliers by pursuing the best procurement practice (Christopher, 2005). Additionally, it should be noted that supplier performance has an impact on performance of procurement process. Some of the factors underlining the need for good supplier performance include lower inventory, make or buy decisions, integrating supplier and buyer systems, and creating good co-operative relationships (Mwangi, 2014).

On the other hand, Christopher (2005) conducted a study that defined features of responsive organization. Major transformations in an organization are realized in line with corporate features such as profit to performance, inventory to information, products to customers, function to process, and transactions to relationships.

The researcher further reiterates that vital measures of procurement performance should be monitored continuously (Mwangi, 2014). The logic behind Key Performance Indicators (KPI) framework proposes that whereas procurement performance has many measurement approaches, only a few numbers of significant dimensions make better contributions more than proportionately to success or failure. Additionally, a balanced scorecard provides a critical alternative mechanism of identifying areas that need improvement to ensure ultimate goals are achieved. Van Weele (2006) explains that there is a close relationship between the performance of procurement process and PPPs, efficiency, and effectiveness. Performance of procurement starts with effectiveness and efficiency in purchasing as a procurement function, which helps an organization change from reactive to proactive to attain set goals (Mwangi, 2014).

The study conducted by Mwangi (2014) assessed PPPs from a different perspective. The researchers analyzed global partnerships and summarized factors that affect its performance. They indicate that realistic and shared goals, well defined benefit of both parties, distinct roles of both parties, active maintenance of the partnership relationship, perception of transparency, achieving agreed obligations, and equality of participation affects not only performance of PPPs, but also determines failure or success of a procurement process. Furthermore, Jeffreys (2011) maintains that the following factors create a relationship between PPPs and procurement process: suitable public policies, common understanding, transparency and accountability, sharing resources, and commitment to achieve public goals.

3. RESEARCH METHODOLOGY

Research Design:

According to Kombo & Tromp (2006) research design facilitates achievement of research objectives because the type of research design determines the quality and quantity of data collected. This study used descriptive research design. Kombo & Tromp (2006) defines descriptive research design as a scientific research approach that shows how research variables relate in trying to address the research question.

Target Population:

Orodho (2005) defines target population as a set of elements that the researcher uses to collect information out of which result are obtained by applying selected data analysis method. This study targeted to understand how PPPs has impacted GDC's procurement performance. The company has 4 departments and 650 employees. The departments are human resource and administration, supply chain, drilling and infrastructure, and finance as shown in table 2. According to Kombo & Tromp (2006) target population is expected to have observable characteristics that the researcher intends to generalize the study results. Thus, this study assumes that the population is not homogeneous.

Table 2

Department	Population
Human Resource and Administration	116
Supply Chain	220
Drilling and Infrastructure	214
Finance	100
Total	650

Target Population:

Sampling Frame and Sampling Technique:

Kombo & Tromp (2006) explain that sampling frame is the list of all population units derived from the sample population. This study used a sample size of 65 respondents which represents 10% of the target population from each department as shown in table 3. The study used stratified sampling technique to ascertain who to administer questionnaire.

Table 3

Department	Population	Sample Population	Representation
Human Resource and Administration	116	12	10%
Supply Chain	220	22	10%
Drilling and Infrastructure	214	21	10%
Finance	100	10	10%
Total	650	65	10%

Sample Population

4. RESEARCH FINDINGS AND DISCUSSION

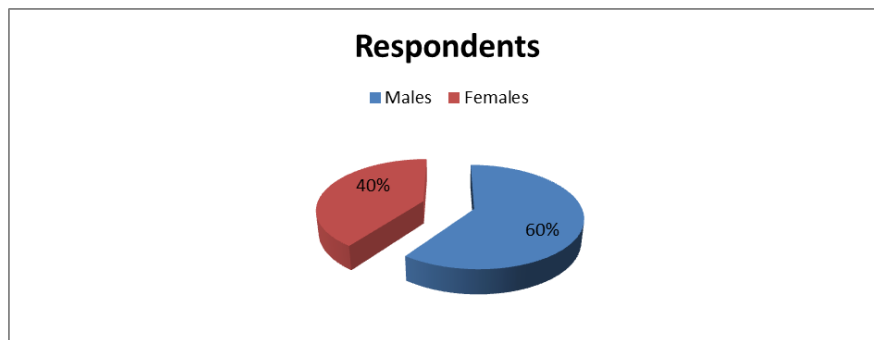
Key parameters used in the analysis were capital base, technological infrastructure, labor competence, and legitimacy of suppliers. This study used structured questionnaire and interviews in data collection. This chapter provides the analysis of data collected, research findings, and interpretation.

RATE OF RESPONSE:

Out of the 650 target population, 65 respondents were collected after five days. 55 out of the 65 questionnaires were fully filled and returned. It translates to 84.615 response rate, which is a good rate.

DEMOGRAPHIC INFORMATION:

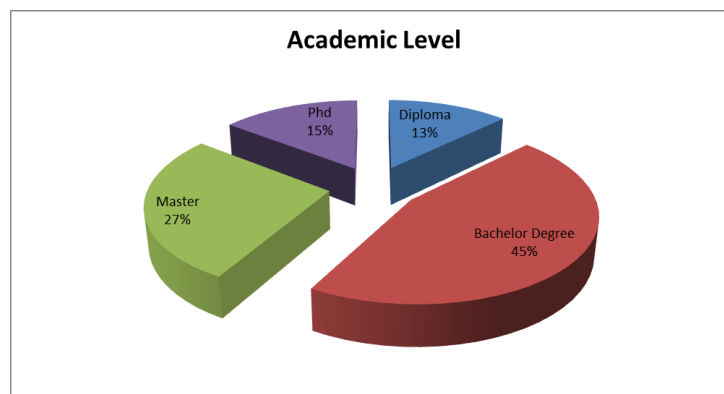
Data analysis results indicated that 40% (22) respondents were female while 60% (33) were male.



Gender Information

ACADEMIC QUALIFICATION:

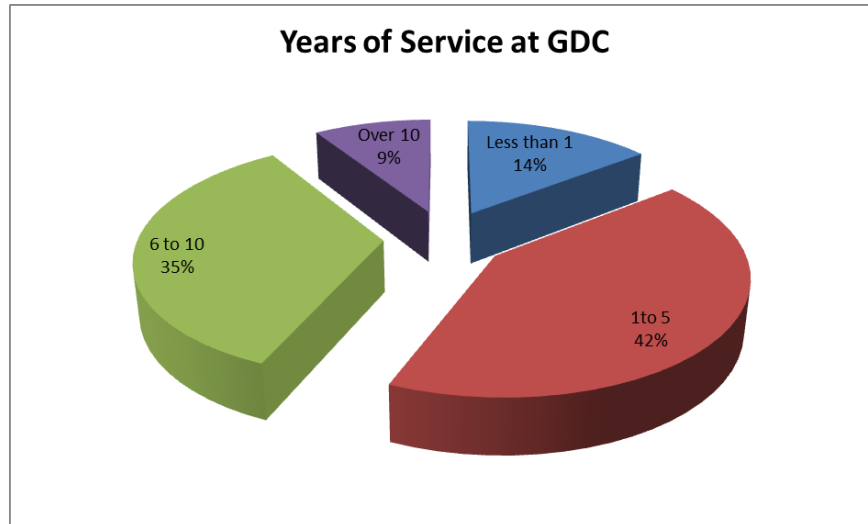
Academic qualification of the respondents. It is evident that diploma holders were 7(13%), bachelor degree holders were 25(45%), master degree holders were 15(27%), and Phd holders were 8(15%). It indicates the high academic qualification, which is positively correlated to competence and proper understanding of specific skills needed to undertake daily tasks effectively and efficiently



Academic Qualification of the respondents

YEARS OF SERVICE AT GDC:

The questionnaire asked the respondents to indicate the number of years they had worked at GDC. The frequency indicates that majority of the respondents had served at the company for between 1 to 5 years (42%) followed by 6 to 10 years (35%). A significant percentage of the respondents had served for less than one year (15%) while the number of employees who had served for more than 10 years were 5(9%). In this regard, it is prudent to conclude that 86% of the GDC employees understand their tasks properly because they are experienced.



CAPITAL BASE:

This study used several criteria to ascertain the influence of capital base on PPP. Table 4 indicates that majority of the respondents (76%) reported that GDC allocates funds to project as per the budget while 24% of them believe that the institution does not allocate money to projects as per the budget before kickoff. Additionally, 13% of the respondents believe that the state corporation does not allocate full amount while 87% of the indicated that it allocates full amount before project kick-off. It is evident that GDC allocates funds as per the budget but is not clear whether the full amount is allocated or not because 13% of the respondents commented that the institution allocates the funds partly. On this note, it is imperative to understand that sufficient funding dictates the success of any project. Disbursing the whole budgeted amount before the project starts is not important.

Table 4

		F	%
Does GDC allocate money to projects as per the budget before the project kicks off?	Yes	42	76
	No	13	24
Do you think full allocation of funds to projects as per the budget enhance performance of the project?	Yes	48	87
	No	7	13

BUDGET ALLOCATION:

Majority of the respondents (45%) reported that PP projects sometimes perform within the set budget. They were closely followed by 27% of them who explained that PPP projects always perform within the set budget. 22% indicate that PPP rarely perform within the set budget while and 2% of them believe that PPP never performs within the set budget. The combined frequency of respondents who are doubtful about PPP projects performing within the set budget is 40(73%) while 27% were sure. These results express doubts over project budgeting. Seemingly, private contractors go back to the state corporation to ask for supplementary funding. Similarly, 27% of the respondents are very sure that PP projects delivers within the set time while 73% are doubtful. An analysis of literature indicates that successful completion of geothermal projects within the forecasted time and money is dependent on many variables, some of which are beyond the control of the contractors. For instance, Maligha (2013) reported that GoK suspended issuing licenses for solar plants and wind farms until 2017. Similarly, Ken Gen was forced to suspend wind- power project in 2016 over land issues. Saitet *et al.*, (2015) explains that drilling at Olkaria was completed in 1990 but an international donor who was funding the project suspended further funding because of unfriendly political environment in Kenya in the run to multiparty democracy.

Similar cases were reported Menengai, Suswa, and Baringo-Silali GDC projects that were suspended in 2015 and reopened in 2017 because of licensing issues. Luckily enough, 51% of the respondents explained that GDC sets money aside to take care of risks and emergencies in its projects. The external risks of GDC projects could be the reason why PPP fail to meet the budgeted time and money.

Table 5

	Always		Sometimes		Rarely		Never	
	F	%	F	%	F	%	F	%
Do PPP projects perform within set budget?	15	27	25	45	12	22	3	2
Do PPP projects perform within set time?	15	27	10	18	10	18	20	11
Does GDC set money aside to take care of risks and emergencies during project development?	28	51	15	27	10	18	2	4

Project Performance:

This indicates that 64% of the respondents felt that GDC allocates more than 75% of the budget to projects, 32.5% reported that the institution allocates between 51% to 75%, while 3.6% explained that the state corporation allocates between 26% to 50% of the budget to projects. Lastly, all the respondents indicated that PPP projects meet customer satisfaction fully.

Table 6

	0%-25%		26%-50%		51%-75%		76%-100%	
	F	%	F	%	F	%	F	%
What is GDC's level of budget allocation to individual projects?	0	0	2	3.6	18	32.7	35	64
To what level do you think PPP projects meet customer satisfaction?	0	0	0	0	0	0	55	100

Budget and Individual Projects:

TECHNOLOGICAL INFRASTRUCTURE:

Respondents reported differently in matters technological infrastructure at GDC. 100% of the respondents reported that the state corporation has adopted a procurement information system. It implies that the corporation has observed the government's requirement that all state corporations must have a computerized procurement system. Well-designed and written information system is likely to improve transparency, efficiency, and effectiveness in utilization of public funds. It explains why all respondent indicated GDC advertises its tenders online. However, 58% of the respondents explained that the corporation uses computerized system while 42% reported that it uses manual system in selection of suppliers. It points at the fact that GDC uses both manual and computerized approaches to selecting the most suitable supplier. It implies that the corporation has not fully adopted a procurement information system. It could be in transition. Manual selection of contractors is normally flawed by irregularities where public officials intentionally favor certain suppliers. Of course they expect a kickback later. In this regard, it is evident that supplier selection at GDC is not fully transparent. The company has loopholes that can accommodate misappropriation of public funds.

Table 7

		F	%
Has GDC adopted an information system that handles the procurement tasks?	Yes	55	100
	No	0	0
How are invitations for tenders advertised?	Manual	0	0
	Online	55	100
How is selection for suppliers or contractors done?	Manual	23	42
	Computerized	32	58

Procurement Information System:

It was prudent to ascertain the impact of the procurement system that the state corporation has adopted. The researcher asked the respondents to comment on the effectiveness, efficiency, accountability, and timely supply of materials. Majority of the respondents (45%) indicated that the system has improved GDC's efficiency by 51% to 75%, 27% of them believed that it had improved efficiency by 26% to 50%, 15% of them reported that the system had improved efficiency by 0% to 25%, while 13% believed that it had improved efficiency by 76% to 100%. Table 8 indicates that majority of the respondents were confident that the information system had improved accountability, effectiveness, efficiency, and timely supply of materials in the state corporations. Evidently, the procurement information system is more desirable than the old manual procurement system.

Table 8

	0%-25%		26%-50%		51%-75%		76%100%	
	F	%	F	%	F	%	F	%
If GDC has adopted a procurement information system, what is its effect on tendering time and follow up?								
Effectiveness	8	15	15	27	25	45	7	13
Efficiency	7	13	17	31	23	42	8	15
Accountability	12	22	28	51	15	27	0	0
Timely supply of materials	2	4	9	16	16	29	28	51

Impact of the Procurement Information System:

LABOR COMPETENCE:

As far as labor competence is concerned, 27% of the respondents believe that the procurement team understands the Procurement Act of 2009 and 2015 while 22% of the respondents believe that they do not understand the Act properly. 51% of the respondents reported that some of the procurement officials understand the Act properly. On the other hand, 58% of the respondents reported that some of the procurement staff is qualified, 27% believe that all the procurement officials are qualified, while 15% indicated the procurement officials are not qualified. 60% of the respondents expressed confidence in the procurement team while 40% indicated expressed doubt. Labor is one of the key assets of any organization. Having a workforce that understand their specific roles and responsibility, and are able to deliver as expected is very critical because it determines success in the organization. Generally, the respondents explained that more than 51% of the procurement officials understood their tasks and responsibilities and are well acquitted with the Procurement Act of 2009 and 2015. This scenario is attributed to the fact that majority of the GDC employees are well educated. GDC employs on the basis of merit.

Table 9

		F	%
Do you believe that the procurement team is well acquitted with the Procurement Act of 2009 and 2015?	Yes	15	27
	No	12	22
	Some of them	28	51
Are you convinced that the procurement staffs are qualified personnel capable of performing tasks as expected?	Yes	15	27
	No	8	15
	Some of them	32	58
Does the procurement department invite tenders from all suitable suppliers?	Always	20	36
	Not Always	35	64
Are you convinced that procurement staff practices professionalism, accountability and efficiency in the procurement process?	Yes	22	40
	No	33	60

Labor Competence of the Procurement Department:

The respondents were asked to comment on the induction process on procurement processes. 55% of the reported that the corporation occasionally provides training on procurement, 22% reported that it always provides training, and 24% indicated that GDC rarely provides training. The responses to this question are disappointing. Seemingly, GDC top

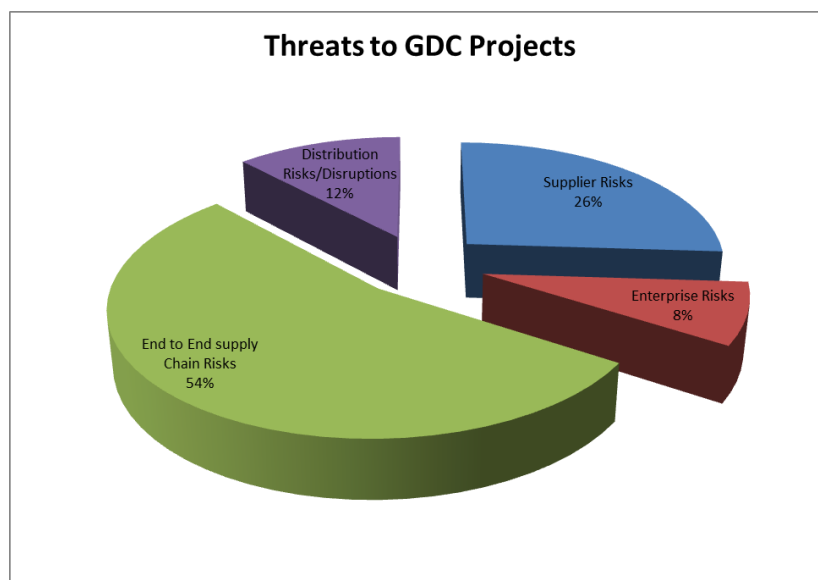
management has not yet realized the importance of regular training. They appear not to understand that workplace training improves performance and employee satisfaction.

Table 10 Procurement Induction Training

	Always		Occasionally		Rarely		Never	
	F	%	F	%	F	%	F	%
Does GDC offer every new employee induction training on procurement processes?	12	22	30	55	13	24	0	0

Reliability and Legitimacy of Suppliers:

Supply chain risk is one of the factors that affect performance of the procurement process. 54% of the respondents indicated that fraudulent procurement personnel affects the procurement function, 30% indicated that dubious suppliers are impediments to the procurement function, 10% explained that loopholes in the information system affects the function, and 2% reported that physical theft has hampered performance of the procurement department. As far as external supplier risk is concerned, 48% indicated that cost escalation poses a substantive risk, 24% reported that poor relationship with suppliers, 20% reported that lead time is a significant risk, while 85 explained poor communication with suppliers affects the procurement function. Lastly, the respondents were asked to comment on the greatest risks that affect performance of GDC projects. Results are shown in figure 7. Evidently, majority of the respondents (54%) reported that end to end supply chain risk poses the highest risk. It was followed by supplier risk (26%), distribution risk (12%), and lastly enterprise risk (8%). Evidently, GDC project faces many risks and challenges, most of which are attributed to the organization’s supply chain. Supplier risk and end to end supply risk are the two greatest risks with a combined percentage of 80%. The results point at irregularities in the company’s procurement system. Possibly, some of the procurement officers are taking advantage of the fact that the corporation is still partly using the manual procurement framework. Additionally, some respondents indicated that the procurement information system has several loopholes that can be used to manipulate public funds. Weaknesses in the GDC’s procurement framework could be another reason why public projects funded by the organization are not completed within the budgeted time and money.



Threats to GDC Projects

5. SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Summary of Findings:

The general objective for this study was to investigate the role of public private partnership on procurement performance among state corporations in Kenya.

The study used a case study of GDC. The study sought to respond to the following specific objectives:

- To determine the influence of capital base on PPP among state corporations in Kenya;
- To find out if technological infrastructure affects performance of PPP among state corporations in Kenya;
- To assess if labor competence affects performance of PPP among state corporations in Kenya
- To establish if reliability and legitimacy of suppliers affect PPP among state corporations in Kenya.

The Influence of Capital Base on PPP among State Corporations in Kenya:

GDC is currently pursuing several projects under PPP framework in Menegai, Olkaria, Baringo-Silali, and Suswa. This study noted that GDC funds the projects through a combination of government funds and donations from international organization. As far as capital base is concerned, this research noted that GDC allocates money to all public projects it pursues but not the full amount generally, it is evident that capital base affects performance of PPP.

Effects of Technological Infrastructure Performance of PPP among State Corporations in Kenya:

In the contemporary business environment, information and communication technology is literally dictating future trends of business. Companies have been forced to adopt computerized system because it is the only way of attaining competitive edge. In this regard, this study noted that technological infrastructure is positively correlated to performance of PPP in state corporations in Kenya.

Impact of Labor Competence on Performance of PPP among State Corporations in Kenya:

It is worthwhile noting that GDC recruits on the basis of merit. 87% of its workforce have bachelor degree and above. The corporation has good number of employees who are master degree and Phd holders. Additionally, just 14% of the employees have worked in the organization for less than one year. The rest (86%) have worked for more than 12 months. It indicates that majority of the employees are experienced, thus competent it is attributed to the fact that part of the personnel does not understand the provisions of the Procurement Act of 2009 and 2015.

Reliability and Legitimacy of Suppliers Affect PPP Among State Corporations In Kenya:

This study noted that the GDC supply chain is marred with irregularities. 54%, 30%, and 10 of the respondents explained that the most common supply chain risks are fraudulent procurement personnel, dubious suppliers, and loopholes in the company's procurement information system respectively. Other are cost escalation, poor relationship with suppliers, lead time, end to end supply chain risk, and lead time. Some of the procurement officers are taking advantage of the fact that the corporation is still partly using the manual procurement framework. Additionally, some respondents indicated that the procurement information system has several loopholes that can be used to manipulate public funds.

In Conclusion:

It is prudent to conclude that public private partnership has a significant effect on procurement performance among state corporations in Kenya. Through contracting private organizations, state corporations in Kenya have reported better performance in public projects this study has confirmed that an adequately structured and well thought out PPP arrangement is expected to effectively and efficiently achieve better results than traditional public sector infrastructure financing option.

RECOMMENDATION:

This study has established that PPP affects the performance of the procurement function to a great extent. Simply stated, the introduction of PPP has enables state corporations satisfy public demand as far as public projects are concerned.

- All the studied independent variables, inter alia, capita base, information infrastructure, labor competence, and supplier legitimacy had a strong and significant relationship with the dependent variable (procurement performance). Nonetheless, this study noted several procurement weaknesses in GDC. This study assumes that most of the state corporations have similar procurement challenges.
- First, even though GDC has implemented a procurement information system, it is still partly using manual procurement approaches. Additionally, the study also noted that the procurement information system has several loopholes that can be used by public officers to corrupt the procurement performance.

- It also noted that completion of public projects in GDC is affected by other external factors that are beyond the control of the organization. In this regard, there is need for the national government to instruct all state corporations to completely discard manual procurement approaches and implement computerized system.

➤ Second, officers found culpable should be forced to step down and necessary legal actions taken.

- Lastly, there is need for the national government to take care of all external risks that state corporations face in an effort to create an ideal environment for smooth flow of public projects.

AREAS OF FURTHER RESEARCH:

- ❖ As much as this study has ascertained that PPP affects procurement performance, it has studied just four PPP variables. PPP is wide topic and affected by very many variables.

- ❖ In this regard, there is need for further research that will study other PPP variables that affect procurement performance.

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