

**INFLUENCE OF PROCUREMENT PRACTICES ON
ASSET DISPOSAL IN ENERGY SECTOR STATE
CORPORATIONS IN KENYA**

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**Influence of Procurement Practices on Asset Disposal in Energy
Sector State Corporations in Kenya**

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of Philosophy in Business Administration, (Procurement and Supply
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and Technology**

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

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DEDICATION

This work is dedicated to my mother the late Martha Makokha Mahaga. For those who knew her no words are needed but for those who did not know her, no words can suffice. May her love for academia grow through this work by eliciting more research in the field of Procurement, Logistics and Supply Chain Management. To my brothers and Sisters John, Godfrey, Roslyn, the late Patrick, the late Paul, the late Christine and Reginald. For whom I am today special thanks to Mr. and Mrs. Samuel Newton Achuchi Oduori.

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ACRONYMS AND ABBREVIATIONS

AfDB	-	African Development Bank
B.C	-	Before Christ
EU	-	European Union
CEO	-	Chief Executive Officer
GAAP	-	Generally Accepted Accounting Principles
GBE	-	Government Business Enterprise
GDP	-	Gross Domestic Product
GoK	-	Government of Kenya
ITM	-	International Trading Manual
KCC	-	Kenya Cooperative Creameries
Ketraco	-	Kenya Electricity Transmission Company
KPLC	-	Kenya Power and Lighting Company
OECD	-	Organization for Economic Cooperation and Development
PPDA	-	Public Procurement and Disposal ACT
PPOA	-	Public Procurement and Oversight Authority
SME	-	Small and Medium Enterprises
TAMM	-	Total Asset Management manual
UK	-	United Kingdom

DEFINITION OF TERMS

Asset	<p>An economic resource that a corporation owns and controls with the expectation that it will provide future benefit. Simply stated assets represent value of ownership that can be converted into cash. Some type of property that is owned by a firm, which considered having some value and is available to satisfy the commitments, debts, or legacies of a company (Fisher et. al., 2013).</p> <p>These are those factors that will decisively affect the nature or outcome of, in the case of this study asset disposal (Serra, 2009).</p>
Determinants	
Disposal	<p>All activities and actions required to manage obsolete equipment from inception to the final transfer of ownership. It encompasses the legal and regulatory framework. The act of getting rid of something, which is not needed (Choi et al., 2017).</p>
Effective Disposal	<p>The management of non-usable assets in the case of this study massive Generation equipment, Turbines, Exploration drill bits, Cranes, High Ups and Cables which have been used and are no longer satisfying the user of the original purpose (Choi, Lee, & Kim, 2017).</p>
E-procurement practices	<p>Forms of technology that are used to store, create, display and exchange information electronically (Salim, 2013).</p>
Energy Sector	<p>The energy sector is the totality of all industries involved in the production and sale of energy (AfDB, 2017). But for this study the inclination will be on state corporations dealing in natural gas extraction, electricity generation, electric power distribution and sales (Choi et al., 2017).</p>

High Value Complex Equipment	Supply items set aside for an intensive control management using the techniques identified under the inventory management and designed to have an optimum level of inventory preferably a level of high investment (Fisher, Lovell & Valero-Silva, 2013).
Inventory management	The receipt, recording and general monitoring of disposable goods or asset in any organization. The process of supervising stock items and non-capitalized items (Fisher et al., 2013).
Pre-disposal transactions	Transactions or actions that may give a company some inclination beforehand and make them susceptible (Abdifatah, 2012).
State Corporation	Legal entity established by the government so as to take part in commercial activities on behalf of the government (Fisher et al., 2013).

ABSTRACT

The purpose of this study was to evaluate the influence of procurement practices on asset disposal in energy sector state corporations in Kenya. The general objective of this study was to evaluate the influence of procurement practices on asset disposal in energy sector state corporations in Kenya. The specific objectives were to investigate the effect of pre-disposal engagement practice on asset disposal in energy sector state corporations in Kenya; to establish the influence of e-procurement practice on asset disposal in energy sector state corporations in Kenya; to assess the effect of procurement skills practice on asset disposal in energy sector state corporations in Kenya; to evaluate the influence of inventory management practice on asset disposal in energy sector state corporations in Kenya and to examine the influence of post evaluation engagement practice on asset disposal in energy sector state corporations in Kenya. The main problem of the study is non adherence to section 74 of the public procurement and disposal act 2015. The theories included: the institutional theory, Agency theory, Gap depreciation theory, Game theory and dynamic supply chain capabilities theory. The target population was 349 employees of the five energy sector state corporations and the sample size was 183 employees. Quantitative research design was adopted for the study. The questionnaire was used as the data collection instrument. Hence the distribution of questionnaires to top managers produced 146 respondents. Data analysis and interpretation was based on descriptive statistics as well as inferential statistics mainly regression analysis, Pearson correlation, factor analysis, and Analysis of Variance. From the study it was established that e-procurement practice influence asset disposal greatly followed by inventory management practice, pre disposal engagement practice, post evaluation engagement practice and lastly procurement skills practice. The study concludes that pre disposal engagement practice, e-procurement practice, procurement skill practice, inventory management practice and post evaluation engagement practice all had a positive correlation with asset disposal in energy sector state corporations in Kenya. This implied that pre disposal engagement practice, e-procurement practice, procurement skills practice, inventory management practice and post evaluation engagement practice all influence positively asset disposal in energy sector state corporations in Kenya. Therefore, from the findings the study concludes that the greater the use of procurement practices, the greater would be their effect on asset disposal. The key recommendations of the study include; in future organizations should consider selecting disposal committee members objectively by doing thorough consultation with the user departments and any department which may be affected indirect in assets disposal process; the study recommends that organizations should put in place good procurement system to assist them in procuring and asset disposal; the study recommends that organizations should conduct needs assessment to establish areas of training; the study also recommends that organizations should conduct benchmarking to other institutions as alternative of training procurement officers; the study recommends that storage of disposable assets should be given a priority in organization and organizations should have designated areas for disposable materials; another though interesting study recommendation is that organizations should lease disposable assets to the public, contract and auction as the fastest way of disposing and finally the study recommends that upon completion of all the procurement or disposal proceedings organizations should prepare contract details and signing of the contract done and organizations should deliver the disposed asset immediately after completion of the contract.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

1.1.1 Global Perspective of Procurement Practices and Asset Disposal

Cases the world over have inevitably pointed at the existence of procurement and disposal in all public entities though in most cases for wrong reasons and interests. Take a case of the sale of Grand Regency and the resultant revelations on how badly disposal was done. Property is no longer seen as a passive, inert bi-product of doing business or delivering services, but is perceived as a measurable component of organizational planning, to be provided efficiently and effectively as all other organizational resources (Harris, 2010). In some countries such assets are managed by acts or manuals. For instance the government of Malaysia focuses on a comprehensive and integrated asset management and has introduced a policy and manual of asset management through the Total Asset Management Manual (TAMM, 2010). Other countries with similar regulatory frameworks are United States of America through the Executive order number 13327, United Kingdom through the Local Government Housing act 1989, Australia and New Zealand among others (Abdi, 2012).

Governments are accountable for providing quality public services to their citizens' at the most favorable terms. They are, among other issues, responsible for managing a diversified public asset portfolio. The lack of reliable information on public assets in place hinders determination of the assets' value, budgeting for asset, management activities and evaluating public asset portfolio performance during disposal. As a result, assets are managed on an ad-hoc, often reactive basis.

1.1.2 Regional Perspective of Procurement Practices and Asset Disposal

Today, in many countries, public procurement has become an issue of public attention and debate, and has been subjected to reforms, restructuring, rules and regulations. According to Roodhooft and Abbeele (2006, cited in Onyinkwa 2013, p.15), public bodies have always been big purchasers, dealing with huge budgets. Badaso (2014) also reiterated that public procurement represents 18.42% of the world GDP. In developing countries, public procurement is increasingly recognized as essential in service delivery (Basheka & Bisangabasaija, 2010), and it accounts for a high proportion of total expenditure. For example, public procurement accounts for 60% in Kenya (Akech, 2005, cited in Badaso, 2014, p 56) ,58% in Angola, 40% in Malawi and 70% of Uganda's public spending (Wittig, 2009; Government of Uganda, 2006, as cited in Basheka & Bisangabasaija, 2010).

Many developing countries like Africa have been embarking on public sector management reforms. The main reasons for commencing public sector reforms were public sector inefficiency and ineffectiveness (ECA, 2003 cited in Grubišić 2009, p 330). Governments have been constantly under pressure to improve public services quality while containing costs and enhancing public accountability at the same time (Roje, Vašiček, & Vašiček, 2014). Several countries, such as Uganda, Rwanda, Tanzania and Kenya undertook significant public sector changes to break from the traditional bureaucratic model of public administration (Hood, 1991 cited in Wamalaw 2014, p.10). Governments have started to constrain public spending, sell off public assets, outsource many services that were previously provided exclusively by the public sector to private companies, develop public asset performance measurement, output and outcome-based budgeting and business-type accounting (Guthrie, 2010).

Overall, those reforms were directed at improving efficiency, effectiveness and accountability in the public sector. Encouraging efficient public sector management has become one of the prevailing issues in international literature and public sector practice (Klausen, 2007 cited in Grubišić 2009; Wise, 2002 cited in Grubišić 2009). Public sector accounting is an umbrella term which, depending on the particular

country context, refers to various accounting systems used by numerous public sector entities in general (central and local) government-as-a-whole, government accounting units (i.e. departments, agencies, ministries, institutes), and government business enterprises (GBEs) that are referred to as state owned enterprises (SOEs) or Corporations or Parastatals in this paper. The need for public sector accounting has been underscored in a bid to reform the disposal of public assets. The reforms in the public procurement led to the formulation of public procurement and assets disposal act to help streamline the procurement sector.

1.1.3 National Perspective of Procurement Practices and Asset disposal

While the Public Contract Law Journal dates back to 1981 and Public Procurement Law Review to 1992, both had anchorage in the legal and regulatory disciplines. It was noted that there was differentiation between public procurement and private sector procurement in the last decade (Edquist & Zabala-Iturriagoitia, 2012). According to Mukasa (2010), public procurement systems are inherently complex and dynamic due to the multiplicity of objectives they have to achieve. For instance, the main motive of public procurement is to serve the public through a political purpose and the general well-being of the society unlike privately funded projects whose *raison d'être* is the profit motive.

Public service agencies aim at making the best use of ‘value for money’ for the members of the public this involves client satisfaction, public interest, fair play, honesty, justice and equity (Ndumbi 2015). Recent studies have also pointed out the significance of moral and ethical behavior in addition to technical and professional competencies (Schlosser, 2014). “Publicly owned properties like in this case state corporation assets are an integral part of the social fabric of many communities and there is an expectation that the GOK, as custodian, will conserve, retain and manage these properties responsibly.

The public procurement system in Kenya has reformed to an orderly and legally regulated system governed by the PPDA, 2015. Before in the Central Government it was governed by Treasury Circulars from 1969, then the Supplies Manual of 1978, prior to the promulgation of the Exchequer and Audit (Public Procurement)

Regulations, 2001, (Juma, 2010). All the reform initiatives were focused on improving the public procurement system by enhancing accountability and transparency. These reforms have ensured fairness and competition among suppliers of goods, works and services, thereby restoring the confidence in the public procurement process while at the same time ensuring that the Government gets the best value for money.

The PPDA, effective from 1st January 2007 and reviewed in 2015, applies to all procurement of goods, works and services, as well as the disposal of assets by public entities. Public entities are those that procure goods, services or works utilizing public funds. As such, public entities include the central and county governments, courts, commissions, state corporations, cooperatives, and educational institutions such as colleges, schools and universities. This Act does not directly seek to regulate the private sector, though it does regulate its interaction with public entities, (GoK, 2011). It ensures the following issues maximize economy and efficiency, promote competition and ensure that competitors are treated fairly, promote the integrity and fairness of procurement procedures, increase transparency and accountability in those procedures, increase public confidence in the procedures, enhance the promotion of local industry and economic development, (Odhiambo, 2016). The act however put more focus on procurement of public property rather than disposal. This creates a gap for loss of public resources through unregulated disposal where malpractices are encountered such as fraudulent practices, corruption, collusion, conflicts of interests and even breach of confidentiality (Odhiambo, 2016).

The PPDA sets-up the Public Procurement Oversight Authority (PPOA), whose primary role is to ensure that procurement procedures established under the Act are adhered to. In doing so, the PPOA has to guide, set-up standards, and train procurement entities and persons, as well as advise government on policy issues. Currently the PPOA role is: Monitoring implementation of procurement policies to ensure that SME are accorded opportunities to participate in public procurement, building capacities of procurement personnel to ensure that procurement is carried out effectively and efficiently, building suppliers capacity to carry out business with the government.

PPOA is also mandated to organize public forums to solicit feedback from stakeholders on the implementation of procurement policies, improving provision of information about procurement opportunities by putting in place communication channels at the PPOA and within the procuring entities, ensuring e-procurement is practiced in collaboration with the e-Government Secretariat in the Office of the President, consulting banks to ease SME access to financial resources, benchmarking policies practiced by other countries to enable SMEs to access procurement opportunities, (Barsemoi,& Mwangagi , 2014). The Public Procurement Oversight Authority (PPOA) is also tasked with Monitoring performance of the system and bringing about modernization of the procurement system including through the introduction of e-procurement. The authority has an advisory board tasked with promoting corporate decision making and greater accountability and transparency on procurement. The law introduces an institutional framework in public entities that should ensure that decisions on procurement are made in a corporate fashion i.e. no one individual will be responsible for all procurement decisions. This should enhance checks and balances and bring greater accountability by public officials. The law also clarifies who is accountable for which decisions and makes mandatory the publication of information on procurement including on contract awards.

Public Procurement Oversight Authority (PPOA) is also tasked to ensure better management of disposal of public assets. This has been one area that has been neglected and has caused the public to lose large sums of money through irregular disposal methods. The new rules on disposal should bring an end to that and ensure that the public gets proper value when public assets are disposed off. The Act establishes clear procedures to be followed when assets are disposed and provides for the proper management of the disposal process (PPDA, 2015).

Sound legal framework in place with the enactment of the PPDA and Regulations. Kenya has in place a sound and comprehensive legal framework for public procurement with a clear hierarchical distinction. The PPDA clearly establishes the procurement and disposal methods to be applied, advertising rules and time limits, the content of tender documents and technical specifications, tender evaluation and award criteria, procedures for submission, receipt and opening of tenders, and the

complaints system structure and sequence. The PPDA and Regulations cover goods, works and services for all procurement using national funds. Both documents are published and widely distributed within government, (GoK, 2011).

The business activities of governments in public procurement have economic and political implications. Recent estimates suggest that between 8 and 25 per cent of the gross domestic product (GDP) of the Organization for Economic Co-operation and Development (OECD) countries and 16 per cent of the European Union (EU) GDP is attributable to government procurement of goods or services (OECD, 2009). The public expenditure incurred by the Kenyan Government can be used to estimate the size of Kenya Government procurement. Public procurement systems in Kenya have undergone significant evolution. From being a system with no regulations in the 1960s, and a system regulated by Treasury Circulars from the 1970s, 1980s and 1990s, to the introduction of the Public Procurement and Disposal Act (PPDA) of 2005 and the Procurement Regulations as amended in 2006 introduced guidelines that led to sanity and standard procedures for public procurement and disposal of goods and unserviceable parts by state corporations and public entities (Mwiriki, 2007).

Mwangi (2007), established that public procurement was not operating efficiently and effectively and the state was losing a lot of money through shoddy deals. The report advocated the need for reforming the public procurement system in the country. In 1997, the Government in collaboration with the World Bank commissioned another study to evaluate the country's procurement procedures. The World Bank supported the study through the Public Procurement and Capacity Reform Project that established the need for a review and execution of a reform process in the procurement systems. The study revealed that the public procurement system in Kenya lacked transparency and fair competition. The study further revealed that procurement staff were not adequately trained and lacked professionalism. The lack of a professional body that would oversee and administer discipline among procurement officers made them vulnerable to corruption.

One of the major recommendations from both studies was that reforms in public procurement systems were paramount if the government was to save resources that were being lost through exorbitant procurement system. The World Bank study argued that improvement in procurement systems had a direct and beneficial effect on the economic situation in the country. The World Bank, the African Development Bank (AfDB) and International Trading Corporation (ITC), in conjunction with the Government of Kenya, initiated the public procurement reform process in the late 90s. That was to enable the system to be, transparent, enhance delegation of authority, incentives in procurement thresholds, planning, and the development of supplies manuals, (World Bank, 2000 as cited in Kagendo, 2012, p.6).

The public procurement reforms also aimed at ensuring that the procurement laws were streamlined to conform to international procurement laws and standards. A task force which comprised mainly staff from the ministry of Finance was established to take a lead in the reform process. The team passed its recommendations over to parliament. However, the draft bill prepared by the task force on behalf of the Ministry of Finance was not approved. In response to the delay in parliamentary approval, the Minister for Finance approved the Exchequer and Audit - Public Procurement Regulations 2001 (GoK, 2011).

It happens so often that in procurement and disposal system there is ministerial interference with the tender process. While the Regulations do not give government ministers, other than the Minister for Finance, any role in the procurement process, they have nevertheless intervened and influenced the award of tenders. Many government ministers simply have no regard for stipulated laws and regulations and often use their residual powers to pursue their own interests. Indeed, where ministers want to manipulate the procurement process, they use their powers to demand for information from the procuring entity, which they then publish and use to cancel tenders, and then turn around to claim that the process has been compromised and needs to be restarted, (Amollo, 2005 cited in Odhiambo, 2016). The term asset has been used in this study to refer to the management of massive Generation equipment, Turbines, Exploration drill bits, Cranes, High Ups and Cables which have been used and are no longer satisfying the user of the original purpose (Dale, 2010).

1.2 Statement of the problem

The Public Procurement and Asset Disposal Act 2005 and reviewed as public procurement and disposal act 2015 aimed at promoting non-discrimination, transparency and fairness in public procurement and disposal of asset. It was aimed at ensuring that public funds are utilized effectively during the procurement and disposal of public assets. However, evidence indicates that the compliance to the ACT is still low at both levels of government (i.e. national and county level).

The inefficiency in the disposal of assets in the public sector is caused by pre-disposal engagement practice, e-procurement practice, procurement skills practice, inventory management practice and post evaluation engagement practice. Despite the fact that numerous studies have been done on procurement, there are limited studies within the context of influence of procurement practices on asset disposal in the energy sector state corporations in Kenya. Susan and Namusonge (2015) in their study concluded that public sector organizations within Yatta sub-county, which is in Kenya, had exhibited low rates of disposal. The study revealed that the rate of disposal in the sub-county was 35.7% which was quite low. These studies didn't explore the influence of procurement practices on asset disposal in the energy sector state corporations in Kenya that include pre- disposal engagement practice, e-procurement practice, procurement skills practice, inventory management practice and post evaluation engagement practice on asset disposal in energy sector state corporations in Kenya.

It is estimated that inefficiencies in the processes of public disposal cost Kenya about 100 Billion annually. This is due to poor disposal planning Wahome (2015). Wachira, Namusonge and Mugambi (2018) in their findings note that Government Owned Entities are holding a lot of assets raising the asset sustainability ratios significantly which has an effect on working capital management and recommend that they should convert to cash and that will enable the organizations manage their working capital prudently. According to the Standard Newspaper (2018) Multimedia University was accused of breaking procurement laws by spending 157 million shillings on consultancy services for a building block. It is in view of this dilemma

that this study assessed the influence of procurement practices on asset disposal in energy sector state corporations in Kenya and addressed the main problem of failure to adhere to section 74 of the public procurement and disposal Act of 2015 that therefore formed the basis of this study.

1.3 Objectives of the study

This study was guided by the following one general objective and five specific objectives.

1.3.1 General Objective

The general objective of this study was to evaluate the influence of procurement practices on asset disposal in energy sector state corporations in Kenya.

1.3.2 Specific Objectives

The specific objectives were:

1. To investigate the influence of pre- disposal engagement practice on asset disposal in energy sector state corporations in Kenya.
2. To establish the influence of e-procurement practice on asset disposal in energy sector state corporations in Kenya
3. To assess the influence of procurement skills practice on asset disposal in energy sector state corporations in Kenya
4. To evaluate the influence of inventory management practice on asset disposal in energy sector state corporations in Kenya
5. To examine the influence of post-evaluation engagement practice on asset disposal in energy sector state corporations in Kenya

1.4 Research questions

1. What is the influence of pre-disposal transaction practice on asset disposal in energy sector state corporations in Kenya?
2. What is the influence of e-procurement practice on asset disposal in energy sector state corporations in Kenya?
3. What is the influence of procurement skills practice on asset disposal in energy sector state corporations in Kenya?
4. What is the influence of inventory management practice on asset disposal in energy sector state corporations in Kenya?
5. What is the influence of post-evaluation engagement practice on asset disposal in energy sector state corporations in Kenya?

1.5 Research Hypotheses

The following five research hypotheses were proposed for this study;

1. **H₀₁**: There is no significant influence of pre-disposal engagement practice on asset disposal in energy sector state corporations in Kenya.
2. **H₀₂**: There is no significant influence of e-procurement practice on asset disposal in energy state corporations in Kenya.
3. **H₀₃**: There is no significant influence of procurement skills practice on asset disposal in energy sector state corporations in Kenya
4. **H₀₄**: There is no significant influence of inventory management practice on asset disposal in energy sector state corporations in Kenya
5. **H₀₅**: There is no significant influence of post evaluation engagement practice on asset disposal in energy sector state corporations in Kenya

1.6 Justification

An overwhelming number of studies had examined the impact of the Public Procurement and Asset Disposal Act of 2005, with others examining factors affecting its implementation; compliance to the Act by the procurement staff; effect of training the staff on compliance; challenges to compliance within the Kenya

context (Onchweri & Muturi, 2015; Maina & Omboto, 2016; Sang & Mugambi, 2014; Ndumbi & Okello, 2015; Wahome, 2015). However, there was scarce literature on the influence of procurement practices on asset disposal within the Kenyan energy sector state corporations. By understanding these practices the following can be achieved:-

1.6.1 Policy Makers

The study findings will help government identify areas where policy changes are needed to ensure the procurement and disposal of assets are improved. The government might also contemplate having centralized disposal agency to get value for the obsolete equipment. The policy makers through the findings of this study and earlier events in disposal might revise the threshold matrix for more approvals on amounts say beyond 100 million.

1.6.2 Energy sector state corporations

The findings of this study will also be applicable and beneficial to majority of energy sector state corporations whose operations deal with High Value Complex Equipment. The energy sector parastatals can use the findings of the study in making decision on whether to procure or lease the High Value Complex Equipment based on other factors like storage on being declared obsolete or the speed with which technology changes with particular equipment.

1.6.3 Research Institutions

The study findings will provide a theoretical and empirical framework for research in influence of procurement practices on asset disposal within the Kenyan energy sector state corporations and will contribute to the body of knowledge since it will be reference material for future researchers and academicians. They will find the study methodology and findings rich enough to guide future research. Further, the study will act as an impetus to reignite interest in this critical area of disposal.

1.7 Scope of the Study

This study investigated the influence of procurement practices on asset disposal in the energy sector state corporations in Kenya whose mandate is generation, transmission, distribution and retailing of electricity. The study specifically investigated the influence of pre-disposal transactions practices, e-procurement practice, procurement skills practice, inventory management practice and post evaluation engagement practice on asset disposal in the energy sector state corporations in Kenya. The energy sector was identified as one of the key pillars in Vision 2030 for it is the bedrock of both industrialization and technological advancement of Kenya. Specifically, the main focus was on Kenya Power and Lighting Company Ltd (KPLC), Kenya Electricity Generating Company Ltd (KenGen), Geothermal Development Company Ltd (GDC), Rural Electrification Authority (REA) and Kenya Electricity Transmission Company Ltd (Ketraco). The study targeted 349 members of staff comprising CEOs, Procurement and Finance Managers of these state corporations in middle and top levels. Data was gathered between March and April 2018.

1.8 Limitations of the Study

Some of those respondents given questionnaires had fears that the information provided could be used against them or bear some adverse effects on the parastatal and therefore they did not wish to participate in the study. This was hot on heels of the Ethics and Anti-Corruption Commission's maximum presence in some of the organizations. Despite this and as a remedy to this fears, the researcher invoked the confidentiality of the information they were to give as cited in the cover letter. The researcher further outlined the procedures that would be used to make ensure the information was kept confidential.

The other notable limitation was the content of the questionnaire perceived to the respondents as long. The respondents felt that the questionnaire was too long and time consuming when filling and hence preferred it to be collapsed into one page only. The researcher overcame this challenge by administering the questionnaires himself and by help of research assistants by going through the questionnaires one on

one with the respondents and ticking the appropriate answers as desired by the respondents and this in turn took a shorter time.

The third limitation was the delayed response to the questionnaires by some managers and even some lost them in the process. To make good this limitation, the researcher frequently provided additional questionnaires. There was also the limitation of the soft copy answering of the questionnaires by the respondents. Some parastatal managers were digitally disadvantaged and had difficulties in answering the questionnaire on soft copy by ticking the appropriate boxes. To overcome this, the researcher advised the respondents to answer the questionnaires not only by ticking but also by either shading or marking by crosses or using any other symbol deemed relevant in the appropriate boxes.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed relevant literature on disposal in Kenya and the world over, with the aim of highlighting the existing research gaps and is organized under the various subtopics: Then the conceptual framework summarized the relationship among key variables and then identified the gaps to be filled by the study.

2.2 Theoretical Framework

This study was anchored on institutional theory which addressed the pre-disposal engagement practice variable, agency theory will cut across the pre-disposal engagement practice and post evaluation practice, gap depreciation theory addressed both procurement skills practice and e-procurement practice, game theory traversed through inventory management practice, procurement skills practice and pre-disposal engagement practice and dynamic capabilities theory addressed purely the variable of procurement skills practice to make them robust and change agents. Fox and Bayat (2014) note that a theoretical framework is the application of a set of concepts drawn from one and the same theory to offer an explanation of an event or shed some light on a particular research problem. These are discussed in the subsection that follows.

2.2.1 The Institutional Theory

Institutional Theory focuses on the resilient and deeper aspects of social structure. It explains the influence of the environment on organizations. It describes processes through which structures and authoritative guidelines, including routines, norms, rules and schemes, are established for purposes of maintaining social behavior (Bright, 2014).

These structures constitute the three pillars of an institutions namely cultural cognitive, normative and regulatory. Social obligation is considered the basis for

compliance in the normative pillar. The normative pillar encompasses values and norms. Shared understanding, common beliefs and symbols are emphasized by the cultural cognitive pillar; whereas the emphasis of the regulatory pillar is on the use of sanctions, rules, and laws to ensure compliance. As such, different aspects of the institutional theory describes how these structures are established, diffused, adapted and adopted over time and space and how they disuse and decline. In view of this theory, legitimacy can be achieved by conforming to key expectations of the stakeholders (Vailatti, Rosa & Vicente, 2017).

It suggests that social values influence structures of an organization and that these social values are often widely accepted but typically taken-for granted. It posits that while seeking to conform to pressures from the external environment and to shared norms, firms often attempt to demonstrate to stakeholder groups that they are legitimate (Ashworth, 2010). According to Ashworth (2010) by conforming to shared norms, organizations enhance their perceived legitimacy, become protected from scrutiny and external pressure and enhance their chances of survival.

Institutional theory is used widely in supply chain management and sustainable procurement studies to examine determinants/elements of public procurement and to describe how organizations have adopted new practices (Lee, 2010; Withey, 2011; McCue & Roman, 2012; Obanda, 2010; Mugambi & Sang, 2014; Muturi & Onchweri, 2015). Mugambi and Sang (2014) used it to explore factors affecting the compliance with the procurement regulations and laws within public institutions. In a more recent research, Muturi & Onchweri (2015) used institutional theory to explore determinants of compliance with procurement regulations within the public sector. Similarly, this theory was used to explore influence of procurement practices on asset disposal within the energy sector state corporations. Within the context of the present study, it was established that coercive governmental pressure contributed by structures and authoritative guidelines and regulations as provided in the PPDA Act of 2007 ensured public organizations comply with the pre-disposal engagement practice, post evaluation engagement practice, inventory management practice, e-procurement practice, and procurement skills practice and this ensures good asset disposal.

2.2.2 Agency Theory

Proponents of Agency Theory posit that agency relationship is created when two parties engage and cooperate in association with one party delegating work or decisions to another party. It conceptualizes agent relationship as a relationship where one party executes decisions or tasks on behalf of another (the principle) (Awino & Marende-Getuno, 2014). The proponents of this theory assume that between agents and principles, there exists a goal conflict with each party in the principle-agent relationship working to achieve self-interest; and that there exists information asymmetry between agents and principles with principals seen as less risk averse than agents (Xingxing & Kaynak, 2012). Langevoort (2002) suggests that the principal-agent relation determines the extent to which procurement stakeholders comply with the procurement regulations and rules as required by the Public Procurement and Asset Disposal Regulation 2006 and Public Procurement & Asset Disposal Act of 2015, (PPDA, 2015).

It is suggested that procurement managers and accounting offices in state corporations take the role of organization stakeholders and government. Within the context of the present study, this is used to explain the relationship between sticking to pre- disposal engagement practices (i.e., avoiding corruption, collusion, and maintaining integrity, honesty, confidentiality) as provided in Public Procurement and Asset Disposal Regulation of 2006, and Public Procurement and Asset Disposal Act of 2015. It is envisaged that the procurement managers would act as agents of government (the principal) to engage in pre- disposal engagement practices while conforming to the procurement regulation. Procurement regulations are prefigured as interventions whose aim is to ensure nonconformist procurement officials begrudgingly obey the regulations. The procurement agents are seen as the key initiator of pre-disposal engagement practices.

2.2.3 Gap Depreciation Theory

Asset depreciation is an accounting method that allows a business to avoid expensing purchases of assets on its income statements. Each year the company determines the financial portion of the asset that has been used and expenses it on its income

statement. While Generally Accepted Accounting Principles (GAAP) offers several methods of depreciation, most companies use just a few selected depreciation methods. The facts are, depreciation is the process of reducing the historical cost of an asset by an annual amount relating to the amount of asset usage. Most assets are recorded at historical costs by accounting departments; based on the type of asset, certain methods must be used to reduce the value of the asset each year. Depreciation affects the company's financial statements, moving the depreciation amount from the asset value on the balance sheet to the depreciation expense on the income statement. The depreciation mechanism put in place will trigger an automatic disposal process upon attaining the zero book value of the asset.

2.2.4 Game theory

The study of how people make decisions is known as game theory. And it is a crucial tool to have in the modern business environment, especially when it comes to the art of negotiation. Deegan, and Unerman, (2011) Game theory is the scientific modelling of interactions between different parties each pursuing their own interests. The parties interact and choose their action in view of what the other parties might think and do. Economists call this game theory and they think about such interaction as a 'ply-by-ply' game, where each player is trying to find an optimum strategy. The application of game theory in business is twofold i.e. winning the game or inventing the game. Game theory is behind the scenes in many familiar situations: for example, a poker game where the next call, raise or draw move is contingent on how the player expects opponents might respond. A buyer can structure an analogous situation by negotiating with two sellers independently. Suppose they have comparable financial strength and similar cost structures for a commoditized product. The lowest price each is willing to quote will be the same, at a minimal profit margin. If the bids are not converging, the buyer's tactic is to continue the negotiation by revising the floor price progressively. If the bids do converge, this is a sign that the prisoner's dilemma has played out. The bid pattern aids the buyer in price discovery even when supply market scenarios and price structures are fluid. Real life is not always as simple as the game implies, of course. Two equal bids might instead be the result of collusion between the sellers. If they are part of a known cartel, game theory won't apply since

it works best in “oligopolistic” situations. One way to spot a possible cartel is to run a reverse auction in multiple rounds.

Singh (2010) More often than not, smart suppliers can see through the pattern of your negotiation; hence, manipulate their pricing structures accordingly. It’s important to change the negotiation script at each stage. Even an efficient sourcing operation can raise its game and achieve rapid payback using game theory. Buyers need to learn how to apply the theory to bidding matrices and spend profile by category. By learning these practices, buyers and sellers will find they can benefit in a wide range of negotiations. The application of game theory dramatically improves the outcome from all decision-making Procurement scenarios including complex, cross-functional sourcing activities, annual price negotiations, make-or-buy decisions, or outsourcing projects (Mulama, 2012). This will mostly be anchored in e disposal and will be used in auctioning, reverse auctioning and in indicating to the disposing entity indications of collusion among bidders. This will enhance online and real time e disposal.

2.2.5 Dynamic Supply Chain Capabilities Theory

In any organizational theory, dynamic capability is the capability of an organization to purposefully adapt an organization's resource base. Dynamic capabilities, emphasizes that the ability to react adequately and timely to external changes requires a combination of multiple capabilities. The main assumption of this framework is that an organization's basic competencies should be used to create short-term competitive positions that can be developed into longer-term competitive advantage. Kianto and Ritala (2010) Dynamic capabilities theory concerns the development of strategies for senior managers of successful companies to adapt to radical discontinuous change, while maintaining minimum capability standards to ensure competitive survival. For example, industries which have traditionally relied on a specific manufacturing process can't always change this process on short notice when a new technology arrives; when this happens, managers need to adapt their own routines to make the most of their existing resources while simultaneously planning for future process changes as the resources depreciate. Three dynamic

capabilities are necessary for an organization to meet new challenges: the ability of employees to learn quickly and to build new strategic assets; the integration of these new strategic assets, including capability, technology and customer feedback, into company processes; and lastly the transformation or reuse of existing assets which have depreciated (Teece, 2012). This will be anchored in procurement skills practice to have a robust training needs assessment vis a vis membership to various procurement and disposal bodies.

2.3 Conceptual Framework

According to Imenda (2014) a conceptual framework is an end result of bringing together a number of related concepts to explain a given event and also give a wider understanding of the research problem. In this study, small individual concepts of pre disposal engagement practice, e-procurement practice, procurement skills practice , inventory management practice and post evaluation engagement practice were joined together to tell a bigger map of their possible significant effect on asset disposal.

Institutional theory underpins the pre-disposal engagement practice variable, agency theory cut across the pre-disposal engagement practice and post evaluation practice, gap depreciation theory addressed e-procurement practice, game theory traversed through inventory management practice, procurement skills practice and pre-disposal engagement practice and dynamic capabilities theory underpinned purely the variable of procurement skills practice to make them robust and change agents.. The aforementioned theories are the basis of the conceptual framework in figure 2.1.

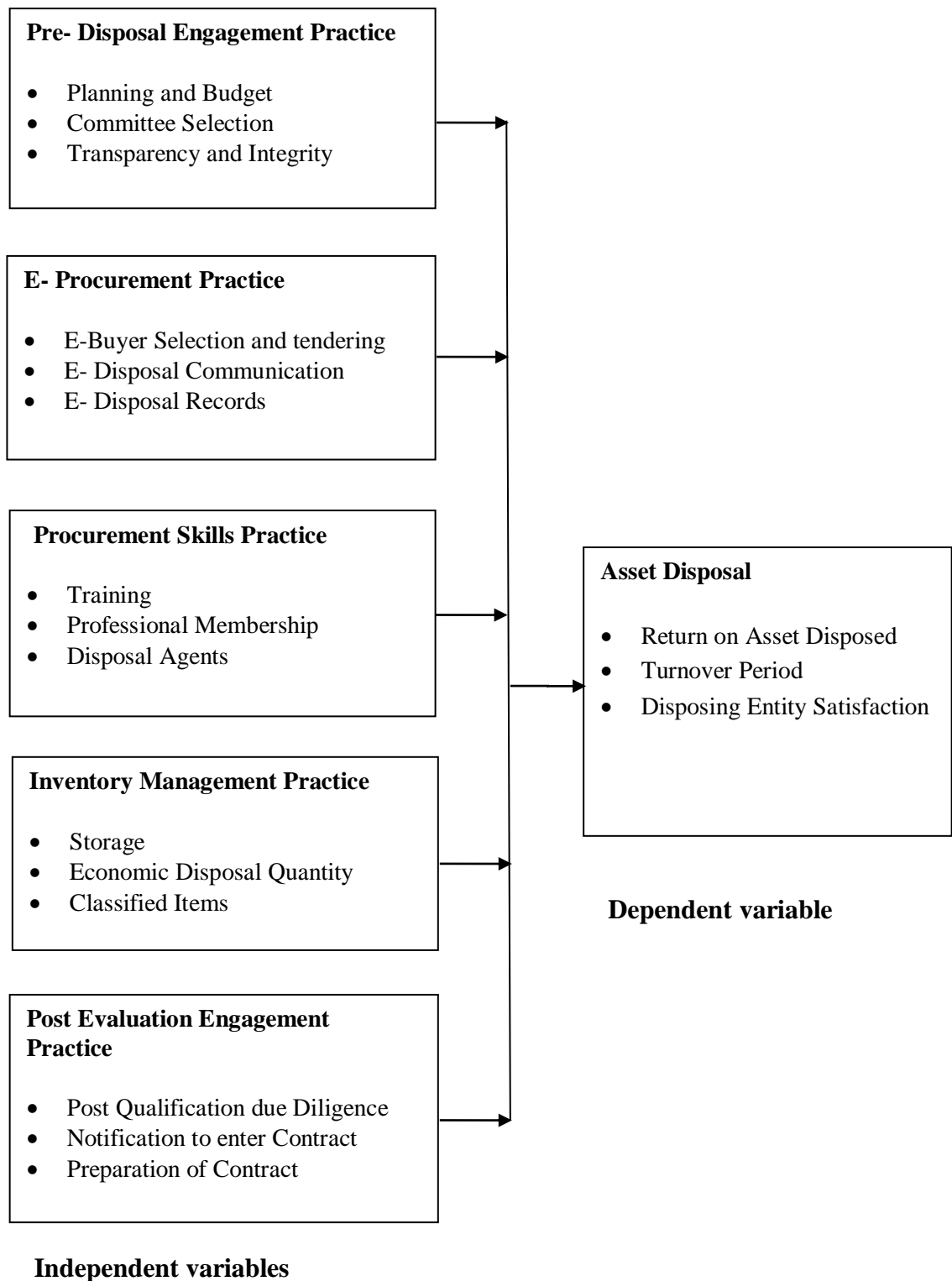


Figure 2.1: Conceptual framework

2.4 Review of Literature on study Variables

This section deals with a review of variables that lead to asset disposal in the energy sector state corporations in Kenya. Specifically, the section reviews pre-disposal engagement practice, e-procurement practice, Procurement skills practice, Inventory management practice and Post evaluation engagement practice.

2.4.1 Pre-disposal Engagement Practice and Asset Disposal

Pre disposal engagement practice entails planning and budgetary allocation, committee selection, and transparency and integrity issues. This are examined here under:-

a. Planning and Budgetary Allocation

Public Procurement Act in section 53 indicates that an accounting officer shall prepare an annual procurement plan which is realistic in a format set out in the regulations within the approved budget prior to commencement of each financial year as part of the annual budget preparation process; all asset disposal shall be planned by the accounting officer concerned through the annual asset disposal plan in a format set out in the regulations; procurement and asset disposal planning shall be based on indicative or approved budget which shall be integrated with applicable budget process; all procurement and asset disposal planning shall reserve a minimum of thirty per cent of the budgetary allocations for enterprises owned by women, youth, persons with disabilities and other disadvantaged groups; an accounting officer shall not commence any procurement proceeding until satisfied that sufficient funds meet the obligations of the resulting contract are reflected in its approved budget estimates; an accounting officer who knowingly commences any procurement process without ascertaining whether the good, work or service is budget for, commits an offence under the Public procurement and Disposal Act; any state or public officer who fails to prepare procurement and disposal plans shall be subject to internal disciplinary action, (PPDA, 2015).

In the performance of the responsibility under section 44 of the public procurement and disposal act an accounting officer shall ensure that procurement and disposal of goods, works and services of a public entity are with approved budget of the entity, (PPDA, 2015). This then means that prior to initiating any procurement or disposal exercises proof of availability of funds to run the whole process is key i.e. budgeting, allocation of budgets and approval. For the purpose of ensuring that the accounting officer's decisions are made in a systematic and structured way, an accounting officer shall establish systems and procedures to facilitate decision making for procurement and disposal. All procurement processes shall be within the approved budget of the procuring entity and shall be planned by the procuring entity concerned through an annual procurement plan; undertaken by a procuring entity as per the threshold matrix prescribed; and undertaken in strict adherence to article 227 of the constitution, (PPDA, 2015). An accounting officer will submit to the authority the part in its procurement plan demonstrating application of preference and reservation schemes in relation to the procurement budget within sixty days after commencement of the financial year.

b. Committee Selection

The accounting officer of a public entity shall be primarily responsible for ensuring that the public entity constitute a committee for all procurement and asset disposal within a procuring entity in accordance with section 44 2b of the act (PPDA, 2015). The act also clearly states that the accounting officer of a public entity shall ensure that the procurement and disposal processes are handled by different professional offices in respect of procurements, initiation, processing and receipt of goods, works and services (PPDA, 2015). Section 45 (1) of the act further states that all asset disposal process shall be handled by different persons in respect of identification, consolidation, preparation of disposal plan, pricing and disposal itself (PPDA, 2015). In the case of county governments the county treasury shall be the organ responsible for the implementation of public procurement and asset disposal according to section 33 of the act. Section 46 of the act states that the accounting officer shall ensure that an ad hoc evaluation committee is established in accordance with the act and regulations from within the members of staff, with relevant expertise. The evaluation

committee will deal with the technical and financial aspects of a procurement as well as the negotiation of the process including evaluation of bids, proposal for prequalification, registration list, expression of interest and any other roles assigned to it; the committee will consist between three and five members appointed on rotational basis comprising heads of user departments or their representatives; have as its secretary the person in charge of the procurement function; complete the procurement process for which it was appointed and no new committee shall be appointed on the same issue unless the one handling the issue is procedurally disbanded, (PPDA, 2015). Section 163 of the act expounds the position on disposal that an accounting officer shall establish a disposal committee as and when prescribed for the purpose of disposal of unserviceable, obsolete, obsolescent, or surplus stores, equipment or asset. The disposal committee shall be responsible for verification and processing of all disposal recommendations in liaison with the head of procurement function as prescribed.

Abdi (2012) found that segregation of duties among employees of procurement department; multi-functional formation of committees, maintaining all documentation relating to the tendering process, maintaining continuous improvement with suppliers are some of the practices that will improve Procurement Legislation and procurement performance. Onyango (2012) found that when organizations institute proper ethical principles, moral standards, training, codes of ethics, culture and employee behavior in their supply chains, then supply chains processes and performance will improve. The culture of committee composition on an ad hoc basis and from many user departments will improve the pre disposal engagement as a practice.

c. Transparency and Integrity

Mugo (2011) notes that low level of compliance with procurement regulations, lack of transparency and accountability of procurement funds lowers the level of effectiveness in procurement practices in public training institutions. Mugo (2011) established that the major factors that determine the extent to which effective procurement practices are employed in tertiary public training institutions in Kenya

include; the level of compliance with procurement regulations, minimization of procurement expenditure, transparency and accountability of procurement funds and quality of procured goods and services. Velnampy (2010) found that low level of compliance with procurement regulations and lack of high degree of transparency and accountability hinder execution of effective procurement practices.

Public procurement and disposal act in section 58 sub section 1 informs of standard procurement and disposal documents and states that, an accounting officer of a procuring entity shall use standard procurement and asset disposal documents issued by the authority in all procurement and asset disposal proceedings; sub section 2 clearly stipulates that the tender documents used by a procuring entity shall contain sufficient information to allow fairness, equitability, transparency, cost effectiveness and completion among those who may wish to submit their applications. Section 60 of the act elaborates on specific requirements, that an accounting officer of a procuring entity shall prepare specific requirements relating to the goods, works or services being procured that are clear, that give correct and complete description of what is to be procured and that allow for fair and open competition among those who may wish to participate in the procurement proceedings.

Sections 70 and 77 on standard tender documents and submission plus receipt of tenders state that the tender documents used by a procuring entity shall contain sufficient information to allow fair competition among those who may wish to submit tenders. An explanation of where and when tenders shall be submitted, the opening time and location have to be made clear in the tender document. The procuring entity shall ensure that the place or site where tenders shall be submitted is open and accessible and shall provide in that place or site, a tender box including an electronic tender box that complies with the prescribed requirements in the regulations (PPDA, 2015).

The public procurement and disposal act on transparency and integrity restricts disposal to employees' etc. Section 166 of the act states that an accounting officer of a public entity shall not dispose-off assets to an employee of the public entity or a member of a board or committee of the public except as expressly allowed under the

act and the regulations. Section 176 sub section e, f of the act states that a person shall not open any sealed tender, including such tenders electronically submitted and any document required to be sealed, or divulge their contents prior to the appointed time for the public opening of the tender or documents, divulge confidential information, (PPDA, 2015).

The performance of public procurement markets has significant implications for the effectiveness of governance in both developed and developing countries. As the statistics below indicate, public procurement accounts for more than 15% of Gross Domestic Product (GDP) in OECD countries. The share of GDP is even higher in non-OECD countries. Moreover, procurement often involves goods and services with substantial economic and social significance, including transportation infrastructures, hospitals and health services, and education supplies. The fundamental purpose of public procurement is achieve the best value for money. Ensuring that public procurement markets function effectively requires policy makers to address two distinct but inter-related challenges: (i) promoting effective competition among suppliers; (ii) ensuring transparency in administrative processes (Mulama, 2012).

Public procurement act sections 65 and 66 state that a person who submitted a tender shall not make any unsolicited communications to the procuring entity or any person involved in the procurement proceedings that might reasonably be construed as an attempt to influence the evaluation and comparison of tenders; and a person who contravenes the provisions commits an offence and shall lead to the tenderer being disqualified and the public officer facing disciplinary action in addition to any other action under the act. An employee or agent of the procuring entity or member of the board or committee of the procuring entity who has conflict of interest with respect to a procurement shall not take part in the procurement proceedings, shall not take part in any decision relating to the procurement or contract even after such a contract has been entered into, shall not be a sub contractor to a bidder to whom the contract has been awarded to, (PPDA, 2015).

Unfortunately, practices such as collusion and corruption in public procurement exists in all countries and in all sectors. Moreover, collusion and corruption are often associated with other crimes, such as money laundering, accounting fraud, tax evasion and extortion and many other practices. Since public tenders generate strong competition, most firms seek to escape competitive pressures through collusion and bribery. This undermines the effectiveness of the tendering system (Mlinga, 2006).

Collusion is a relationship between bidders which restricts competition and harms the public purchaser. Through bid-rigging, the price paid by the public administration for goods or services is artificially raised. These practices have a direct and immediate impact on public expenditures and, therefore, on taxpayers; Collusion involves allocation of contracts to someone based on prior knowledge or communication. The result is that contracts which would have been obtained through the competitive process is allocated in a dubious manner to someone who is already aware of price ranges. As such public contracts are therefore allocated to the firm chosen by the cartel. Such undermine ethical behavior and the ethical use of resources (Mlinga, 2006).

Corruption involves a vertical relationship between one or more bidders and the procurement official. It is first and foremost a principal-agent problem where the agent (the procurement official) enriches himself at the expense of his principal, the government purchaser (or the public more generally). Corruption arises in procurement when the agent of the procurer in charge of the procurement is influenced to design the procurement process or alter the outcome of the process in order to favour a particular firm in exchange for bribes or for other rewards. As public procurement accounts for a large share of national economies, the potential of corruption to damage a national economy is significant. Collusion and corruption affect the efficient allocation of public contracts and therefore undermines the principles of fair play, honesty, justice and equity (Onyinkwa, 2013).

Corruption leads to the allocation of the contract to the firm who has offered the bribe. In this sense, corruption implies a distortion of competition. Thus, while fighting collusion and fighting corruption are separate policy challenges, they are

often highly complementary. Procurement legislation has been brought in to bring sanity in the public procurement in state and public owned procurement entities where the process was riddled with corruption and mega kickbacks and subsequent loss of billions of shillings.

Of all government activities, public procurement is also one of the most vulnerable to fraud and corruption according to (Eigen, 2012). Bribery by international firms in OECD countries is more frequent in public procurement than in utilities, taxation, and judicial system, according to a survey of the World Economic Forum. Bribery in government procurement is estimated to be adding 10-20% to total contract costs. Due to the fact that governments around the world spend about USD 4 trillion each year on the procurement of goods and services, a minimum of USD 400 billion per year is lost due to bribery (Eigen, 2012). Weak governance in public procurement hinders market competition and raises the price paid by the administration for goods and services, directly impacting public expenditures and therefore taxpayers' resources. The financial interests at stake, and the close interaction between the public and private sectors, make public procurement a major risk area.

The procurement systems in the public sector aim to maximize overall value for money for citizens. This requires considerations of issues such as client satisfaction, the public interest, fair play, honesty, justice and equity (Onyinkwa, 2013). According to Mlinga (2006), Value for money is the core principal of underpinning public procurement, incorporating ethical behavior and the ethical use of resources. The application of the highest ethical standards will help ensure the best achievable procurement outcome.

2.4.2 E- procurement practice and Asset Disposal

E procurement practice will discuss in details e buyer selection, tendering, e disposal communication and e disposal records. This are examined here under:-

a. E- Buyer Selection and Tendering

The Public Procurement and Disposal act in section 55 discusses the eligibility to bid and states that a person is eligible to bid for a contract in procurement or an asset being disposed, only if the person satisfies the following criteria:- the person has the legal capacity to enter into a contract for procurement or asset disposal; the person is not insolvent, in receivership, bankrupt or in the process of being wound up; the person, if a member of a regulated profession, has satisfied all the professional requirements; the person and his or her sub-contractor, if any are not debarred from participating in procurement proceedings; the person has fulfilled tax obligations; the person has not been convicted of corrupt or fraudulent practices and is not guilty of any serious violation of fair employment laws and practices.

Section 57 and 71 of the Act elaborates on the registration of suppliers and indicates that the head of procurement function shall maintain and continuously update lists of registered suppliers, contractors and consultants in various specific categories of goods, works or services according to its procurement needs. An application to be included in the list of the procuring entity may be made at any time and at no cost, under sub section 2. The accounting officer shall ensure the preparation of an invitation to tender that sets out the name and address of the procuring entity; the tender number assigned by the procuring entity; a brief description of the goods, works or service being procured including the time limit for delivery or completion; explanation on how to obtain the tender documents, including the amount of any fee, if any; where and when tenders shall be submitted and when and where the tenders shall be opened; applicable reservations and preferences; requirement of serialization of pages by the bidder for each bid submitted under section 74 of the Act. On the submission and receipt of tenders section 77 of the act stipulates that submission of tender documents whether in electronic or manual form, shall be in writing, signed and in the case of manual submission, they shall be in a sealed envelope, (PPDA, 2015).

The opening of tenders, evaluation of tenders, post qualification, recommendation for contract award, successful tender, notification of intention to enter into a contract are stipulated in sections 78,80,83,85,86 and 87 that: - the accounting officer of a procuring entity shall appoint a tender opening committee specifically for the procurement in accordance with the act i.e. at least three members and at least one of the members shall not be directly involved in the processing or evaluation of the tenders; the evaluation committee appointed by the accounting officer shall evaluate and compare the responsive tenders other than tenders rejected; an evaluation committee may, after tender evaluation, but prior to the tender award, conduct due diligence and present the report in writing to confirm and verify the qualifications of the tenderer who submitted the lowest evaluated responsive tender to be awarded the contract in accordance with the Act and this might entail getting confidential information from persons with whom the tenderer has had prior engagement; subject to prescribed thresholds all tenders shall be evaluated by the evaluation committee of the procuring entity for the purpose of making recommendations to the accounting officer through the head of procurement to inform the decision of the award of contract to the successful tenderers; before the expiry of the period during which tenders must remain valid, the accounting officer of the procuring entity shall notify in writing the person submitting the successful tender that his tender has been accepted, (PPDA, 2015).

In the case of complex and specialized good, works and services an accounting officer of a procuring entity where applicable may conduct a pre-qualification procedure as a basic procedure prior to adopting an alternative procurement method other than open tender for the purpose of identifying the best few qualified firms for the subject procurement under section 93 of the Public Procurement and disposal Act. In conducting a pre-qualification procedure an accounting officer of a procuring entity shall publish an invitation notice to candidates to submit applications to be pre-qualified. In section 94 of the act the accounting officer of a procuring entity is called upon to promptly issue pre-qualification documents to all candidates who request them and shall maintain a record of all candidates to whom documents are issued, (PPDA, 2015).

b. E- Disposal Communication

Relevant and clear communication is paramount in any procurement and disposal process. The Public Procurement and Disposal Act in Section 60 states that an accounting officer of a procuring entity shall prepare specific requirements relating to the goods, works or services being procured that are clear, that give a correct and complete description of what is to be procured and that allow for fair and open competition among those who may wish to participate in the procurement proceedings. All communications and enquiries between parties on procurement and asset disposal proceedings shall be in writing. Information and communication technologies may be used in procurement and asset disposal proceedings as prescribed with respect to public notifications; submission and opening of tenders; tender evaluation; requesting for information on the tender or disposal process; dissemination of laws, regulations and directives; digital signatures or as may be prescribed by regulations under Section 64 of the Act. Section 65 of the act deters any unsolicited communication to the procuring entity or any person involved in the procurement proceedings that might reasonably be construed as an attempt to influence evaluation and comparison of tenders. Upon completion of the evaluation process, a tenderer may communicate with the procuring entity on the procurement proceedings. Section 70 prescribes that the authority shall issue standard procurement and asset disposal documents and formats as prescribed for use by procuring entities; an explanation of where and when tenders shall be submitted , a statement that the tenders will be opened immediately after the deadline for submitting them and an explanation of where the tenders will be opened and section 96 informs that the accounting officer of a procuring entity shall take such steps as are reasonable to bring the invitation to tender to the attention of those who may wish to submit tenders through newspapers, websites and government portals (PPDA, 2015).

Golder (2007) asserts that organizations that fail to integrate procurement functions with information communication technology systems like electronic data interchange employs manual procurement procedures that are inefficient and ineffective and leads this to wastage of procurement funds since the procurement processes are

characterized by a low degree of transparency. According to Kiromo (2015), IT has reached almost every aspect of procurement and may enhance and deepen the effort of procurement reform.

Specifically, information technology (IT) promotes economy and efficiency significant savings of public funds by increasing competition, transparency by making procurement information of all sorts such as bidding opportunities, bidding documents, notices, texts of applicable rules readily available and in diminishing the opportunities for discretion (and hence corruption), and public confidence in the integrity of government Matata and Namusonge (2015). Chang (2010) affirms that IT plays a great role towards supporting adoption of centralized procurement systems in public sector organizations. Centralized procurement system leads to a central procurement data base that creates a favorable environment for effective automation of procurement processes, Matata and Namusonge (2015). Chopra (2009) affirms that there are two primary types of procurement systems: electronic procurement and standard procurement. Both types of systems are widely available and are often included in an enterprise resource planning (ERP) or accounting software product. Charles (2008) concurs that, as purchasing departments have become larger and more complex, most organizations have adopted IT based systems that have created a platform for installation of automated procurement systems.

These procurement systems provide efficient and extensive cost savings and other business benefits by automating many of the purchasing processes. According to Baily (2009), organization with effective IT infrastructure can easily automate its procurement functions by implementing an Enterprise Resource Planning (ERP) system. ERP is a system that integrates all organizational functions into a single system in order to serve the needs of each different department within the enterprise. ERP is more of a methodology than a piece of software, although it does incorporate several software applications, brought together under a single, integrated interface. According to Lambert (2008), Electronic Data Interchange (EDI) is a communication technology used to facilitate effective execution of procurement functions by most organizations. Michael (2010), explains that Electronic Data Interchange refers to computer-to-computer exchange of business documents in a standard format. Chopra

(2009) affirms that EDI describes both the capability and practice of communicating information between two organizations electronically instead of traditional form of mail, courier, and fax.

The benefits of EDI are; quick access to information, better customer service, reduced paperwork, increased productivity, improved tracing and expediting, cost efficiency, competitive advantage and improved billing. Through the use of EDI, supply chain partners can overcome the distortions and exaggeration in supply and demand information by improving technologies to facilitate real time sharing of actual demand and supply information (Linda, 2008). Handfield (2010) study found out that integration of procurement functions with ICT has enabled many public training institutions to improve the level of effectiveness in the execution of procurement practices. A study by Sanjeeve (2014) found that implementation of ICT based procurement methods in many public institutions in Africa is hindered by lack of e-procurement methods, lack of automated procurement systems, lack of supportive ICT infrastructure and absence of ICT skills amongst procurement staff.

c. E- Disposal Records

Wanjiru (2014) on the effects of records management on the efficiency of procurement function in an organization revealed that poor record management practices affect procurement efficiency in organizations to a great extent. The study recommends that the firms adequate controls should be put in place by introduction of electronic data management software for managing records in liaison with these both internal and external stakeholders should be connected to the electronic data software for transparency and efficiency.

Procurement records are dealt with under section 68 and 69 of the public procurement and disposal act; an accounting officer of a procuring entity shall keep records for each procurement for at least six years after the resulting contract has been completed or, if no contracted resulted after the procurement proceedings were terminated; after the contract has been awarded to the person or the procurement proceedings have been terminated , the procuring entity shall, on request, make records for the procurement available to a person who submitted a tender, proposal

or quotation, or any interested member of the public where such information held is aligned to the principle of public interest or, if direct procurement was used, a person with whom the procuring entity was negotiating; all approvals relating to any procedures in procurement shall be in writing and properly dated, documented and filed, (PPDA, 2015).

Golder (2007) asserts that organizations that fail to integrate procurement functions with information communication technology systems like electronic data interchange employs manual procurement procedures that are inefficient and ineffective and leads this to wastage of procurement funds since the procurement processes are characterized by a low degree of transparency. According to Kiromo (2015), IT has reached almost every aspect of procurement and may enhance and deepen the effort of procurement reform.

Specifically, information technology (IT) promotes economy and efficiency significant savings of public funds by increasing competition, transparency by making procurement information of all sorts such as bidding opportunities, bidding documents, notices, texts of applicable rules readily available and in diminishing the opportunities for discretion (and hence corruption), and public confidence in the integrity of government Matata and Namusonge (2015). Chang (2010) affirms that IT plays a great role towards supporting adoption of centralized procurement systems in public sector organizations. Centralized procurement system leads to a central procurement data base that creates a favorable environment for effective automation of procurement processes, Matata and Namusonge (2015). Chopra (2009) affirms that there are two primary types of procurement systems: electronic procurement and standard procurement. Both types of systems are widely available and are often included in an enterprise resource planning (ERP) or accounting software product. Charles (2008) concurs that, as purchasing departments have become larger and more complex, most organizations have adopted IT based systems that have created a platform for installation of automated procurement systems.

These procurement systems provide efficient and extensive cost savings and other business benefits by automating many of the purchasing processes. According to Baily (2009), organization with effective IT infrastructure can easily automate its procurement functions by implementing an Enterprise Resource Planning (ERP) system. ERP is a system that integrates all organizational functions into a single system in order to serve the needs of each different department within the enterprise. ERP is more of a methodology than a piece of software, although it does incorporate several software applications, brought together under a single, integrated interface. According to Lambert (2008), Electronic Data Interchange (EDI) is a communication technology used to facilitate effective execution of procurement functions by most organizations. Michael (2010), explains that Electronic Data Interchange refers to computer-to-computer exchange of business documents in a standard format. Chopra (2009) affirms that EDI describes both the capability and practice of communicating information between two organizations electronically instead of traditional form of mail, courier, and fax.

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Managing the records of right procurement function within the organization showed that poor process of keeping records influence the efficiency and effect of procurement practices within an organization (Wanjiru, 2014). The study argued that in all companies, there is need for a company to put right practice in place.

2.4.3 Procurement Skills Practice and Asset Disposal

Procurement skills practice will traverse through training, professional membership and disposal agents in details. This are examined here under:-

a. Training

Smith (2009) contends that lack of professional training on procurement functions and lack of continuous training on implementation of best procurement practices hinders the procurement staff in public sector organizations to effectively execute procurement procedures. Compton (2007) suggests that effective execution of organization procurement procedures greatly depends on the level of employees' training since lack of professional trained staff on procurement functions limits the ability of the organizations to embrace procurement best practices through benchmarking. Charles (2007) contends that lack of professional training is a key impediment to maintenance of high level of professionalism in the execution of procurement procedures in many public sector organizations. According to Andrew (2008), new training ideas are developed because trends are towards making training more practical, realistic and pertaining to employees' jobs.

Training must give employees broader knowledge to enable them to effectively use new technology and integrate it into the workplace. Lower costs, better quality, faster return on investment, increased productivity and long-term growth are all achieved once employees adapt to changes and are trained accordingly. In the past, training was very classroom/instructor-oriented; this has recently proved ineffective compared to modern developments. More recent trends show training going beyond job specific to continuous learning, in which the focus is on other areas of expertise within the company. In continuous learning, employees are encouraged to learn and understand the jobs and skills needed of those around them and more often perform them on a regular basis. Semi-autonomous work teams are most conducive in the continuous learning environment because each employee trains others in their group. This way, employees know one another's jobs and can perform them in case of an employee absence.

Employees begin to realize that learning and continuous training is as big as job itself (Christianne, 2008). Training one another, or "train the trainer", is another important aspect of continuous learning. It allows employees to develop new applications and techniques and share them with their peers or supervisors (Christianne, 2008).

Hall (2009) argues that the efficiency and the effectiveness of procurement procedures are hindered by absence of effective continuous employees training programmes that help in equipping the employees with competitive procurement management skills. Armstrong (2008) affirms that continuous employees training contribute towards improvement of the level of their competency in the execution of respective job task functions. David (2007) argues that competency is a standardized requirement for an individual to properly perform a specific job. It encompasses a combination of knowledge, skills and behavior used to improve performance.

More generally, competency is the state or quality of being adequately or well qualified, having the ability to perform a specific role. Ebrahim (2010) contends that from management viewpoint, training is associated with higher organizational productivity, it can improve the adaptability and flexibility of their employees and their responsiveness to innovation, it can be regarded as a means of engaging the commitment of employees to the organization and training programs specific to the organization are of paramount importance not least because they bind the employee and cannot be used by rival organizations. Farah and Moronge (2018) showed that in Africa, training of procurement personnel could greatly support effective implementation of procurement practices in many public training institutions. Simpson and Power (2007) found that in many African government institutions, many procurement managers are not trained on implementation of effective procurement practices and this contributes to wastage of procurement funds. Andrew (2009) notes that many procurement managers in tertiary training institutions in Kenya lack competitive knowledge and skills on how to effectively embrace effective procurement practices and this hampers minimization of procurement expenditure.

Handfield (2010) notes that in UK, many public training institutions have succeeded in embracing effective procurement practices as a result of continuous training of procurement staff and employment of professionally trained procurement staff. Findlay (2009) notes that in South Africa, many public training institutions have not managed to embrace effective procurement practices as a result of low level of staff competency, use of poor training methods, lack of qualified procurement staff with

technical knowledge and skills on the requirements of effective procurement practices. Christiane (2008) reveals that lack of professionally trained procurement staff and employment of unqualified and incompetent staff discourages implementation of effective procurement practices in many public institutions in developing nations.

b. Professional Membership

The public procurement and disposal act is very clear on the procurement function and those in it when it pertains to professional association. Section 47 of the act states that a procurement function shall be handled by procurement professionals whose qualifications are recognized in Kenya; the head of procurement function shall among other functions under the act and as a registered professional with various professional bodies, be responsible for rendering professional advice to the accounting officer, (PPDA, 2015)

c. Disposal Agents

Occasionally a procuring entity will purchase or dispose a specialized equipment on a one off basis therefore not necessitating permanent specialists. In this case under section 51 of the public procurement and disposal act, direction is given as; a procuring entity may procure and appoint a procuring or asset disposal agent, including on a competitive basis to carry out such procurement or asset disposal on its behalf as per the terms of contract; the procuring entity has to demonstrate lack of internal capacity, provides evidence of inability to establish a procurement and disposal unit, demonstrates the inability to use the services of other state organs or public entities, (PPDA, 2015).

The appointment of a procuring or asset disposal agent shall be done only from amongst a list of agents registered and licensed by the authority; a procuring entity shall within fourteen days after the appointment of the agent, publicize the following details on its website:- name and address of the agent, value of the contract, items and value of items to be procured or disposed by the agent, duration of the contract and method of procuring the agent, (PPDA, 2015).

2.4.4 Inventory Management practice and Asset Disposal

Practices like storage economic disposal quantity and classification of items take prominence under inventory management practice. This are examined here under:-

a. Storage

The receipt and recording of disposable goods is amply anchored in section 159 of public procurement and disposal act; an accounting officer of a procuring entity shall only receipt goods, works and services which have been certified. Section 160 emphasizes the objectives of inventory control, asset and stores management and control; an accounting officer of a procuring entity shall manage its inventory, assets and stores for the purpose of preventing wastage and loss, and continuing utilization of the supplies. Section 161 on inventory, stores and asset management system states that an accounting officer of a procuring entity shall set up an inventory management system which shall be managed by the head of procurement function for the purpose of control and managing its inventory, stores and assets. Section 162 sub section 5 states that an accounting officer of a procuring entity shall follow policy set out by the Cabinet Secretary specifying the life span of each category of items before boarding for disposal, (PPDA, 2015). Sanjeeve (2014) revealed that over 50% of American companies that have not effectively embraced effective procurement practices employ poor inventory management practices. Sobczak (2008) notes that many Japanese firms that employ just in time inventory management technique have succeeded in embracing effective procurement practices.

Chang (2010) noted that many organizations in Africa lack effective inventory management practices and this greatly influences application of effective procurement practices. Hunja (2010) notes that inventory management problems that affect implementation of effective procurement practices in many public institutions in Canada include; lack of application of economic order quantity principle, application of poor stores management practices, long lead time and higher inventory costs. Elliot (2007) found that many government training institutions in India employed ineffective inventory management practices as a result of lack of application of economic order quantity principle, application of poor stores

management practices, long lead time and higher inventory costs. Shalle, Guyo, and Amuhaya (2014) emphasize that continuous inventory replenishment policy takes a regular order. The time of a replenishment decision is called an order point and the arrival of an order is regeneration point.

b. Economic Disposal Quantity

When any equipment is unserviceable, its keeping through maintenance costs, storage, parking insurance, among others, may well exceed the returns that can be derived from that piece of equipment and the investment of additional monies (Susan & Namusonge, 2014). Section 160, 161 and 164 of the act clearly allows a procuring entity to manage a system that allows it to determine levels and also give procedures prior to disposal or the identified obsolete equipment; an accounting officer of a procuring entity shall manage its inventory, assets and stores for the purpose of preventing wastage and loss, and continuing utilization of the supplies; an accounting officer of a procuring entity shall set up an inventory management system which shall be managed by the head of procurement function for the purpose of control and managing its inventory, stores and assets; the employee in charge of unserviceable, obsolescent, obsolete or surplus assets shall bring the matter to the attention of the disposal committee through the head of procurement function. This will be done within a reasonable time after the asset become unserviceable, obsolete or surplus, (PPDA, 2015).

Inventory management then makes the process of efficiently overseeing the constant flow of units into and out of an existing inventory viable (Elliot, 2009). This process usually involves controlling the transfer of units in order to prevent the inventory from becoming too high, or dwindling to levels that could put the operation of the company into jeopardy. Competent inventory management also seeks to control the costs associated with the inventory, both from the perspective of the total value of the goods included and the tax burden generated by the cumulative value of the inventory Moruena (2010). Balancing the various tasks of inventory management means paying attention to three key aspects of any inventory (Benton, 2007). The first aspect has to do with time. In terms of materials acquired for inclusion in the

total inventory, this means understanding how long it takes for a supplier to process an order and execute a delivery.

Inventory management also demands that a solid understanding of how long it will take for those materials to transfer out of the inventory be established. Knowing these two important lead times makes it possible to understand when to place an order or dispose and how many units must be ordered or disposed to keep production running smoothly (Moruena, 2010). Calculating what is known as buffer stock is also key to effective inventory management. Essentially, buffer stock is additional units above and beyond the minimum number required to maintain production levels. Finally, inventory management has to do with keeping accurate records of finished goods that are ready for shipment or obsolete equipment that is due for disposal. This means posting the production of newly completed goods to the inventory totals as well as subtracting the most recent shipments of finished goods to buyers (Cooper, 2008). Sanjeeve (2014) revealed that over 50% of American companies that have not effectively embraced effective procurement practices employ poor inventory management practices. Sobczak (2008) notes that many Japanese firms that employ just in time inventory management technique have succeeded in embracing effective procurement practices.

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c. Classified Items

Public procurement and disposal act gives cognizance to classified items in matters toxic, security etc. Section 90 of the act states that, national security organs and other procuring entities that deal with procurements of classified nature shall manage their procurements and disposal on the basis of a dual list maintained by the respective procuring entity as prescribed; procuring entities other than national security organs, that procure classified items shall request the cabinet secretary for approval of the classified list of items annually; the dual list shall distinguish items subject to open and classified procurement and disposal proceedings respectively; procuring entities that deal with classified items shall agree annually with the cabinet secretary on the category of classified items to be included in the classified list of procurements or disposal to be applied; the cabinet secretary shall submit the list of classified items to the cabinet for approval, (PPDA, 2015).

Subsection 7 and 8 of the aforementioned act states that; any person carrying his or her duties or responsibilities shall maintain confidentiality and shall not disclose any information that may otherwise compromise national security; a person who in order to avoid open tendering, procures items that ought to be subject to open tendering as though they were included in the list of classified items commits an offence, (PPDA, 2015)

2.4.5 Post Evaluation Engagement Practice and Asset Disposal

What transpires upon successful evaluation of bids like post qualification due diligence, notification to enter contract and preparation of contract are highlighted. This are examined here under:-

a. Post qualification due diligence

An evaluation committee after tender evaluation, but prior to the award of the tender, conduct due diligence and present the report in writing to confirm and verify the qualification of the tenderer who submitted the lowest evaluated responsive tender to be awarded the contract in accordance with the act under section 83; the conduct of

due diligence may include obtaining confidential references from persons with whom the tenderer has had prior engagement, (PPDA, 2015).

To acknowledge that the report is a true reflection of the proceedings held, each member who was part of the due diligence by the evaluation committee shall (i) initial each page of the report and (ii) append his or her signature as well as their full name and designation under subsection 3 of the aforementioned section in the act. Section 84 of the act; the head of procurement function of a procuring entity shall, alongside the report to the evaluation committee as secretariat comments, review the tender evaluation report and provided a signed professional opinion to the accounting officer on the procurement or asset disposal proceedings. The professional opinion provide guidance on the procurement proceeding in the event of dissenting opinions between tender evaluation and award recommendations, (PPDA, 2015).

b. Notification to enter contract

Notification of intention to enter into a contract is a key contributor to successful procurement or disposal process. Section 87 of the act states thus; before the expiry of the period during which tender must remain valid, the accounting officer of a procuring entity shall notify in writing the person submitting the successful tender that his or her tender has been accepted; the successful bidder shall signify in writing the acceptance of the award within the time frame specified in the notification award, (PPDA, 2015).

When a person submitting the successful tender is notified, the accounting officer of the procuring entity shall also notify in writing all other persons submitting their tender that their tenders were not successful, disclosing the successful tenderer as appropriate and reasons thereof; for greater certainty, a notification does not form a contract nor reduce the validity for a tender of tender security as detailed in subsection 4 of the act, (PPDA, 2015).

c. Preparation of contract

Upon completion of all the procurement or disposal proceedings the final stage is contract signing which is covered by sections 134 and 135 of the public procurement and disposal act; the accounting officer shall be responsible for preparation of contracts in line with award decisions; the existence of a contract shall be confirmed through the signature of a contract document incorporating all agreements between the parties and such contract shall be signed by the accounting officer or an officer authorized in writing by the accounting officer of the procuring entity and the successful tenderer, (PPDA, 2015).

Subsection 2, 3, 4 and 5 of section 135 state that; an accounting officer of a procuring entity shall enter into a written contract with the person submitting the successful tender based on the tender documents and any clarifications that emanate from the procurement proceedings; the written contract shall be entered into within the period specified in the notification but not before fourteen days have elapsed following the giving of that notification provided that a contract shall be signed within the tender validity period; no contract is formed between the person submitting the successful tender and the accounting officer of a procuring entity until the written contract is signed by the parties; an accounting officer of a procuring entity shall not enter into a contract with any person or firm unless an award has been made and where a contract has been signed without the authority of the accounting officer, such contract shall be invalid, (PPDA, 2015).

The tender documents shall be the basis of all procurement and disposal contracts and shall, constitute at a minimum: - contract agreement form; tender form; price schedule or bills of quantities submitted by the tenderer; schedule of requirements; technical specifications; general conditions of the contract; special conditions of the contract and notification of award.

2.4.6 Measurement of Asset Disposal

Each year a considerable portion of the government's budget is allocated towards equipment, inventory, and plant procurement. Most of these equipment, plant and

inventories are disposed off upon reaching the end of their economic life or usefulness or else they become surplus to requirements. The Public Procurement and Disposal Act of 2005 and reviewed in 2015 emphasizes that the disposal of government assets should be conducted with the outcome of appropriately handling items that require special attention/consideration during disposal, realizing the best net return during the disposal/selling the item, ensuring that all disposal activities are undertaken in an accountable, transparent, fair and efficient manner, (PPDA, 2015).

During the disposal of the Government assets, the accounting procedures must be performed based on the Finance Instructions. It is recommended that the disposal of the government assets must be done with reasons and be documented as this help in auditing and in highlighting issues and successes for purposes of future reference. The Act suggests that the government asset that is disposed through selling should be based on its reserve value, which should reflect its fair market value. The sale price of the item should be based on the current market value of the good as well as its condition.

As such, asset disposal will be determined based on the level to which procurement expenditure is minimized, the level of accountability and transparency during the expenditure of procurement funds, and the level of compliance with procurement regulations during the disposal (Ndumbi, 2015). As stated in the act, the procurement and disposal of an asset must be fair, competitive, honest, cost-effective and transparent. The disposal and procurement of an equipment, inventories and plant by government agencies are required to comply with the act (PPDA, 2015).

The Act requires the disposal of the assets to be managed by the Contracting Authority's Procurement Department and to strictly adhere to procedures foreseen under the regulations and rules established. The asset disposal must only be undertaken by a person with adequate professional or technical qualifications. The Contracting authority is required to accept an offer only if it is from a person possessing certain minimum qualifications. The contracting authority is also required to establish qualifications requirements in an objective, non-discriminatory and clear manner, and go ahead and publish the requirements via an asset disposal notice.

Officers involved in the Disposal of the Asset must do so with probity (i.e., honestly, ethically, efficiently, accountably) while ensuring fairness to all parties and ensuring no conflict of interest exist. Due consideration should be given to non-friendly or dangerous environmentally goods, (PPDA, 2015).

2.5 Empirical Review

In their studies on disposal of public assets in Croatia, Grubišić (2008) said that Governments are accountable for providing quality public services to their citizens' at the most favorable terms. They are, among other issues, responsible for managing a diversified public asset portfolio. The lack of reliable information on public assets in place hinders determination of the assets' value, budgeting for asset management activities and evaluating public asset portfolio performance. As a result, assets are managed on an ad-hoc, often reactive basis. The first precondition for employing public assets for generating public revenues is to determine clearly what types of assets constitute the public asset portfolio and to determine the components of property rights that can be enforced on public assets. It also means that ultimate ownership rights need to be separated from control rights (Grubišić, 2008)

In Croatia certain public assets were not properly classified, recorded nor valued. The considerable disorder in property rights enforcement combined with the unawareness of the public authorities that public assets belong to the public, has resulted in unfulfilled public expectations regarding better use of public assets. Some public assets have not been used at all, while some assets have often been claimed as being unproductive without questioning the adequacy and real cost benefit ratio of their usage. Some public assets were sold to cover budgetary gaps, or to gain the sympathies of the electorate for implementation of certain projects. Overall, efficient public asset management has not been the matter of concern for the public authorities (Grubišić, Roje & Nušinović, 2009).

In their findings on the Croatian study suggested among others that the Public asset classification and the creation of a public asset registry would enhance recognition and valuation of public assets and encourage professional public asset management development. Making decisions regarding public asset use implies gathering data on

all assets, liabilities, revenues and expenses of a governmental unit and of the general government as a whole. Since information is the most important resource in the management process, a comprehensive accounting information system is crucial for public revenue and expenditure planning, performance measurement and asset management control. It assures that there are general ledger records and financial statements on a daily basis. The role of accounting and financial reporting in conducting public sector asset management reform, as part of a wider set of public sector financial management reforms, is therefore inevitable (Grubišić, Roje & Nušinović, 2009).

Gilbert (2008) indicated that State and Commonwealth government agencies are increasingly forced to treat parcels of public land as financial assets to be realized, our urban landscapes are losing significant public sites and infrastructure. Many sites are lost from public ownership without assessment of the significant nonfinancial values they may contain, such as their ecological, cultural, social, economic or potential value to the public. Disposal currently occurs in various ways – sometimes on the open market, but often through private negotiations prior to announcements of redundancy, sale and redevelopment. In many cases the public remains uninformed and uninvolved in both the disposal process and in the development of future options for the site. As a result the significant public values of such sites either remain unknown or are lost regardless as agencies rush to secure the deal. Indeed, as custodian of both the planning system and our built heritage, governments are arguably obliged to examine longer-term considerations in their decision making with respect to public property.

Gilbert (2008) observes that governments typically act as proponent, consultant and approval authority (especially where there is community opposition), and the public participation usually afforded by the planning process is reduced or bypassed. Such intervention is in stark contrast to the general retreat of government from service provision that accompanies neoliberalism, and which lies at the core of the issue of public asset sales.

Bates (2001) indicates that almost 40% of land in Australia is controlled by the public sector under freehold title or as Crown land reserved for a particular public purpose. In recent decades, State and Commonwealth government agencies have been increasingly involved in disposal of land and property under their control, as neo-liberalist (often referred to in Australia as economic rationalist) ideologies have taken hold in government. Central governments and treasuries now require agencies to demonstrate efficient asset management by sourcing funds from 'none performing' assets.

Consequently public sites are treated as assets that can be sold for their real estate value despite any cultural heritage, ecological, wider economic, social or other potential public value of the land due to the legacy of its past use. Such disposal programs reflect an assumption that government property is the exclusive possession of individual agencies or departments however the public perceive public land to be owned by the people, and expect governments to exercise stewardship of the land on their behalf Adam (2001). Warnings about the impacts of public sector asset disposal on Australia's cultural and natural heritage have been raised continuously by organizations such as the National Trust, (Moloney, 1989, cited in Wild, 2013, p.7), the Nature Conservation Council, (Wild, 2013), the NSW Audit Office and various others, (Low, 2009). When viewed purely in economic terms, the evidence indicates that often the private rather than the public sector benefits most from sales of public assets. Examples include one sale of barracks in Tasmania for around 5% of an earlier valuation (Andrew, 2009).

Chang (2010) noted that many organizations in Africa lack effective inventory management practices and this greatly influences application of effective procurement practices. Hunja (2010) notes that inventory management problems that affect implementation of effective procurement practices in many public institutions in Canada include; lack of application of economic order quantity principle, application of poor stores management practices, long lead time and higher inventory costs. Elliot (2007) found that many government training institutions in India employed ineffective inventory management practices as a result of lack of application of economic order quantity principle, application of poor stores

management practices, long lead time and higher inventory costs. Shalle, Guyo, and Amuhaya (2014) conducted a study on role of inventory optimization on e-procurement performance in State corporations in Kenya. The findings of the study emphasize that continuous inventory replenishment policy takes a regular order. The time of a replenishment decision is called an order point and the arrival of an order is regeneration point.

Wanyama (2010) revealed that many public training institutions lose huge amounts of funds annually as result of implementation of ineffective procurement practices which are not in tandem with the public procurement and disposal regulations. Mugo (2011) notes that low level of compliance with procurement regulations, lack of transparency and accountability of procurement funds lowers the level of effectiveness in procurement practices in public training institutions. Mugo (2011) established that the major factors that determine the extent to which effective procurement practices are employed in tertiary public training institutions in Kenya include; the level of compliance with procurement regulations, minimization of procurement expenditure, transparency and accountability of procurement funds and quality of procured goods and services.

Velnampy (2010) conducted a study on evaluation of factors influencing effective procurement management system of public sector organizations. The study found that low level of compliance with procurement regulations and lack of high degree of transparency and accountability hinder execution of effective procurement practices. Muindi (2014) study on factors influencing public procurement under free primary education programme in Kenya with reference to Machakos County revealed that staff training technology, supplier management relations and the organizational structure affect implementation of effective procurement practices in many public schools.

Wanjiru (2014) on the effects of records management on the efficiency of procurement function in an organization revealed that poor record management practices affect procurement efficiency in organizations to a great extent. The study recommends that the firms adequate controls should be put in place by introduction

of electronic data management software for managing records in liaison with these both internal and external stakeholders should be connected to the electronic data software for transparency and efficiency.

2.6 Critique of the existing literature

The main aim of this research was to investigate the influence of procurement practices on asset disposal in the energy sector state corporations in Kenya. These organizations also have presence in all the counties and most activities coordinated from Head Offices. This setup makes conclusions representative of the universe during the research period. The variables that influence disposal are also looked at individually but aiming to see if more than one can be responsible for disposal in some cases at once. One important caveat is that the majority of disposal research to date has been undertaken in developed nations and not developing countries like Kenya. Therefore the conclusions drawn are likely to be applicable to firms in developed countries. The lack of extensive research on disposal conducted in developing nations presents an interesting opportunity for future study both to identify the challenges of effective disposal and the often causes.

Gilbert (2008) in his research on the Australian public land disposal applied the public interest theory to make conclusions of how the process was negative. This can only apply in systems with full proven track record of efficiency, transparency and government goodwill for the citizenry something seldom found in developing countries. As the case is in Kenya PPOA (Public Procurement Oversight Authority) seeks no opinion on the feelings of citizens on disposal of public assets. Grubišić *et al* (2008) in their studies on public assets in Croatia advanced the regulatory capture theorem to give findings of lack of asset registry among others. This is a form of political corruption that occurs when a regulatory agency, created to act in the public interest, instead advances the commercial or political concerns of special interest groups that dominate the industry or sector it is charged with regulating, (Vailatti, 2017). This on its own will only highlight the plight of citizenry on disposal and not the corrective measures for the recommendations are likely to end with the same regulatory agency.

Theories like GAAP which advocate for disposal on the attainment of a zero book value i.e. depreciation being the process of reducing the historical cost of an asset by a pre-determined annual amount relating to the amount of asset usage. The methods applied under this theory do not give an actual value of the equipment at the time of disposal hence assure avenue for revenue loss or pilferage and that means that other methods like valuation of the asset at that time of disposal may have to be put in use. Therefore most of the earlier works have been done in one organization, countries that are developed and a lot of the works done on land as a public asset.

2.7 Research Gaps

This research has sketched the connections between procurement practices and the asset disposal. The study seeks to find sustainable solution to the unending problems those energy sector state corporations in Kenya face every now and then in having to dispose assets in generation, transmission and distribution of electrical energy. No research has been done in this area particularly the assets whose use is not common as is cars, office furniture and even land. The study will provide a long term solution to energy sector state corporations in disposal of assets arising from any cause i.e. accidents, mechanical breakdowns, book value and technological changes.

Examples of the studies in Kenya include Susan and Namusonge (2014) in their study concluded that public sector organizations within Yatta sub-county, which is in Kenya, had exhibited low rates of disposal. The study revealed that the rate of disposal in the sub-county was 35.7% which was quite low. Further, 100% of procurement personnel agreed that their departments had items that were unserviceable and needed disposal. Okello and Were (2014) conducted the study on the Influence of supply chain management practices on performance of the Nairobi securities exchange's listed, food manufacturing companies in Nairobi. The study established that inventory management, technology and innovation as supply chain management practices in the study. Okemba and Namusonge (2014) conducted research to examine whether reverse logistics as green supply chain management practices determines supply chain performance in Kenya's manufacturing firm: A case study of Nairobi based firms in the food and beverage sector. Osoro *et al.*

(2015) investigated the effect of crude oil price as a determinant on performance of supply chain systems in the petroleum industries in Kenya. Namasenge and Ondieki and Biraori (2015) carried out a study that aimed at examining the influence of supplier relationship on the effectiveness of supply chain management practices in Kenyan public sector: case of Ministry of Finance. The study identified that lack of supplier relationship management strategies lowered the effectiveness of supply chain management functions. Although the studies carried out by Mutuetandu and Iravo (2014) addressed some variables in this study, this study is not carried out in energy sector state parastatals in Kenya. Kagendo (2012) whose study was focused on the effects of the Act on public procurement in Parastatals in Kenya with the specific objectives being to establish its effect on the procurement process in Parastatals in Kenya and find out the challenges to the implementation of the Act. Makori (2017) the focus was on the framework of disposal in public sector and not the determinants of effective disposal. Matunga, Nyanamba and Okibo (2013) focused on procurement efficiency and not determinants of efficiency in procurement which when mirrored will apply to disposal.

Most of the other studies have been done in developed nations and skewed towards disposal of land making it a good avenue for research and specifically for disposal in the energy sector state corporations. Most of studies done in Kenya do not address specifically the energy sector state parastatals and the variables used as supply chain management practices are different from the ones used in this study. Hence there is need for an empirical study to be carried out in energy sector state parastatals in Kenya. The study will adopt the influence of procurement practices on asset disposal that will include, pre-disposal engagement practice, e-procurement practice, procurement skills practice, inventory management practice and post evaluation engagement practices.

2.8 Summary

This chapter deals with the influence certain variables have on asset disposal in the energy sector state parastatals in Kenya. The results of this study will assist the CEOs, the procurement managers and supply chain professionals in implementing asset disposal and avoid the seasonal disposal culture in Kenya. This will mean assets being disposed when at the correct state, save storage charges, avoid pilferage by cannibalization and avoid complete obsolescence. The conceptual framework is developed to link the independent variables with the dependent variable. The chapter has also summarized the main theories that are related to disposal.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section discusses the methods that were used to carry out the study. It includes a discussion on the research design, the target population, sample size and sampling techniques, data collection instruments and procedure, pilot testing as well as data analysis. The principal variables were pre disposal engagement practice, e-procurement practice, procurement skills practice, inventory management practice and post evaluation engagement practice.

3.2 Research Design

The study utilized Survey design aimed at collecting qualitative and quantitative data. The rationale was to supplement each other in that qualitative methods provided the in depth explanations while quantitative methods provided the hard data needed to meet required objectives and test hypotheses. Christensen (2011) note that mixed qualitative and quantitative design are a systematic way of collecting both numerical and qualitative information and analyzing it using statistical procedures. Therefore, this study the same in establishing the influence of procurement practices in energy sector state corporations. In the research respondents in the various energy sector state corporations in generation, transmission, distribution and retailing were interviewed at once, because of the time period the data was collected and the type of analysis. Barker (2002) note that quantitative designs facilitate greater precision in measurement and also avail a good basis for generalizing results over and above the study sample. The quantitative design similarly enhanced comparisons because the researcher was able to obtain feedback from a big number of people for comparisons.

This study adopted a survey research design using qualitative and quantitative approach. Qualitative approach also called scientific method puts emphasis on measurement and data is analyzed in numerical form to provide brief description whereas the qualitative does not produce discrete numerical data. For this study the

quantitative was from the questionnaire whereas qualitative was from the interview guide.

3.3 Target Population

The study targeted five energy sector state corporations in Kenya. The study was conducted within the Kenyan borders. According to Tashakkori and Teddlie (2003), a target population is classified as all the members of a given group to which the investigation is related, whereas the accessible population is looked at in terms of those elements in the target population within the reach of the study. This was a cross-sectional study of energy sector state corporations in Kenya namely Kenya Power (KP), Kenya Electricity Generating Company (KenGen), Kenya Electricity Transmission Company (KETRACO), Rural Electrification Authority (REA) and Geothermal Development Company (GDC). The study targeted managers in the five energy sector state corporations in Kenya which deal with generation, transmission, distribution, and retailing.

According to Trochim (2006) the unit of analysis is who or what you are analyzing for the study. Therefore, the unit of analysis will be the individual managers in the five energy sector state corporations. The managers are the entities the study analyzed and the focus was on individual managers within the energy sector state corporations. The reason for having managers is that disposal involves a myriad of decision making and formulation of policies. The target population was 349 managers distributed as follows:-

Table 3.1: Population size

Management level	Kenya Power	Kenya Electricity Generating Company	Kenya Electricity Transmitting Company	Rural Electrification Authority	Geothermal Development Company	Total
Top Level Management	11	10	9	13	11	54
Middle Level Management	20	19	22	21	18	100
Low Level Management	40	42	33	45	65	195
Total	71	71	64	79	64	349

Source: Companies Annual Reports (2017)

3.4 Sampling Frame

The sampling frame describes a list of all population units from which the sample is selected (Cooper & Schindler, 2008). The study targeted the top level management, middle level management and the low level management in all the five State corporations in Kenya which are Kenya Power (KP), Kenya Electricity Generating Company (KENGEN), Kenya Electricity Transmission Company (KETRACO), Rural Electrification Authority (REA) and Geothermal Development Company (GDC). This gave a more accurate inference to the entire study and also because of the fact that asset disposal is a function of all the employees in the energy state corporations in Kenya.

3.5 Sample and Sampling techniques

The focus is on the sampling technique adopted and the total sample obtained for the study.

3.5.1 Sampling Technique

Sampling is an element of data collection or a section of a population that is selected for a research process (Sekaran & Bougie, 2010). Stratified sampling was used to classify the employees into the various management levels; strategic level,

tactical level and operational levels. Kothari (2012) noted that stratified sampling is used when a population from which a sample is to be drawn does not constitute a homogeneous group. Stratified sampling involves dividing the population into a series of relevant strata which implies that the sample is likely to be more representative. Saunders, Lewis and Thornhill (2009) support the categorization of homogeneous subjects into various strata and therefore the employees' will be categorized into different levels of management. Application of stratified sampling method involves dividing population into different subgroups and selecting subjects from each stratum in a proportionate manner. Similarly, application of proportionate stratified random sampling technique involves determining sample size in each stratum in a proportionate manner to the entire population. Accordingly, application of proportionate stratified random sampling generates more accurate primary data compared to disproportionate sampling.

Kothari (2012) notes that, multi-stage sampling is used when a population from which a sample is to be drawn does not constitute a homogeneous group. Ghauri and Gronhang (2005) outlined the procedure for drawing a sample as consisting of the following steps: defining the population, identifying the sampling frame, selecting a sampling procedure, determining the sample size, selecting the sample units and ultimately collecting data from the sampled units.

3.5.2 Sample size

The total sample size for this study was obtained using the formulae developed by Saunders, Levis and Thornbill (2009). The adjusted sample size was 187. The study later applied the simple random method and since the study population was less than 10,000 the total sample size was determined by use of Saunders et al. (2009) formula which is effective for social sciences, for samples less than 10, 000.

Where;

n=the desired sample size for target population <10,000,

z=normal standard deviation corresponding to 95% confidence interval, that is 1.96,

p=Proportion of the population estimated to have desired characteristics.

q=1-p

d=Level of statistical significance (=0.05)

Hence;

$$N = \frac{z^2 pq}{d^2} = \frac{1.96^2 * 0.5 * 0.5}{0.05^2} = 384 \dots \dots \dots \text{Equation (i)}$$

$$\frac{d^2}{0.05^2}$$

Therefore the desired sample size for populations less than 10, 000 is as shown below.

$$nf = \frac{n}{N} = \frac{384}{349} = 1.1$$

$$\frac{1+n}{N} = \frac{1+384}{349}$$

Where

nf=expected sample size

N=population of the study.

n=expected sample size for populations of less than 10, 000.

Source: Saunders et al. (2009)

Table 3.2: Sample size

Management Level	Kenya Power		Kenya Electricity Generating Company		Kenya Electricity Transmitting Company		Rural Electrification Authority		Geothermal Development Company		Total	
	P	S	P	S	P	S	P	S	P	S	P	S
Top level management	11	6	10	8	9	5	13	8	11	6	54	30
Middle level management	20	10	19	10	22	12	21	10	18	10	100	52
Low level management	40	21	42	22	33	17	45	23	35	18	195	101
Total	71	37	71	37	64	34	79	41	64	34	349	183

Source: Companies Annual Reports (2017)

3.6 Data Collection Methods

The data collection methods adopted for the study were both primary and secondary. The procedure to be adopted was use of a questionnaire.

3.6.1 Primary Data

The primary data was collected through a self-administered semi-structured questionnaire using the key-informant method. Wu (2010) explains that views of key informants are widely used in business research because they are deemed to be the most knowledgeable about the issues being investigated for which they are directly responsible. The structured questionnaire had with closed- ended questions and a customized five-part Likert scale which will was used to collect data on the independent variables from the managers. The interview guide gave respondents freedom of expression that could not be captured in the structured questions. Respondents were asked to indicate agreement with each item. Each had a five-point scale ranging from 1=strongly disagree, 2=disagree, 3=indifferent, 4=agree, and 5=strongly agree. The managers that were targeted were informed about the purpose

of the study. The questionnaires were preferred because personal administration of questionnaires to individuals helps to develop close relationships with the respondents. The questionnaire also provides the clarifications sought by respondents on the spot by collecting the questionnaires soon after they are filled. The data collected will be edited to ensure consistency across respondents and detect omissions. According to Fox and Bayat (2007), a researcher should address the design of the study and analysis of the results so that the research can hold quality test and this can be done through reliability. De vaus (2002) notes that reliability is the ability of the questionnaire to give the same answer in the same circumstances from time to time. This implies that if respondents will answer a questionnaire the same way on repeated situations, then the questionnaire will be said to be reliable.

3.6.2 Secondary Data

Any or all information relating to energy state corporations in the annual and published financial statements in national newspapers, during annual general meetings and in-house magazines or literature were used to provide secondary data information on assets. Other important business disclosures in journals, manuals and the parastatal documents were used for secondary data collection.

3.7 Data Collection Procedures

The data collection instrument in this study was a questionnaire. The research instrument was conveyed to the respondents in person by the researcher. The researcher visited the parastatals under study, introduce himself to the relevant respondents by explaining to them the nature and purpose of the study administered the questionnaires and collected them within an agreed time frame say two weeks. Prior to the collection of data express authority was sought from the Human Resources in charge in each and every parasternal to collect data.

A cover letter explaining the objectives of the study and assuring the respondents' confidentiality and asking them to participate in the study accompanied the questionnaire. Respondents were asked to willingly participate in the survey and give the data. But any respondents who declined to participate was replaced by others

from the same parastatals in the same sector. Respondents were required to fill the questionnaires that include responses on asset disposal.

Ghuri and Gronhaug (2005) narrate that questionnaire method is an inexpensive method for data collection. The use of questionnaire has many advantages which are as follows: they have standard questions which can be administered to a large number of respondents in Kenya within a short time and at a minimal cost. Respondents are assured of anonymity and confidentiality and they are able to complete the questionnaires when it is convenient and at their own time.

3.8 Pilot Study

Activities before the fieldwork process consisted of instrument design and development. Questionnaire administration involved pre-contact with the respondents. In order to ensure content validity, the preliminary questionnaire was pre-tested on a pilot set of respondent managers for comprehension, logic and relevance. Basing on Mugenda and Mugenda (2009) recommendations, the researcher set eighteen pilot questionnaires representing 9% of the sample size and which was within the range of 1%-10% and gave to the managers of: Kenya Power, Kenya Electricity Generating company, Geothermal Development corporation, Rural electrification and Kenya Energy transmission company The pre-tested respondents were not part of the study population since this would have brought about assessment biases and contamination of the respondents (Mugenda & Mugenda, 2009).

The questionnaire pre-tests were done in order to observe the respondents' reaction, attitudes, and questions that respondents found to be ambiguous. All the aspects of the questionnaire were pre-tested including question content, wording, sequence, question difficulty, layout, form and instructions. The feedback obtained was used to revise the questionnaire before administering it to the study respondents.

3.8.1 Reliability

The reliability of the research instrument were established by testing for both consistency and stability. Consistency indicates how well items hang together as a

set. Cronbach alpha will be used to test for consistency and reliability. Cronbach alpha coefficients range from 0 to 1. Sekaran (2010) opines that a Cronbach alpha of at least 0.7 should be accepted as adequate since the higher the Cronbach alpha the higher the internal consistency and reliability. Data reliability which is a measure of internal consistency and average correlation was measured using Cronbach's alpha coefficient which ranges between 0 and 1 (Kothari, 2010). Higher alpha coefficient values will mean that scales are more reliable. Cronbach's alpha is a general form of the Kuder- Richardson (K – R) 20 formula.

The formula is as follows:

$$KR_{20} = \frac{(K) (S^2 - \Sigma S^2)}{(S^2) (K - 1)} \dots\dots\dots \text{Equation (ii)}$$

KR_{20} = Reliability coefficient of internal consistency

K = Number of items used to measure the concept

ΣS^2 = Variance of all scores

S^2 = Variance of individual items

Source: Sekaran (2010)

3.8.2 Validity

Validity is defined as the extent to which a concept is accurately measured in a quantitative study. To ensure the validity of research instruments. Content validity was achieved by cross checking the questionnaires with the objectives of the study to ensure the questions meet the study objectives. The proposal went through peer review process and further correction by the supervisors. This enhanced the validity of the process and the research instruments. The tool was also pretested to ensure construct validity. Correlations were conducted to determine the extent to which the different instruments measure the same variable.

3.9 Data Analysis and Presentation

The techniques adopted in the study and the process of obtaining data for the study are captured here and an explanation given.

3.9.1 Data analysis

Data was analyzed using quantitative technique. Inferential statistics included Analysis of Variance (ANOVA), Pearson correlation and Multi linear regression analysis. These was used to establish the relationship among the study variables and to test the formulated hypotheses at 95% confidence level and 5% level of significance. Preliminary associations among the study variables was assessed using correlations which was tested at 95% confidence level (level of significance, $\alpha = 0.05$). Data processing and analysis was finally done through use of quantitative.

3.9.2 Quantitative Analysis

The data obtained through questionnaires was analyzed; firstly, by calculating response rate and descriptive statistics such as mean, standard deviation and frequency distributions, which according to Kothari (2012) these measures inform the point about which items have a tendency to cluster and also describes the characteristics of the collected data. Secondly, the data collected on each of the independent variables under study and their influence on asset disposal in energy state corporations in Kenya was analyzed using inferential statistics. Multiple regressions was used to determine the type of relationship that exists between the dependent and independent variables. This was done by obtaining an equation which describes the dependent variable in terms of the independent variables based on the multiple regression models. To test the hypothesis for this study, the independent variables were regressed against asset disposal as the dependent variable. Regression is used to test the effects of independent (predictor) variables on a single dependent (criterion) variable. Regression tests the deviation about the means and therefore the multiple linear regression model for this study took the form:-

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \varepsilon..... \quad \text{(iii)}$$

Where:

Y	=	Asset Disposal
B ₀ - β ₅	=	Regression coefficients to be estimated
X ₁	=	Pre-disposal transaction practices
X ₂	=	Inventory management practices
X ₃	=	Procurement Skills practices
X ₄	=	E- procurement practices
X ₅	=	Procurement planning practices
ε	=	Error term

According to Mugenda and Mugenda (2009), multiple regression analysis attempts to determine whether a group of variables together predict a given dependent variable and in this way, attempt to increase the accuracy of the estimate. In justification of the above model, the researcher developed a model from the trend of the data accounting for variability. The researcher found the linear regression and examined the correlation coefficient and use coefficient of determination.

3.9.3 Variable Definition and Measurement

Variables that were not be easily measured were be operationalized to make them measurable through their reduction into observable behaviour or characteristics. The measurement of variables in this study was conceptualized as provided in table 3.3 below:-

Table 3.3: Measurement of Variables

Variable Definition	Indicators	Measurement
Pre-disposal engagement practice	-Planning and Budget	Overall, on a scale of 1 to 5, where 5 is the scale of the highest extent of use of predisposal engagement practices and 1 is the lowest.
	-Committee Selection	
	-Transparency and Integrity	
E-Procurement Practice	-E-Buyer Selection and Tendering	Overall, on a scale of 1 to 5, where 5 is the scale of the highest extent of use of E procurement practices and 1 is the lowest.
	-E-Disposal Communication	
Procurement skills practice	-E-Disposal Records	Overall, on a scale of 1 to 5, where 5 is the scale of the highest extent of use of procurement skills practice and 1 is the lowest.
	-Training	
	-Professional Membership	
	-Disposal agents	
Inventory Management practice	-Storage	Overall, on a scale of 1 to 5, where 5 is the scale of the highest extent of use of Inventory Management practice and 1 is the lowest.
	-Economic Disposal Quantity	
	-Classified Items	
Post Evaluation Engagement practice	-Post evaluation due diligence	Overall, on a scale of 1 to 5, where 5 is the scale of the highest extent of use of Post evaluation engagement practice and 1 is the lowest.
	-Notification to enter contract	
	-Preparation of Contract	
Asset Disposal	-Return on Asset Disposed	Overall, on a scale of 1 to 5, where 5 is the scale of the highest extent and 1 is the lowest.
	-Turnover Period	
	-Disposing Entity Satisfaction	

3.9.4 Diagnostic tests

The focus was the assessment of existence of multicollinearity, homoscedasticity and test for normality and linearity in the study.

a. Multicollinearity

According to Kothari (2004) the simplest means of identifying collinearity is an examination of the correlation matrix for independent variables. The presence of high correlations which is normally higher than 0.90 is the first indication of substantial collinearity. The test for multicollinearity will be conducted to assess whether one or more of the variables of interest is highly correlated with one or more of the other independent variables. The variance inflation factor will be used to evaluate the level of correlation between variables and to estimate how much the variance of a coefficient is inflated because of linear dependence with other predictors. As a rule of thumb if any of the VIF is greater than 10, then there is a probability of a problem with multicollinearity.

b. Homoscedasticity

The study will also check the existence of homoscedasticity which refers to the assumptions that the variability in scores for one continuous variable is roughly the same at all values for another continuous variable constitutes another assumption of multivariate analysis (Kothari, 2014). To test for homoscedasticity, Levene test for equality will be computed using one way ANOVA procedure. It will be used to assess the equality of variances for a variable calculated for two or more groups.

c. Normality test

A normality test will be done using Q-Q probability plot for all the variables under investigation. Kolmogorov-Smirnov test and the Shapiro-Wilk test will be used. Shapiro-Wilk test is more appropriate for sample sizes. It is a more reliable test for determining skewness and kurtosis values of normality. If it is below 0.05, the data significantly deviate from a normal distribution. Saunders, Thornhill and Lewis (2009) asserts that the use of inferential parametric statistical procedures require that

the assumptions of such tests of normality are tested. This is to assist the graphical tests to be performed about the normality of the data to check for skewness and kurtosis coefficients. This test helps to confirm whether the data follows a normal distribution or not. If the normality is not achieved, the results may not depict the true picture relationship amongst the variables.

d. Linearity

Finally, linearity of data will be tested using kurtosis tests (Cooper & Schindler, (2001). The study will employ univariate analysis to identify the determinants of effective disposal, the bivariate to establish the relationships among the determinants and multivariate to derive a model and validate it. Since the study will use multivariate analysis to develop a model, assumptions like linearity will be tested.

3.10 Hypotheses Testing

The null hypothesis will be tested as follows:

Table 3.4: Hypotheses testing

Hypothesis	Hypothesis test	Decision rule and anticipated model
H₀₁ There is no significant influence of pre-disposal engagement practice on asset disposal in energy sector state corporations in Kenya.	Karl Pearson's zero order coefficient of correlation (Beta test) $H_0: \beta = 0$ $H_A: \beta \neq 0$	Reject H_{01} if p-value ≤ 0.05 (otherwise fail to reject) $P = \alpha + \beta_1 PDT + \epsilon$
	Reject H_{01} if p-value ≥ 0.05 (otherwise fail to reject)	
	Karl Pearson's zero order coefficient of correlation (Beta test) $H_0: \beta = 0$ $H_A: \beta \neq 0$	Reject H_{02} if p-value ≤ 0.05 (otherwise fail to reject) $P = \alpha + \beta_2 IMP + \epsilon$
H₀₂ There is no significant influence of e-procurement practice on asset disposal in energy sector state corporations in Kenya.	Karl Pearson's zero order coefficient of correlation (Beta test) $H_0: \beta = 0$ $H_A: \beta \neq 0$	Reject H_{03} if p-value ≤ 0.05 (otherwise fail to reject) $P = \alpha + \beta_3 PST + \epsilon$
	Reject H_{03} if p-value ≥ 0.05 (Otherwise fail to reject)	
	Karl Pearson's zero order coefficient of correlation (Beta test) $H_0: \beta = 0$ $H_A: \beta \neq 0$	Reject H_{04} if p-value ≤ 0.05 (otherwise fail to reject) $P = \alpha + \beta_4 ICT + \epsilon$
H₀₃ There is no significant influence of procurement skills practice on asset disposal in energy sector state corporations in Kenya	Karl Pearson's zero order coefficient of correlation (Beta test) $H_0: \beta = 0$ $H_A: \beta \neq 0$	Reject H_{05} if p-value ≤ 0.05 (otherwise fail to reject) $P = \alpha + \beta_5 PP + \epsilon$
	Reject H_{05} if p-value ≥ 0.05 (Otherwise fail to reject)	
	Karl Pearson's zero order coefficient of correlation (Beta test) $H_0: \beta = 0$ $H_A: \beta \neq 0$	
H₀₄ There is no significant influence of inventory management practice on asset disposal in energy sector state corporations in Kenya	Karl Pearson's zero order coefficient of correlation (Beta test) $H_0: \beta = 0$ $H_A: \beta \neq 0$	
	Reject H_{04} if p-value ≥ 0.05 (Otherwise fail to reject)	
	Karl Pearson's zero order coefficient of correlation (Beta test) $H_0: \beta = 0$ $H_A: \beta \neq 0$	
H₀₅ There is no significant influence of post evaluation engagement practice on asset disposal in energy sector state corporations in Kenya	Karl Pearson's zero order coefficient of correlation (Beta test) $H_0: \beta = 0$ $H_A: \beta \neq 0$	
	Reject H_{05} if p-value ≥ 0.05 (Otherwise fail to reject)	
	Karl Pearson's zero order coefficient of correlation (Beta test) $H_0: \beta = 0$ $H_A: \beta \neq 0$	

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter presented the findings of the study, data analysis and interpretation basing on the overall objectives of the study. The general objective of this study was to evaluate the influence of procurement practices on asset disposal in energy sector state corporations in Kenya and was guided by the following specific objectives; investigate the influence of pre- disposal engagement practice on asset disposal in energy sector state corporations in Kenya; to establish the influence of e-procurement practice on asset disposal in energy sector state corporations in Kenya; to assess the influence of procurement skills practice on asset disposal in energy sector state corporations in Kenya; to evaluate the influence of inventory management practice on asset disposal in energy sector state corporations in Kenya and to examine the influence of post-evaluation engagement practice on asset disposal in energy sector state corporations in Kenya.

4.2 Response Rate

High response rate guarantees that the findings are representative of the target population. Emore (2007) notes that a response rate is the extent to which the collected data takes care of all the sample items, a ratio of actual respondents to anticipated number of persons who responded to the study. The study targeted a sample of 183 respondents, who were top level management, middle level management and the low level management in all the five State corporations in Kenya namely; Kenya Power (KP), Kenya Electricity Generating Company (KENGEN), Kenya Electricity Transmission Company (KETRACO), Rural Electrification Authority (REA) and Geothermal Development Company (GDC). A total of 148 self-administered questionnaires were filled out of the expected 183 yielding a response rate of 80.87 percent as depicted in Table 4.1.

Table 4.1: Response Rate

Response rate	Sample size	Percent
Returned questionnaires	148	81
Un-returned questionnaires	35	19
Total	183	100

This good response rate was attributed to the data collection procedure, where the researcher personally administered questionnaires and waited for the respondents to fill, and picked the filled questionnaires. This response rate demonstrated the willingness of respondents to participate in the study. This response rate was good and representative. Mugenda (2009), established that a response rate of 50 percent is adequate for analysis; a rate of 60 percent is good and a response rate of 70 percent and over is excellent.

4.3 Reliability Results

The focus was to see to what extent the measurements were able to yield consistent results each time they were applied under the same conditions or circumstances.

4.3.1 Reliability Tests for procurement Practices

Kothari (2004), alluded that reliability refers to the extent to which a measurement is able to yield consistent results each time it is applied under similar conditions. To measure the reliability of the data collection instrument, Cronbach's alpha (α) was used. Cronbach's alpha is a measure of internal consistency that tests how closely related a set of items are as a group. A value of alpha (close to 1) is high and is often used as evidence that the items measure an underlying (or latent) construct.

Table 4.2 shows the summary of the reliability statistics for procurement practices indicators. As explained by Cronbach and Shavelson (2004), Cronbach Alpha Coefficient of above 0.7 implies reliability of the data collection instrument. From the table, it is inferred that all the questions met the Cronbach's Alpha Coefficient of

assessing the internal consistency of the instruments with alpha coefficients of above 0.7 which therefore implies reliability. The overall reliability of the instrument was 0.900 which conforms with Bryman (2003) proposition that the reliability benchmark alpha coefficients should be 0.8.

Table 4.2: Reliability Statistics

Variable	No. Of items	Alpha (α)	Comment
Pre disposal engagement practice	11	0.795	Reliable
E-procurement practice	6	0.812	Reliable
Procurement skills practice	5	0.826	Reliable
Inventory management practice	6	0.874	Reliable
Post evaluation practice	6	0.886	Reliable
Overall	34	0.8386	Reliable

4.4 Descriptive Results

This section presents a summary of the 148 respondents rating of various items of pre disposal engagement, e-procurement, procurement skills, inventory management and post evaluation practice scales. The data was analyzed by use of means, standard deviations and percentages. The analysis was presented in form of tables.

4.4.1 Results of pre disposal engagement practice

The study sought to investigate the influence of pre- disposal engagement practice on asset disposal in energy sector state corporations in Kenya. The respondents were asked to indicate the effect of pre- disposal engagement practice on asset disposal in energy sector state corporations in Kenya. This was on a scale of very great extent, great extent, moderate, low extent and not at all. The score very great extent represents

very high influence of pre disposal engagement and has been taken to be equivalent to mean score of 4.1 to 5.0 on the likert scale. The score great extent represents high influence of pre disposal engagement and is equivalent to a mean score of 3.1 to 4.0. The score moderate represent neutral influence and taken to be equivalent to mean score of 2.1 to 3.0. The low extent scores represent low influence of pre disposal engagement and taken to be equivalent to mean score of 1.1 to 2.0 and the score not at all have been taken to be equivalent to mean score of 0.1 to 1.0. A standard deviation of more than one implies a significant difference in respondents. Results of the analysis is presented in Table 4.3.

Table 4.3: Results of pre disposal engagement practice

Opinion Statements	Not at all (%)	Low Extent (%)	Moderate (%)	Great Extent (%)	Very Great Extent (%)	Mean	Std. Deviation
1. In our organization we have asset disposal committee	4	0	0.7	75	21	4.08	0.753
2. In organization the asset disposal committee is set up as and when required	0.7	0	4.6	74	21	4.15	0.546
3. In our organization persons with integrity from user support departments make the disposal team	5.3	31	25	27	11	3.08	1.12
4. In our organization persons the integrity of the committee influence asset disposal	4.8	20	21	52	2.7	3.28	0.971

Table 4.3, shows that organizations have asset disposal committees and these asset disposal committees are set up as and when required received very high rating of 4.08 and 4.15 respectively. The respondents also rated high on integrity of persons in user departments and persons with the integrity in user committee influence asset disposal with a mean of 3.08 and 3.28 respectively. From the study, it was found that there was no significant difference in the responses of the respondents since the standard deviation was less than one except the responses on ‘organization select persons with integrity from user support departments make the disposal team’ which showed significant difference of more than. This meant that majority of the respondents had diverse views regarding the issue of selecting persons to constitute disposal team.

Based on the study findings, its clearly evident that before an organization embark on asset disposal process, it mandatory that it has to form an asset disposal committee and this committee is selected based on the integrity of individual persons who are regarded to influence the asset disposal process. Also, this disposal committee is formed on ad hoc basis to discharge its duties and once it accomplishes its mandate it is disbanded. These study findings concurred with the public procurement and asset disposal act of 2015 which stipulate that any state corporations wishes to dispose its asset, it must constitute an asset disposal committee to carry out asset disposal process. The procurement systems in the public sector aim to maximize overall value for money for citizens. This requires considerations of issues such as client satisfaction, the public interest, fair play, honesty, justice and equity (Onyinkwa, 2013). Therefore, procurement process of asset disposal should be promoting effective competition among suppliers and ensuring integrity in administrative processes (Mikkola, 2007).

In addition, the study established that integrity of persons in user departments and persons with the integrity in user committee influence asset disposal. These findings agreed with the public procurement and disposal act on transparency and integrity restricts disposal to employees’ etc. Section 166 of the act states that an accounting officer of a public entity shall not dispose-off assets to an employee of the public

entity or a member of a board or committee of the public except as expressly allowed under the act and the regulations.

4.4.2 Results of E-procurement practice

The study sought to evaluate the effect of e-procurement practices on asset disposal in energy sector state corporations in Kenya. The respondents were asked to indicate the influence of e-procurement practice on asset disposal in energy sector state corporations in Kenya. This was on a scale of very great extent, great extent, moderate, low extent and not at all. The score very great extent represents very high effect of pre disposal engagement and has been taken to be equivalent to mean score of 4.1 to 5.0 on the Likert scale. The score great extent represents high influence of pre disposal engagement and is equivalent to a mean score of 3.1 to 4.0. The score moderate represent neutral influence and taken to be equivalent to mean score of 2.1 to 3.0. The low extent scores represent low influence of pre disposal engagement and taken to be equivalent to mean score of 1.1 to 2.0 and the score not at all have been taken to be equivalent to mean score of 0.1 to 1.0. A standard deviation of more than one implies a significant difference in respondents. Results of the analysis is presented in Table 4.4.

Table 4.4: Results of E-procurement practice

Opinion Statements	Not at all (%)	Low Extent (%)	Moderate (%)	Great Extent (%)	Very Great Extent (%)	Mean	Std. Deviation
1. In our organization there is a clear and computerized criteria of identifying disposable assets	0	0.7	2	32.2	65.1	4.62	0.563
2. In our organization e-planning influence asset disposal	2.7	30.7	43.3	12.7	10.7	2.98	0.986
3. In our organization all buyer prequalification are electronically implemented	1.3	8.6	11.9	29.8	48.3	4.15	1.025
4. In our organization prequalification and selection of buyers is done in a given period influence asset disposal	2.6	18.5	27.2	48.3	3.3	3.31	0.903
5. In our organization the e-prequalification and of buyer influence asset disposal	0.7	8.6	61.8	26.3	2.6	3.22	0.66
6. In our organization records management influences asset disposal	0.7	6.7	60.7	21.3	10.7	3.35	0.786

From the study findings in Table 4.4, it shows that organizations have clear and computerised criteria of identifying disposal assets which was very high rating of 4.62. Also, the respondents indicated that their organizations all buyers are prequalified electronically which had very high rating of 4.15. The respondents also

rated high on organization prequalification and selection of buyers is done in a given period, organization conduct e-prequalification and organization use records management for identifying the assets to disposed with a mean of 3.31, 3.22 and 3.35 respectively. Likewise, the study found out that a mean of 2.98 respondents indicated neutral that some organizations use e-planning to influence asset disposal. Similarly, the study indicated that there was no significant difference in the respondents since the standard deviation of their responses was less than one except the responses on 'organization prequalifies all buyers electronically' which showed significant difference with a standard deviation of more than one. This implied that majority of the organizations prequalifies buyers electronically.

From the study findings, it was established that organizations have clear and computerised criteria of identifying disposal assets and prequalified buyers electronically as a way of enhancing procurement reform. Information technology (IT) promotes economy and efficiency significant savings of organizations by increasing competition, transparency. This statement are in agreement with the findings of Matata and Namusonge (2015) which established that information technology (IT) promotes economy and efficiency significant savings of public funds by increasing competition, transparency by making procurement information of all sorts such as bidding opportunities, bidding documents, notices, texts of applicable rules readily available and in diminishing the opportunities for discretion (and hence corruption), and public confidence in the integrity of government.

Equally, the study found out that organizations prequalify and select suppliers through the use of e-prequalification. This enables organizations to select the right suppliers to engage with and this has enabled the organizations to integrate with all stakeholders in order to execute procurement deals. This statement is in harmony with the study of Handfield (2009) who established that integration of procurement functions with ICT has enabled many public training institutions to improve the level of effectiveness in the execution of procurement practices. Therefore, organizations are required good procurement system to assist them in procuring. But the study also, found that not all organizations have procurement systems and this has affected these organizations negatively. This findings concurred with study of Sanjeeve (2014) who

found that implementation of ICT based procurement methods in many public institutions in Africa is hindered by lack of e-procurement methods, lack of automated procurement systems, lack of supportive ICT infrastructure and absence of ICT skills amongst procurement staff.

Lastly, the study found out that organizations conduct e-prequalification and use records management for identifying the assets to be disposed. This finding is in harmony with study of Wanjiru (2014) who noted that that poor record management practices affect procurement efficiency in organizations to a great extent and thus study recommended that the firms adequate controls should be put in place by introduction of electronic data management software for managing records in liaison with these both internal and external stakeholders should be connected to the electronic data software for transparency and efficiency.

4.4.3 Results of procurement skills practice

The study sought to evaluate the effect of procurement skills practices on asset disposal in energy sector state corporations in Kenya. The respondents were asked to indicate the influence of procurement skills practice on asset disposal in energy sector state corporations in Kenya. This was on a scale of very great extent, great extent, moderate, low extent and not at all. The score very great extent represents very high influence of pre procurement skills and has been taken to be equivalent to mean score of 4.1 to 5.0 on the likert scale. The score great extent represents high influence of pre procurement skills and is equivalent to a mean score of 3.1 to 4.0. The score moderate represent neutral influence and taken to be equivalent to mean score of 2.1 to 3.0. The low extent scores represent low effect of procurement skills and taken to be equivalent to mean score of 1.1 to 2.0 and the score not at all have been taken to be equivalent to mean score of 0.1 to 1.0. A standard deviation of more than one implies a significant difference in respondents. Results of the analysis is presented in Table 4.5.

Table 4.5: Results of procurement skills practice

Opinion Statements	Not at all (%)	Low Extent (%)	Moderate (%)	Great Extent (%)	Very Great Extent (%)	Mean	Std. Deviation
1. In our organization training needs assessment is done annually	17.3	11.3	8	51	12	3.29	1.314
2. In our organization professional membership or association is encouraged	19.3	15.3	8.7	49	7.3	3.1	1.309
3. In our organization membership of a professional body influence asset disposal	2	1.3	5.3	49	42.7	4.29	0.797
4. In our organization membership audits are used to assess conformity	0.7	18	26.7	51	4	3.39	0.851

From the study findings, it was observed that membership of professional body influence asset disposal and was highly rated with a mean of 4.29. Training assessment needs of procurement officers, professional membership are encouraged and membership audits are used to assess conformity. From the study, it was found

that there was significant difference in the responses of the respondents since the standard deviation was above one.

It was revealed from the study that membership of professional body influence asset disposal in organisation. This is in concurrence with the public procurement and asset disposal act (2015) section 47 that a procurement function shall be handled by procurement professionals whose qualifications are recognized in Kenya; the head of procurement function shall among other functions under the act and as a registered professional with various professional bodies, be responsible for rendering professional advice to the accounting officer. It is clear that for procurement officer to be registered in a professional body he/she must have meet minimum professional requirement. Also, these body they conduct seminars and workshops for the members to inculcate the best procurement practices in regard to asset disposal.

The study established that training of procurement officers is important especially in areas of their requirement. Therefore, organization conduct needs assessment annually to ascertain training needs. Likewise procurement officers are encouraged to associate themselves to various organizational bodies. This would equip the officers to execute their mandate in asset disposal. These findings are in agreement with the study of Compton (2007) who suggested that effective execution of organization procurement procedures greatly depends on the level of employees' training since lack of professional trained staff on procurement functions limits the ability of the organizations to embrace procurement best practices through benchmarking.

Equally, Christianne (2008) observed that employees begin to realize that learning and continuous training is as big as job itself and it allows employees to develop new applications and techniques and share them with their peers or supervisors. Hall (2009) argues that the efficiency and the effectiveness of procurement procedures are hindered by absence of effective continuous employees training programmes that help in equipping the employees with competitive procurement management skills. Armstrong (2008) affirms that continuous employees training contribute towards improvement of the level of their competency in the execution of respective job task

functions. David (2007) argues that competency is a standardized requirement for an individual to properly perform a specific job. It encompasses a combination of knowledge, skills and behavior used to improve performance. In addition, Handfield (2010) noted that in UK, many public training institutions have succeeded in embracing effective procurement practices as a result of continuous training of procurement staff and employment of professionally trained procurement staff.

4.4.4 Results of Inventory management practice

The study sought to evaluate the effect of inventory management practice on asset disposal in energy sector state corporations in Kenya. The respondents were asked to indicate the inventory management practice on asset disposal in energy sector state corporations in Kenya. This was on a scale of very great extent, great extent, moderate, low extent and not at all. The score very great extent represents very high influence of inventory management and has been taken to be equivalent to mean score of 4.1 to 5.0 on the Likert scale. The score great extent represents high influence of inventory management and is equivalent to a mean score of 3.1 to 4.0. The score moderate represent neutral influence and taken to be equivalent to mean score of 2.1 to 3.0. The low extent scores represent low effect of inventory management and taken to be equivalent to mean score of 1.1 to 2.0 and the score not at all have been taken to be equivalent to mean score of 0.1 to 1.0. A standard deviation of more than one implies a significant difference in respondents. Results of the analysis is presented in Table 4.6.

Table 4.6: Results of Inventory Management practice

Opinion Statements	Not at all (%)	Low Extent (%)	Moderate (%)	Great Extent (%)	Very Great Extent (%)	Mean	Std. deviation
1. In our organization storage of disposal assets is a priority	3	12	19	40	25	3.73	1.067
2. In our organization disposal materials have designated storage areas	22	14	14	34	16	3.08	1.418
3. In our organization the disposable assets are constantly updated	3	9	8	41	39	4.05	1.059
4. In our organization economic disposal quantities influence asset disposal	4	4	19	33	39	3.97	1.087
5. In our organization disposable assets are classified hazardous/security	5	2	6	33	55	4.32	.995
6. In our organization classified assets influence asset disposal	0	0	6	22	72	4.66	.592

Based on the study findings in Table 4.6, it was established that disposable assets are constantly updated, disposable assets are classified hazardous or security and classification of assets influence asset disposal which were very highly rated by respondents with means of 4.05, 4.32 and 4.66 respectively. In addition, the study found out that storage of disposable assets is given in priority in organizations, organizations have designated areas for disposable materials and economic disposable quantities determine assets disposal in organization and these were highly rated with means of 3.73, 3.08 and 3.97 respectively. From the study, it was found that there was significant difference in the responses of the respondents since the standard deviation was above one.

The study findings indicated that disposable assets are constantly updated, are classified as hazardous and highly influence asset disposable in organization.

These findings are in harmony with Public procurement and asset disposal act (2015) which gives cognizance to classified items in matters toxic, security etc. Section 90 of the act states that, national security organs and other procuring entities that deal with procurements of classified nature shall manage their procurements and disposal on the basis of a dual list maintained by the respective procuring entity as prescribed; procuring entities other than national security organs, that procure classified items shall request the cabinet secretary for approval of the classified list of items annually; the dual list shall distinguish items subject to open and classified procurement and disposal proceedings respectively; procuring entities that deal with classified items shall agree annually with the cabinet secretary on the category of classified items to be included in the classified list of procurements or disposal to be applied; the cabinet secretary shall submit the list of classified items to the cabinet for approval.

Moreover, the study found out that storage of disposable assets is given in priority in organizations, organizations have designated areas for disposable materials and economic disposable quantities determine assets disposal in organization. These findings are in agreement with ssection 161 of PPDA (2015) that an accounting officer of a procuring entity shall set up an inventory management system which shall be managed by the head of procurement function for the purpose of control and

managing its inventory, stores and assets. Section 162 sub section 5 states that an accounting officer of a procuring entity shall follow policy set out by the Cabinet Secretary specifying the life span of each category of items before boarding for disposal. Also, economic disposal quantities influence asset disposal.

This finding concurred with Susan and Namusonge (2014) who noted that when any equipment is unserviceable, its keeping through maintenance costs, storage, parking insurance, among others, may well exceed the returns that can be derived from that piece of equipment and the investment of additional monies. Equally, Section 160, 161 and 164 of Public procurement and asset disposal act (2015) clearly allows a procuring entity to manage a system that allows it to determine levels and also give procedures prior to disposal or the identified obsolete equipment; an accounting officer of a procuring entity shall manage its inventory, assets and stores for the purpose of preventing wastage and loss, and continuing utilization of the supplies.

4.4.5 Results of post evaluation engagement practice

The study sought to examine the influence of post-evaluation engagement practice on asset disposal in energy sector state corporations in Kenya. The respondents were asked to indicate the post-evaluation engagement on asset disposal in energy sector state corporations in Kenya. This was on a scale of very great extent, great extent, moderate, low extent and not at all. The score very great extent represents very high influence of post-evaluation engagement and has been taken to be equivalent to mean score of 4.1 to 5.0 on the likert scale. The score great extent represents high influence of post-evaluation engagement and is equivalent to a mean score of 3.1 to 4.0. The score moderate represent neutral influence and taken to be equivalent to mean score of 2.1 to 3.0. The low extent scores represent low influence of post-evaluation engagement and taken to be equivalent to mean score of 1.1 to 2.0 and the score not at all have been taken to be equivalent to mean score of 0.1 to 1.0. A standard deviation of more than one implies a significant difference in respondents. Result of the analysis is presented in Table 4.7.

Table 4.7: Results of Post Evaluation Engagement practice

Opinion Statement	Not at all (%)	Small extent (%)	Moderate (%)	Great extent (%)	Very Great extent (%)	Mean	Std. deviation
1. In our organization there is post qualification due diligence done on the selected bidder	3	14	45	23	15	3.33	.997
2. In our organization post qualification due diligence influence asset disposal	0	2	8	32	59	4.48	.707
3. In our organization proper communication of notice to enter contract with the selected bidder influence asset disposal	15	14	26	23	22	3.22	1.352
4. In our organization upon taking delivery the disposed asset immediately leaves our custody	6	11	21	33	29	3.68	1.179
5. In our organization contract preparation and signing influence asset disposal	3	16	27	31	23	3.56	1.111

From the study findings, it was found that post qualification due diligence influence asset disposal which was very highly rated with a mean of 4.48. Also, from the study it was established that post qualification due diligence is done in organizations, proper communication of notice to enter contract with the selected bidder is done, immediate release of disposed asset and contract preparation and signing also influence asset disposal as they were highly rated with means of 3.33, 3.22, 3.68 and 3.56.

Based on the study findings, it was noted that prior to the award of the tender, organizations conduct due diligence and present the report in writing to confirm and verify the qualification of the tenderer who submitted the lowest evaluated responsive tender to be awarded the contract. These findings are in harmony with section 83 of Public Procurement and Asset Disposal act (2015) which states that before the award of contract the organization should conduct due diligence may include obtaining confidential references from persons with whom the tenderer has had prior engagement. Also, the study observed that proper communication should be done to notify formally the bidder who has won the contract. This result is in agreement with the Public Procurement and Asset Disposal act (2015) which state that accounting officer of a procuring entity shall notify in writing the person submitting the successful tender that his or her tender has been accepted; the successful bidder shall signify in writing the acceptance of the award within the time frame specified in the notification award.

Likewise, the study noted that upon completion of all the procurement or disposal proceedings organization prepare contract preparation and signing of the contract. This findings concurred with Public Procurement and Asset Disposal act (2015) that Upon completion of all the procurement or disposal proceedings the final stage is contract signing which is covered by sections 134 and 135 of the public procurement and disposal act; the accounting officer shall be responsible for preparation of contracts in line with award decisions; the existence of a contract shall be confirmed through the signature of a contract document incorporating all agreements between the parties and such contract shall be signed by the accounting officer or an officer

authorized in writing by the accounting officer of the procuring entity and the successful tenderer. The tender documents shall be the basis of all procurement and disposal contracts and shall, constitute at a minimum: - contract agreement form; tender form; price schedule or bills of quantities submitted by the tenderer; schedule of requirements; technical specifications; general conditions of the contract; special conditions of the contract and notification of award (PPDA, 2015).

4.4.6 Results of Asset Disposal

The study sought to examine how asset disposal has been managed in energy sector state corporations in Kenya. The respondents were asked to indicate on how they manage asset disposal in energy sector state corporations in Kenya. This was on a scale of very great extent, great extent, moderate, low extent and not at all. The score very great extent represents very high influence of asset disposal and has been taken to be equivalent to mean score of 4.1 to 5.0 on the likert scale. The score great extent represents high influence of asset disposal and is equivalent to a mean score of 3.1 to 4.0. The score moderate represent neutral influence and taken to be equivalent to mean score of 2.1 to 3.0. The low extent scores represent low influence of asset disposal and taken to be equivalent to mean score of 1.1 to 2.0 and the score not at all have been taken to be equivalent to mean score of 0.1 to 1.0. A standard deviation of more than one implies a significant difference in respondents. Results of the analysis is presented in Table 4.8.

Table 4.8: Results of Asset Disposal

Opinion Statements	Not at all (%)	Small extent (%)	Moderate (%)	Great extent (%)	Very Great extent (%)	Mean	Std. deviation
1. In my organization we strive to minimize disposal expenditure	0	0	8	41	51	4.43	.640
2. In my organization after disposal a check is done on the disposal amount vis a vis the evaluation	0	3	14	43	40	4.19	.800
3. In my organization an evaluation is done on the duration taken during disposal of assets	0	2	8	30	60	4.49	.716
4. In my organization an evaluation is down on the duration taken to handover the items disposed	0	0	13	32	56	4.43	.712
5. In my organization an evaluation is done on the process to identify any bottleneck or litigation on the process	0	0	15	34	52	4.37	.730

From the study findings, it was found that organizations strive to minimize disposal expenditure, a check is done on the disposal amount vis a vis the valuation after disposal, evaluation is done the duration taken during disposal of assets, evaluation is

done on the duration taken to hand over the items disposed and evaluation is done on the process to identify any bottlenecks or litigation on the process. All these were rated very highly by respondents with the means of 4.43, 4.19, 4.49, 4.43 and 4.37 respectively. From the study, it was also found that there was no significant difference in the responses of the respondents since the standard deviation was less than one.

These study findings concurred with Gadde (2011) who established that asset disposal should be determined based on the level to which procurement expenditure is minimized, the level of accountability and transparency during the expenditure of procurement funds, and the level of compliance with procurement regulations during the disposal. Also, PPDA (2015) states that procurement and disposal of an asset must be fair, competitive, honest, cost-effective and transparent.

4.5 Diagnostic tests

The diagnostics tests of normality, heteroscedasticity and multicollinearity were conducted and the results below showed that the regression model was fit in the study.

a) Normality of the Dependent Variable

Normality of asset disposal was tested by use of Kolmogorov-Smirnov and Shapiro-Wilk test. The tests results show that the p-value = 0.987 > 0.05 as shown in Table 4.9. The tests reject the hypothesis of normality when the p-value is less than or equal to 0.05 (Sharpiro & Wilk, 1965) illustrating that the standardized residuals was significantly normally distributed.

Table4.9: Normality Test Results for Dependent Variable

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Asset Disposal	.061	111	.200*	.987	111	.390

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

b) Heteroscedasticity

Heteroscedasticity in a study usually happens when the variance of the errors varies across observation, Long and Ervin (2000). Breusch-Pagan and Koenker was used to test the null hypothesis that the error variances are all equal versus the alternative that the error variances are a multiplicative function of one or more variables. Breusch-Pagan and Koenker test the null hypothesis that heteroskedasticity not present (homoskedasticity) if sig-value is less than 0.05, reject the null hypothesis.

A large chi-square value greater than 9.22 would indicate the presence of heteroscedasticity (Sazali, Hashida, Jegak & Raduan, 2009). In this study, the chi-square value was 8.636 indicating that heteroscedasticity was not a concern.

Ho: Constant variance

Variables: Pre-disposal (PD), E-procurement (EP), Procurement Skills (PS), Inventory Management (IM), Post Evaluation Engagement (PEE).

Table 4.10: Breusch-Pagan and Koenker Test for Heteroscedasticity

Ho	Variables	Chi2(1)	Prob > Chi2
Constant Variance	PD, EP , PS, IM and PEE	8.636	0.124

c) Multicollinearity

Multicollinearity is the undesirable situation where the correlations among the independent variables are strong. In other words, multicollinearity misleadingly bloats the standard errors. Thus, it makes some variables statistically insignificant while they should be else significant (Martz, 2013). Tolerance of a respective independent variable is calculated from $1 - R^2$. A tolerance with a value close to 1 means there is little multicollinearity, whereas a value close to 0 suggests that multicollinearity may be a threat (Belsley, Kuh & Welsch, 2004). The reciprocal of the tolerance is known as Variance Inflation Factor (VIF). Equally, the VIF measures

multicollinearity in the model in such a way that if no two independent variables are correlated, then all the VIF values will be 1, that is, there is no multicollinearity among factors. But if VIF value for one of the variables is around or greater than 5, then there is multicollinearity associated with that variable (Martz, 2013).

Table 4.11 indicates the test results for multicollinearity, using both the VIF and tolerance. With VIF values being less than 5, it was concluded that there was no presence of multicollinearity in this study. The VIF shows us how much the variance of the coefficient estimate is being inflated by multicollinearity.

Table 4.11: Multicollinearity Test Results for the Study Variables

Variables	Tolerance	VIF
Pre-disposal Engagement	0.446	2.242
E-procurement	0.477	2.096
Procurement Skills	0.498	2.010
Inventory Management	0.649	1.541
Post evaluation engagement	0.399	2.506

4.6 Correlational Results of study Variables

Correlation is often used to explore the relationship among a group of variables (Pallant, 2010), in turn helping in testing for multicollinearity. That the correlation values are not close to 1 or -1 is an indication that the factors are sufficiently different measures of separate variables (Farndale, Hope-Hailey & Kelliher, 2010). It is also an indication that the variables are not multicollinear. Absence of multicollinearity allows the study to utilize all the independent variables.

Table 4.12 shows that the lowest correlation in this study was between procurement skills practice and asset disposal ($r=0.436$, $p<0.01$). The highest correlation was e-procurement practice and asset disposal ($r=0.825$, $p<0.01$). A correlation of above 0.90 is a strong indication that the variables may be measuring the same thing (Tabachnick & Fidell, 2013). The fact that all the correlations were less than 0.90

was an indication that the factors were sufficiently different measures of separate variables, and consequently, this study utilized all the variables.

Table 4.12: Correlation Matrix

		Pre disposal engagement practice	Post evaluation engagement practice	Inventory management practice	E-procurement practice	Procurement skills practice	Asset Disposal
Pre disposal engagement practice	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	148					
Post evaluation engagement practice	Pearson Correlation	.302**	1				
	Sig. (2-tailed)	.000					
	N	148	148				
Inventory management practice	Pearson Correlation	.437**	.548**	1			
	Sig. (2-tailed)	.000	.000				
	N	148	148	148			
E-procurement practice	Pearson Correlation	.614**	.416**	.686**	1		
	Sig. (2-tailed)	.000	.000	.000			
	N	148	148	148	148		
Procurement skills practice	Pearson Correlation	-.049	.263**	.265**	.364**	1	
	Sig. (2-tailed)	.558	.001	.001	.000		
	N	148	148	148	148	148	
Asset Disposal	Pearson Correlation	.677**	.657**	.701**	.825**	.436**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	

** . Correlation is significant at the 0.01 level (2-tailed).

4.7 Multiple Regression Results

The study used multiple regression analysis to determine the linear statistical relationship between the independent and dependent variables of this study. The entire five null hypotheses as stated in chapter one of this study were tested using regression models.

a) Test of hypothesis 1: There is no significant influence of pre-disposal engagement practice on asset disposal in energy sector state corporations in Kenya.

The study conducted regression analysis so as to investigate the effect of pre-disposal engagement practice on asset disposal in energy sector state corporations in Kenya.

The hypothesis to test for this specific objective was:

H₀₁: There is no significant influence of pre-disposal engagement practice on asset disposal in energy sector state corporations in Kenya.

Table 4.13: Model Summary of pre disposal engagement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.677 ^a	.458	.455	3.285

The linear regression model showed that adjusted $R^2 = 0.455$ which means that 45.5 percent change of asset disposal in energy sector state corporations in Kenya can be explained by a unit change of pre disposal engagement practice. The result is shown in Table 4.13. Also, the result indicated that one unit change in pre disposal engagement translates to 45.5 percent change in asset disposal in energy sector state corporations in Kenya and therefore, pre disposal engagement practice has influence on asset disposal.

Further test on ANOVA showed that the significance of the F-statistic (123.482) is less than 0.05 since p value, $p=0.00$, as indicated in Table 4.14. This implied that there is a positive significant relationship between pre disposal engagement practice and asset disposal in energy sector state corporations in Kenya.

Table 4.14: ANOVA^a of pre disposal engagement

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1332.537	1	1332.537	123.482	.000 ^b
	Residual	1575.537	146	10.791		
	Total	2908.074	147			

a. Dependent Variable: Asset Disposal

b. Predictors: (Constant), Pre disposal engagement practice

Additional test on the beta coefficients of the resulting model, showed that the constant $\beta= 3.884$, if the independent variable of pre disposal engagement practice is held constant then there will be a positive asset disposal in energy sector state corporations in Kenya by 3.884. The regression coefficient for pre disposal engagement practice was positive and significant ($\beta = 0.677$) with a t-value=811.11 (p -value<0.001) implying that for every 1 unit increase in pre disposal engagement practice, asset disposal in energy sector state corporations in Kenya is predicted to increase by 0.677 units and therefore H_{01} was rejected. As shown in Table 4.15.

Table 4.15: Coefficients^a of pre disposal engagement

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
		(Constant)	3.884	1.548		
1	Pre disposal engagement practice	.528	.047	.677	11.112	.000

a. Dependent Variable: Asset Disposal

From the result it is revealed that pre disposal engagement significantly influence asset disposal in energy sector state corporations in Kenya. This finding is in harmony with section 44 of PPDA (2015) that an accounting officer shall ensure that procurement and disposal of goods, works and services of a public entity are with approved budget of the entity. This then means that prior to initiating any procurement or disposal exercises proof of availability of funds to run the whole process is key i.e. budgeting, allocation of budgets and approval. For the purpose of ensuring that the accounting officer’s decisions are made in a systematic and structured way, an accounting officer shall establish systems and procedures to facilitate decision making for procurement and disposal. All procurement processes shall be within the approved budget of the procuring entity and shall be planned by the procuring entity concerned through an annual procurement plan; undertaken by a procuring entity as per the threshold matrix prescribed; and undertaken in strict adherence to article 227 of the constitution, (PPDA, 2015).

b) Test of hypothesis 2: There is no significant influence of e-procurement practice on asset disposal in energy state corporations in Kenya.

The study conducted regression analysis so as to establish the influence of e-procurement practice on asset disposal in energy sector state corporations in Kenya. The hypothesis to test for this specific objective was:

H₀₂: There is no significant influence of e-procurement practice on asset disposal in energy state corporations in Kenya.

Table 4.16: Model Summary of e-procurement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.657 ^a	.431	.428	3.365

a. Predictors: (Constant), e-procurement

The linear regression model showed that adjusted $R^2 = 0.428$ which means that 42.8 percent change of asset disposal in energy sector state corporations in Kenya can be explained by a unit change of e-procurement practice. The result is shown in Table

4.16. Also, the result indicated that one unit change in e-procurement translates to 42.8 percent change in asset disposal in energy sector state corporations in Kenya and therefore, e-procurement practice has influence on asset disposal.

Table 4.17: ANOVA^a of e-procurement

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1254.528	1	1254.528	110.769	.000 ^b
	Residual	1653.546	146	11.326		
	Total	2908.074	147			

a. Dependent Variable: Asset Disposal

b. Predictors: (Constant), E- Procurement practices

Additional test on ANOVA showed that the significance of the F-statistic (110.769) is less than 0.05 since p value, $p=0.00$, as indicated in Table 4.17. This implied that there is a positive significant relationship between e-procurement practice and asset disposal in energy sector state corporations in Kenya.

Table 4.18: Coefficients^a of e-procurement

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.809	2.262		-1.242	.216
	E- Procurement practices	.957	.091	.657	10.525	.000

a. Dependent Variable: Asset Disposal

Further test on the beta coefficients of the resulting model, as shown in Table 4.18, the constant $\beta= 0.657$, if the independent variable of e-procurement practice is held constant then there will be a negative asset disposal in energy sector state corporations in Kenya by 0.657.

The regression coefficient for e-procurement practice was positive and significant ($\beta = 0.657$) with a t-value=10.525 (p-value<0.001) implying that for every 1 unit increase in e-procurement practice, asset disposal in energy sector state corporations in Kenya is predicted to increase by 0.657 units and therefore H_{02} was rejected.

From the results it was established that e-procurement influence positively asset disposal. E-procurement assist organizations in setting out clear criteria in identifying disposable items. E-procurement also helps organizations in buyer prequalification and selection and in record management. These results are in with Chang (2008) that information technology (IT) plays a great role towards supporting adoption of centralized procurement systems in public sector organizations. Matata and Namusonge (2015) established that IT promotes economy and efficiency significant savings of public funds by increasing competition, transparency by making procurement information of all sorts such as bidding opportunities, bidding documents, notices, texts of applicable rules readily available and in diminishing the opportunities for discretion (and hence corruption), and public confidence in the integrity of government.

c) Test of hypothesis 3: There is no significant influence of procurement skills practice on asset disposal in energy sector state corporations in Kenya.

The study conducted regression analysis so as to assess the influence of procurement skills practice on asset disposal in energy sector state corporations in Kenya. The hypothesis to test for this specific objective was:

H_{03} : There is no significant influence of procurement skills practice on asset disposal in energy sector state corporations in Kenya.

Table 4.19: Model Summary of procurement skills

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.701 ^a	.491	.488	3.183

a. Predictors: (Constant), Procurement skills practice

The linear regression model shows $R^2 = 0.488$ which means that 48.8% change of asset disposal in energy sector state corporations in Kenya can be explained by a unit change of procurement skills practice.

Table 4.20: ANOVA^a of procurement skills

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1428.946	1	1428.946	141.047	.000 ^b
	Residual	1479.129	146	10.131		
	Total	2908.074	147			

a. Dependent Variable: Asset Disposal

b. Predictors: (Constant), Procurement skills practice

Further test on ANOVA Table 4.20 shows that the significance of the F-statistic (141.047) is less than 0.05 since p value, $p=0.00$. This implied that there is a positive significant relationship between procurement skills practice and asset disposal in energy sector state corporations in Kenya.

Table 4.21: Coefficients^a of procurement skills

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.119	1.183		6.020	.000
	Procurement skills practice	.977	.082	.701	11.876	.000

a. Dependent Variable: Asset Disposal

More test on the beta coefficients of the resulting model, as shown in Table 4.21, the constant $\beta = 0.701$, if the independent variable of procurement skills practice is held

constant then there will be a negative asset disposal in energy sector state corporations in Kenya by 0.701. The regression coefficient for procurement skills practice was positive and significant ($\beta = 0.701$) with a t-value=11.876 (p-value<0.001) implying that for every 1 unit increase in procurement skills practice, asset disposal in energy sector state corporations in Kenya is predicted to increase by 0.701 units and therefore H_{03} was rejected.

Results from the study shows that procurement skills influence positively asset disposal in energy sector state corporations in Kenya. Organizations that train its procurement officers empower them with skills to dispose assets. Also, organizations encourage its members to belong to a certain professional bodies for the purpose of gaining new knowledge regarding assets disposals and many organizations conduct training needs assessment for their procurement officers annually. These study findings concurred with other previous studies such as Compton (2007) suggested that effective execution of organization procurement procedures greatly depends on the level of employees' training since lack of professional trained staff on procurement functions limits the ability of the organizations to embrace procurement best practices through benchmarking. Andrew (2008) noted that new training ideas are developed because trends are towards making training more practical, realistic and pertaining to employees' jobs. Armstrong (2008) affirms that continuous employees training contribute towards improvement of the level of their competency in the execution of respective job task functions.

d). Test of hypothesis 4: There is no significant influence of inventory management practice on asset disposal in energy sector state corporations in Kenya.

The study conducted regression analysis so as to evaluate the influence of inventory management practice on asset disposal in energy sector state corporations in Kenya. The hypothesis to test for this specific objective was:

H_{04} : There is no significant influence of inventory management practice on asset disposal in energy sector state corporations in Kenya

Table 4.22: Model Summary of inventory management

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.825 ^a	.681	.679	2.520

a. Predictors: (Constant), Inventory management practice

The linear regression model shows $R^2 = 0.679$ which means that 67.9% change of asset disposal in energy sector state corporations in Kenya can be explained by a unit change of inventory management practice. The result is shown in Table 4.22. Also, the result indicated that one unit change in inventory management translates to 67.9 percent change in asset disposal in energy sector state corporations in Kenya and therefore, inventory management practice has influence on asset disposal.

Table 4.23: ANOVA^a of inventory management

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	1980.829	1	1980.829	311.892	.000 ^b
1	Residual	927.246	146	6.351		
	Total	2908.074	147			

a. Dependent Variable: Asset Disposal

b. Predictors: (Constant), Inventory management practice

Additional test on ANOVA in Table 4.23 shows that the significance of the F-statistic (311.89) is less than 0.05 since p value, $p=0.00$. This implied that there is a positive significant relationship between inventory management practice and asset disposal in energy sector state corporations in Kenya.

Table 4.24: Coefficients^a of inventory management

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	-2.472	1.335		-1.852	.066
1 Inventory management practice	1.045	.059	.825	17.660	.000

a. Dependent Variable: Asset Disposal

Extra test on the beta coefficients of the resulting model, in Table 4.24, the constant $\beta = 0.825$, if the independent variable of inventory management practice is held constant then there will be a negative asset disposal in energy sector state corporations in Kenya by 0.825.

The regression coefficient for inventory management practice was positive and significant ($\beta = 0.825$) with a t-value=17.66 (p-value<0.001) implying that for every 1 unit increase in inventory management practice, asset disposal in energy sector state corporations in Kenya is predicted to increase by 0.825 units and therefore H_{04} was rejected.

Results on the inventory management indicates that inventory management practice influence positively asset disposal in energy sector state corporations in Kenya. It was established many organizations they store disposable assets, they have designated storage areas for disposable assets, they constantly update disposable assets, they use economic disposable quantities when disposing assets and classify disposable assets to into hazardous or security as a way of influencing asset disposal.

These results are in agreement with other studies like Susan and Namusonge (2014) noted that when any equipment is unserviceable, its keeping through maintenance costs, storage, parking insurance, among others, may well exceed the returns that can be derived from that piece of equipment and the investment of additional monies.

Section 90 of PPDA (2015) states that, national security organs and other procuring entities that deal with procurements of classified nature shall manage their procurements and disposal on the basis of a dual list maintained by the respective procuring entity as prescribed; procuring entities other than national security organs, that procure classified items shall request the cabinet secretary for approval of the classified list of items annually; the dual list shall distinguish items subject to open and classified procurement and disposal proceedings respectively; procuring entities that deal with classified items shall agree annually with the cabinet secretary on the category of classified items to be included in the classified list of procurements or disposal to be applied; the cabinet secretary shall submit the list of classified items to the cabinet for approval.

e) Test of hypothesis 4: There is no significant influence of post evaluation engagement practice on asset disposal in energy sector state corporations in Kenya.

The study conducted regression analysis so as to examine the influence of post-evaluation engagement practice on asset disposal in energy sector state corporations in Kenya. The hypothesis to test for this specific objective was:

H₀₅: There is no significant influence of post evaluation engagement practices on asset disposal in energy sector state corporations in Kenya.

Table 4.25: Model Summary of post evaluation engagement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.436 ^a	.190	.185	4.016

a. Predictors: (Constant), Post evaluation engagement practice

The linear regression model shows $R^2 = 0.185$ which means that 18.5% change of asset disposal in energy sector state corporations in Kenya can be explained by a unit change of post evaluation engagement practice. The result is shown in Table 4.25. Also, the result indicated that one unit change in post evaluation engagement

translates to 67.9 percent change in asset disposal in energy sector state corporations in Kenya and therefore, post evaluation engagement practice has influence on asset disposal.

Table 4.26: ANOVA^a of post evaluation engagement

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	552.770	1	552.770	34.265	.000 ^b
Residual	2355.305	146	16.132		
Total	2908.074	147			

a. Dependent Variable: Asset Disposal

b. Predictors: (Constant), Post evaluation engagement practice

Further test on ANOVA in Table 4.26 shows that the significance of the F-statistic (34.265) is less than 0.05 since p value, $p=0.00$. This implies that there is a positive significant relationship between post evaluation engagement practice and asset disposal in energy sector state corporations in Kenya.

Table 4.27: Coefficients^a of post evaluation engagement

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1 (Constant)	11.359	1.649		6.888	.000
Post evaluation engagement practice	.374	.064	.436	5.854	.000

a. Dependent Variable: Asset Disposal

Further test on the beta coefficients of the resulting model, as shown above in table 4.27, the constant $\beta= 0.436$, if the independent variable of post evaluation

engagement practice is held constant then there will be a negative asset disposal in energy sector state corporations in Kenya by 0.436.

The regression coefficient for post evaluation engagement practice was positive and significant ($\beta = 0.436$) with a t-value=5.854 (p-value<0.001) implying that for every 1 unit increase in post evaluation engagement practice, asset disposal in energy sector state corporations in Kenya is predicted to increase by 0.436 units and therefore H_{05} was rejected.

From the study findings, it was observed that post evaluation engagement influence asset disposal positively in energy sector state corporations in Kenya. The organizations conduct post qualification due diligence on bidder selection, organizations do communicate to notify the entered contract with suppliers before signing the contracts. These results are in harmony with that that prior to the award of the tender, organizations conduct due diligence and present the report in writing to confirm and verify the qualification of the tenderer who submitted the lowest evaluated responsive tender to be awarded the contract. These findings are in harmony with section 83 of Public Procurement and Asset Disposal act (2015) which states that before the award of contract the organization should conduct due diligence may include obtaining confidential references from persons with whom the tenderer has had prior engagement. Also, Subsection 2, 3, 4 and 5 of section 135 state that; an accounting officer of a procuring entity shall enter into a written contract with the person submitting the successful tender based on the tender documents and any clarifications that emanate from the procurement proceedings; the written contract shall be entered into within the period specified in the notification but not before fourteen days have elapsed following the giving of that notification provided that a contract shall be signed within the tender validity period; no contract is formed between the person submitting the successful tender and the accounting officer of a procuring entity until the written contract is signed by the parties; an accounting officer of a procuring entity shall not enter into a contract with any person or firm unless an award has been made and where a contract has been signed without the authority of the accounting officer, such contract shall be invalid, (PPDA, 2015).

4.8 Overall regression Model

The study was to evaluate relationship between the independent variables and asset disposal. The independent variables were regressed against the dependent variable and the results are as shown in Table 4.28.

Table 4.28: Model Summary of overall model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.936 ^a	.877	.872	1.589

a. Predictors: (Constant), Post evaluation engagement practice, Pre disposal engagement practice, E- Procurement practices, Procurement skills practice, Inventory management practice

The regression analysis shows a strong relationship, $R^2=0.872$ which shows that 87.2 percent of change in asset disposal in energy sector state corporations in Kenya can be explained by a change of one unit of all the predictor variables jointly as shown in Table 4.28.

Table 4.29: ANOVA^a of overall model

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2549.403	5	509.881	201.864	.000 ^b
	Residual	358.672	142	2.526		
	Total	2908.074	147			

a. Dependent Variable: Asset Disposal

b. Predictors: (Constant), Post evaluation engagement practice, Pre disposal engagement practice, E- Procurement practices, Procurement skills practice, Inventory management practice

Test on ANOVA shows that the significance of the F-statistic (201.864) is less than 0.05 since p value, $p=0.00$, as indicated in Table 4.29. This implied that there is a positive significant relationship between independent variables and asset disposal in energy sector state corporations in Kenya. Thus, procurement practices such as pre disposal engagement, e-procurement, procurement skills, inventory management and post evaluation engagement practices influence asset disposal in energy sector state corporations in Kenya.

Table 4.30: Coefficients^a of overall model

Variables	Unstandardized		Standardized		Sig.
	B	Std. Error	Coefficients	t	
(Constant)	-15.005	1.276		-11.763	.000
Pre disposal engagement practice	.270	.032	.347	8.550	.000
E- Procurement practices	.439	.052	.301	8.389	.000
1 Procurement skills practice	.124	.062	.089	2.013	.046
Inventory management practice	.436	.064	.344	6.798	.000
Post evaluation engagement practice	.193	.030	.225	6.493	.000

a. Dependent Variable: Asset Disposal

The estimated multiple regression model to estimate asset disposal

$$Y = -15.005 + 0.270X_1 + 0.439X_2 + 0.124X_3 + 0.436X_4 + 0.193X_5$$

Where:

Y = Asset Disposal

β_0 = Constant or intercept which is the value of dependent variable

when all the independent variables are zero.

β_1 - β_5 = Regression coefficient to be estimated

X_1 = Pre-disposal transaction practices

X_2 = E-procurement practices

X_3 = Procurement Skills practices

X_4 = Inventory management practices

X_5 = Post evaluation engagement practices

From the study findings, it was noted that pre disposal transaction practice influence asset disposal positively by the coefficient of $\beta_1= 0.270$, e-procurement practice influence asset disposal positively by the coefficient of $\beta_2= 0.439$, procurement skills practice influence asset disposal positively by the coefficient of $\beta_3=0.124$, inventory management practice influence asset disposal positively by the coefficient of $\beta_4=0.436$ and post evaluation practice influence asset disposal positively by the coefficient of $\beta_5=0.193$.

4.9 Hypotheses Test Results

All coefficients are significantly different from 0, with p values 0.000, 0.000, 0.046, 0.000 and 0.000, respectively, and are less than $p=0.05$ as summarized in Table 4.31. From the study it was established that e-procurement practice influence asset disposal greatly followed by inventory management practice, pre disposal engagement practice, post evaluation engagement and lastly procurement skills.

Table 4.31: Summary of Hypotheses Test Results

Hypothesis	P Values	Decision
H₀₁ There is no significant influence of pre-disposal engagement practice on asset disposal in energy sector state corporations in Kenya.	0.000	Reject
H₀₂ There is no significant influence of e-procurement practice on asset disposal in energy sector state corporations in Kenya.	0.000	Reject
H₀₃ There is no significant influence of procurement skills practice on asset disposal in energy sector state corporations in Kenya	0.046	Reject
H₀₄ There is no significant influence of inventory management practice on asset disposal in energy sector state corporations in Kenya	0.000	Reject
H₀₅ There is no significant influence of post evaluation engagement practice on asset disposal in energy sector state corporations in Kenya	0.000	Reject

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the major findings of this study and also sets to draw conclusions and make recommendations for practice and suggestions for further research based on the results of this study. This is in line with the purpose of the study which is to evaluate the influence of procurement practices on asset disposal in energy sector state corporations in Kenya.

5.2 Summary

The general objective of this study was to evaluate the influence of procurement practices on asset disposal in energy sector state corporations in Kenya and was guided by the following specific objectives; investigate the influence of pre- disposal engagement practice on asset disposal in energy sector state corporations in Kenya; to establish the influence of e-procurement practice on asset disposal in energy sector state corporations in Kenya; to assess the influence of procurement skills practice on asset disposal in energy sector state corporations in Kenya; to evaluate the influence of inventory management practice on asset disposal in energy sector state corporations in Kenya and to examine the influence of post-evaluation engagement practice on asset disposal in energy sector state corporations in Kenya.

5.2.1 Influence of pre- disposal engagement practice on asset disposal in energy sector state corporations in Kenya.

Pre disposal engagements are transactions or actions that may give a company some inclination beforehand and make them susceptible. Public Procurement Act in section 53 indicates that an accounting officer shall prepare an annual procurement plan which is realistic in a format set out in the regulations within the approved budget prior to commencement of each financial year as part of the annual budget preparation process; all asset disposal shall be planned by the accounting officer concerned through the annual asset disposal plan in a format set out in the

regulations; procurement and asset disposal planning shall be based on indicative or approved budget which shall be integrated with applicable budget process.

Based on the study findings, it was established that many organizations have asset disposal committee. The members of asset disposal committee are drawn from user support departments and are selected based on the integrity of individual persons. Also, disposal committee is formed on ad hoc basis to discharge its duties and once it accomplishes its mandate it is disbanded. However, a few respondents indicated that organizations form disposal committee, but the members are not selected using integrity because it is the prerogative of the chief accounting officer to select the members he or she may wish and some respondents suggested members of the committees should be vetted before they are appointed for the purpose of increasing integrity and accountability. The study also found out that pre disposal engagement practice showed a strong positive correlation ($r=0.677$) with asset disposal in energy sector state corporations in Kenya. This implied that pre disposal engagement practice influence positively asset disposal in energy sector state corporations in Kenya and therefore H_{01} was rejected.

5.2.2 Influence of e-procurement practice on asset disposal in energy sector state corporations in Kenya.

E-procurement practice is a form of technologies that are used to store, create, display and exchange information electronically. The procurement systems provide efficient and extensive cost savings and other business benefits by automating many of the purchasing processes. Organization with effective IT infrastructure can easily automate its procurement functions by implementing an Enterprise Resource Planning (ERP) system. According to the Act of acknowledge the use of information and communication technologies in procurement and asset disposal proceedings in public notifications; submission and opening of tenders; tender evaluation; requesting for information on the tender or disposal process; dissemination of laws, regulations and directives; digital signatures or as may be prescribed by regulations under Section 64 of the Act. Based on the study findings, it was established that organizations have clear and computerised criteria of identifying disposal assets and

prequalified buyers electronically as a way of enhancing procurement reform. This is because information technology (IT) promotes economy and efficiency significant savings of organizations by increasing competition, transparency.

Equally, the study found out that, organizations prequalifies and select suppliers through the use of e-prequalification. This enables organizations to select the right suppliers to engage with and this has enabled the organizations to integrate with all stakeholders in order to execute procurement deals. Therefore, organizations are required good procurement system to assist them in procuring. However, the study established that not all organizations have procurement systems and this has affected these organizations negatively. Lastly, the study found out that organization conduct e-prequalification and organization use records management for identifying the assets to disposed.

Further, the study established that e-procurement had strong positive correlation ($r=0.85$) with asset disposal in energy sector state corporations in Kenya. This showed that e-procurement influence asset disposal in energy sector state corporations in Kenya. Also, tests on linear regression model showed that adjusted $R^2= 0.428$ which means that 42.8 percent change of asset disposal in energy sector state corporations in Kenya can be explained by a unit change of e-procurement practice. This implied that for every 1 unit increase in e-procurement practice, asset disposal in energy sector state corporations in Kenya is predicted to increase by 0.657 units and therefore H_{02} was rejected.

5.2.3 Influence of procurement skills practice on asset disposal in energy sector state corporations in Kenya.

Procurement skills provide effective execution of organization procurement procedures and it is greatly depends on the level of employees' training since lack of professional trained staff on procurement functions limits. Lack of professional training is a key impediment to maintenance of high level of professionalism in the execution of procurement procedures in many public sector organizations. New training ideas are developed because trends are towards making training more practical, realistic and pertaining to employees' jobs. Training must give employees

broader knowledge to enable them to effectively use new technology and integrate it into the workplace. Lower costs, better quality, faster return on investment, increased productivity and long-term growth are all achieved once employees adapt to changes and are trained accordingly.

From the study, it was revealed that membership of professional body influence asset disposal in organisation. This is because public procurement and asset disposal act clearly states that a procurement function shall be handled by procurement professionals whose qualifications are recognized in Kenya. Also, the study established that training of procurement officers is important especially in areas of their requirements and therefore, organization do conduct needs assessment annually to ascertain. Likewise procurement officers are encouraged to associate themselves to various organizational bodies. Although some respondents rated low influence that training needs of procurement officers are not assessed on annually basis. Thus some respondents suggested that organizations should conduct benchmarking to other institutions as alternative of training procurement officers. Despite the fact that majority of respondents indicated rated very highly on professional membership encouragement influence asset disposal, some respondents indicated rated low influence. This implies that not all professional membership body would influence asset disposal.

The study also, established that procurement skills practice moderately correlates ($r=0.436$) positively with asset disposal in energy sector state corporations in Kenya. Additional tests on the linear regression model showed $R^2= 0.488$ which means that 48.8% change of asset disposal in energy sector state corporations in Kenya can be explained by a unit change of procurement skills practice. The regression coefficient for procurement skills practice was positive and significant ($\beta = 0.701$) with a t -value= 11.876 (p -value <0.001) implying that for every 1 unit increase in procurement skills practice, asset disposal in energy sector state corporations in Kenya is predicted to increase by 0.701 units and therefore H_{03} was rejected.

5.2.4 Influence of inventory management practice on asset disposal in energy sector state corporations in Kenya.

Inventory management is the process of efficiently overseeing the constant flow of units into and out of an existing inventory. This process usually involves controlling the transfer of units in order to prevent the inventory from becoming too high, or dwindling to levels that could put the operation of the company into jeopardy. In addition to maintaining control of the volume and movement of various inventories, inventory management also makes it possible to prepare accurate records that are used for accessing any taxes due on each inventory type. Without precise data regarding unit volumes within each phase of the overall operation, the company cannot accurately calculate the tax amounts.

From the study findings, it was observed that disposable assets are constantly updated, are classified as hazardous and highly influence asset disposable in organization. Moreover, the study found out that storage of disposable assets was given a priority in organizations and organizations have designated areas for disposable materials and economic disposable quantities determine assets disposal in organization. However, some respondents suggested that organizations can lease to the public, contract and auction as the fastest way of disposing assets.

The study also established that there was strong positive correlation ($r=0.701$) between inventory management and asset disposal in energy sector state corporations in Kenya. Further test on linear regression model showed $R^2= 0.679$ which means that 67.9% change of asset disposal in energy sector state corporations in Kenya can be explained by a unit change of inventory management practice. Hence this implied that for every 1 unit increase in inventory management practice, asset disposal in energy sector state corporations in ` present the report in writing to confirm and verify the qualification of the tenderer who submitted the lowest evaluated responsive tender to be awarded the contract in accordance with the act under section 83; the conduct of due diligence may include obtaining confidential references from persons with whom the tenderer has had prior engagement.

Based on the study findings, it was noted that prior to the award of the tender, organizations conduct due diligence and present the report in writing to confirm and verify the qualification of the tenderer who submitted the lowest evaluated responsive tender to be awarded the contract. However, the study observed that proper communication is not done to notify formally to all bidder who has won the contract. Also, some respondents noted some organizations do not deliver the disposed asset immediately. In addition, the study noted that upon completion of all the procurement or disposal proceedings organization prepare contract preparation and signing of the contract.

The study established that a positive correlation ($r=0.657$) between post engagement practice and asset disposal in energy sector state corporations in Kenya. Also, the linear regression model showed $R^2= 0.185$ which means that 18.5% change of asset disposal in energy sector state corporations in Kenya can be explained by a unit change of post evaluation. The regression coefficient for post evaluation engagement practice was positive and significant ($\beta = 0.436$) with a t -value=5.854 (p -value<0.001) implying that for every 1 unit increase in post evaluation engagement practice, asset disposal in energy sector state corporations in Kenya is predicted to increase by 0.436 units and therefore H_{05} was rejected.

5.3 Conclusions

This will give an overall view of the study finding and conclusions drawn thereof as a result of the analysis carried out.

5.3.1 Influence of pre- disposal engagement practice on asset disposal in energy sector state corporations in Kenya.

From the study findings, it could be concluded that many organizations have asset disposal committee and the members of asset disposal committee are drawn from user support departments. It could also be concluded that disposal committee is formed on ad hoc basis to discharge its duties and once it accomplishes its mandate it is disbanded. However, the study concludes that the disposal committee members are not selected objectively. Lastly the study concludes that pre disposal engagement

practice had a strong positive correlation with asset disposal in energy sector state corporations in Kenya. This implied that pre disposal engagement practice influence positively asset disposal in energy sector state corporations in Kenya and therefore H_{01} was rejected.

5.3.2 Influence of e-procurement practice on asset disposal in energy sector state corporations in Kenya.

On e-procurement, the study concludes that most organizations prequalifies and select suppliers through the use of e-prequalification. This enables organizations to select the right suppliers to engage with and this has enabled the organizations to integrate with all stakeholders in order to execute procurement deals. Therefore, the study concludes that organizations are required good procurement system to assist them in procuring. Likewise the study concludes that organization conduct e-prequalification and organization use records management for identifying the assets to disposed. Further, the study concludes that e-procurement had strong positive correlation with asset disposal in energy sector state corporations in Kenya. This showed that e-procurement influence asset disposal in energy sector state corporations in Kenya and therefore H_{02} was rejected.

5.3.3 Influence of procurement skills practice on asset disposal in energy sector state corporations in Kenya.

On procurement skills practice, the study concludes that membership of professional body influence asset disposal in organisation. The study concludes that training of procurement officers is important especially in areas of their requirements and therefore, organization do conduct needs assessment annually to ascertain. The study also, concludes that although professional membership is encouraged but these professional memberships do not influence the training needs of procurement officers. Thus the study concludes that organizations should conduct benchmarking to other institutions as alternative of training procurement officers. Lastly the study concludes that procurement skills practice moderately correlation positively with asset disposal in energy sector state corporations in Kenya. The regression

coefficient for procurement skills practice was positive and significant and therefore H_{03} was rejected.

5.3.4 Influence of inventory management practice on asset disposal in energy sector state corporations in Kenya.

From the study findings, it can be concluded that disposable assets in organizations are constantly updated and are classified as hazardous and highly influence asset disposal in organization. Also, the study concludes that storage of disposable assets is given a priority in organizations and organizations have designated areas for disposable materials. The study concludes that economic disposable quantities determine assets disposal in organization. Equally, the study concludes that organizations should lease disposable assets to the public, contract and auction as the fastest way of disposing. Finally, the study concludes that inventory management practice positively influence asset disposal in energy sector state corporations in Kenya and therefore H_{04} was rejected.

5.3.5 Influence of post evaluation engagement practice on asset disposal in energy sector state corporations in Kenya.

Based on the study findings, the study concludes that prior to the award of the tender, organizations conduct due diligence and present the report in writing to confirm and verify the qualification of the tenderer who submitted the lowest evaluated responsive tender to be awarded the contract. Also, the study concludes that proper communication is not done to notify formally to all bidder who has won the contract and some organizations do not deliver the disposed asset immediately after completion of the contract. The study concludes that upon completion of all the procurement or disposal proceedings organization prepare contract details and signing of the contract is done. Lastly, study concluded that that a positive correlation between post engagement practice and asset disposal in energy sector state corporations in Kenya and hence H_{05} was rejected.

5.4 Recommendations

The study suggested the following recommendations:-

5.4.1 Managerial recommendations

The study established that many organizations have asset disposal committee and the members of asset disposal committee are drawn from user and support departments and the disposal committee is formed on ad hoc basis to discharge its duties and once it accomplishes its mandate it is disbanded. However, the study noted that the disposal committee members are not selected objectively and therefore, the study recommends in future organizations should consider selecting disposal committee members objectively by doing thorough consultation with the user departments and any department which may be affected indirectly in the assets disposal process.

On e-procurement, the study found out that most organizations prequalifies and select suppliers through the use of e-prequalification. However, the study established that some organizations do not have good procurement systems to assist them in procuring and asset disposal. Therefore, the study recommends that organizations should put in place good procurement system to assist them in procuring and asset disposal. The study also, recommends that organizations should embrace e-procurement practice since it influences positively asset disposal in energy sector state corporations in Kenya.

Regarding procurement skills practice, the study established that training of procurement officers is important especially in areas of their requirements and therefore study recommends that organization should conduct needs assessment to establish areas of training. The study also recommends that organizations should conduct benchmarking to other institutions as alternative of training procurement officers.

The study recommends that disposable assets in organizations should be constantly updated and classified according to its state for example as hazardous because they highly influence asset disposable in organizations. Also, the study recommends that

storage of disposable assets should be given a priority in organization and organizations should have designated areas for disposable materials. Equally, the study recommends that organizations should lease disposable assets to the public, contract and auction as the fastest way of disposing. Finally, the study established that proper communication is not done to notify formally a bidder who has won the contract and some organizations do not deliver the disposed asset immediately after completion of the contract. Thus, the study recommends that upon completion of all the procurement or disposal proceedings organization should prepare contract details and signing of the contract be done and organizations deliver the disposed asset immediately after completion of the contract.

5.4.2 Policy recommendations

Procurement plays a crucial role in an organization's profitability and enhances shareholders value and public sector organizations are expected to achieve high performance standards in public provision. From the study finding it was established that procurement practices such as pre disposal engagement, e-procurement, procurement skills, inventory management skills and post evaluation engagement practices positively influence asset disposal in energy sector state corporations in Kenya. Thus study recommends that organizations should embrace these practices to achieve good asset disposal. The study also recommends to the policy makers like the government to come up with a good policy of selecting members of asset disposal committee. This can be done by allowing proper vetting of members before they are allowed to participate in the committee. Another policy recommendation would be for the government to consider central disposal of assets and an independent disposal authority or agency.

5.5 Areas for further research

Although this study came up with meaningful results, there were other avenues for further research. The study was confined to a literature review that only proposes pre disposal engagement, e-procurement, procurement skills, inventory management and post evaluation engagement practices and the theories that support these five variables. Thus, empirical work that actually demonstrates the whole of asset

disposal is beyond the scope of the five variables identified in the study. Therefore, similar study should be conducted using different variables to establish which other variables influences asset disposal in energy sector state corporations in Kenya.

Similarly, the data was collected from state corporations in Kenya. There are various private energy sectors in Kenya. Thus, informant representatives of participating energy sector state corporations in Kenya may be biased. This study recommends a similar research to be conducted from multiple informants groups of energy sectors in Kenya to come up with a variety of outcomes. Likewise, the study adopted mixed qualitative and quantitative design which was limited to point-in-time assessment. Therefore, future research can be conducted using longitudinal research so as to identify factors which contribute to asset disposal in energy sector state corporations in Kenya.

It is a well-known fact that for every empirical research, the results were always based on self-reported data of the best informed managers. As much as it was assumed that senior managers were adequate for reliable and valid data, the information that a parastatal generated was not the only source of information about its degree of procurement practices and asset. It might be useful to put together managers' responses to questionnaires with views held by its pre-qualified suppliers and bidders on its asset disposal. There could be exaggerated positions from self-reported data especially if secondary data was lacking for cross validation. Therefore future research could put together the viewpoints of pre-qualified suppliers and bidders. It was appropriate to conclude that a study that will take the pre-qualified suppliers and bidders' perspective for measuring procurement practices and asset disposal could be justifiable.

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APPENDICES

Appendix I: Introduction Letter

10th March, 2018

Dear Sir/Madam,

RE: REQUEST TO FILL THE ATTACHED QUESTIONNAIRE

My name is Robert Bomba Mahaga, a PhD student at Jomo Kenyatta University of Agriculture and Technology (JKUAT). I am undertaking a research proposal on influence of procurement practices on asset disposal in energy sector state corporations in Kenya. To this end I kindly request that you complete the following short questionnaire in assisting me carry out the study. All information given will be treated as confidential and will only be used for academic purposes and reported as mathematical averages, variances and correlations.

Should you have any queries or comments regarding this survey, you are welcome to contact me on 0722415545, 0733824937 or e-mail rmahaga@kplc.co.ke.

Thank you

Yours sincerely,

Robert Bomba Mahaga

PhD Candidate

Appendix II: Research Questionnaire

My name is Robert Bomba Mahaga, a PhD candidate in the School of Human Resource Development at the Jomo Kenyatta University of Agriculture and Technology. I am conducting a research study concerning “**the influence of procurement practices on asset disposal in energy sector state corporations in Kenya**”, and since you are the most informed person on your parastatals disposal trends, I have selected you as my study respondent. Please, take a few minutes to answer the questions in this questionnaire. I assure you that your answers will be kept completely **confidential** and will be used for academic purposes only.

Instructions:

1. Kindly answer all questions and use any other pen other than pencil for the exercise.
2. Please mark (✓) in front of the answer as it deems appropriate.

SECTION A: Pre -Disposal Engagement Practice

Please, indicate with a tick the extent to which the parastatal's Pre Disposal Transactions Practice influence asset disposal.

Pre Disposal Engagement Practice	5	4	3	2	1
	To a very great extent	To a great extent	Moderate extent	To a low Extent	Not at all
Q.3. In our organization we have asset disposal committee					
Q.4. In our organization the asset disposal committee is permanent					
Q.5. In our organization the asset disposal committee is ad hoc i.e. set up as and when required					
Q.6. In our organization the selection and composition of the committee influence asset disposal.					
Q.7. In our organization transparency between user departments and procurement is mandatory					
Q.8. In our organization transparency in the working of the committee influence asset disposal					
Q.9. In our organization persons with integrity from user and support departments make the disposal team					
Q.10 In our organization the integrity of the committee influence asset disposal					

SECTION B: E-Procurement Practice

Please tick the extent to which E procurement practice influence asset disposal of your parastatal.

E- Procurement Practice	5	4	3	2	1
	very great	great	moderat	low	Not at all
Q.11. In our organization there is a clear and computerized criteria of identifying disposable assets					
Q.12. In our organization if e-planning influence asset disposal					
Q.13 In our organization prequalification and selection of buyers is done for a given period					
Q.14. In our organization the E- prequalification and selection of buyers influence asset disposal					
Q.15. In our organization a clear records management is used for all procurement documents					
Q.16. In our organization records management influence asset disposal					

SECTION C: Procurement Skills Practice

Over the last five years how has Procurement Skills Practice influenced asset disposal of your parastatal? (Tick as appropriate)

Opinion statements	5	4	3	2	1
Procurement Skills Practice	great	Great	extent	extent	Not at all
Q 17. In our organization training needs and training is done annually					
Q18. In our organization training influences asset disposal.					
Q19. In our organization professional membership or association is encouraged					
Q20. In our organization membership of a professional body influence asset disposal					
Q21. In our organization disposal agents are used in specialized cases that are not repetitive					
Q22. In our organization the use of disposal agents influence asset disposal					

SECTION D: Inventory Management Practice

Over the last five years how has Inventory Management Practice influenced asset disposal of your parastatal? (Tick as appropriate)

	5	4	3	2	1
Inventory management practice	Very great	Great extent	Moderate	Low extent	No
Q 23. In our organization storage of disposable assets is a priority					
Q 24 In our organization storage of disposable equipment influence asset disposal					
Q 25. In our organization there are pre-determined economic disposal quantities					
Q 26. In our organization economic disposal quantities influence asset disposal					
Q 27. In our organization disposable assets are classified (hazardous/security)					
Q28. In our organization classified assets influence asset disposal					

SECTION E: Post Evaluation Engagement Practice

Please, indicate the extent to which post evaluation engagement practice influence asset disposal of your parastatal.

	5	4	3	2	1
Post Evaluation Engagement Practice	Very	Great	moderat	small	Not at
Q.29. In our organization there is post qualification due diligence done on the selected bidder					
Q.30. In our organization post qualification due diligence influence asset disposal					
Q.31. In our organization notification to enter contract is mandatory for the selected bidder					
Q.32. In our organization proper communication of notice to enter contract with the selected bidder influence asset disposal					
Q.33. In our organization preparation of contract is done prior to taking ownership of the disposed asset					
Q.34. In our organization contract preparation and signing influence asset disposal					

SECTION F: Asset Disposal

Over the last five years how has your parastatal been managing asset disposal?

(Tick as appropriate).

	5	4	3	2	1
Asset Disposal	Very great		Moderate extent	Low extent	No extent at all
Q.35. In my organization we strive to minimize disposal expenditure					
Q.36. In my organization after disposal a check is done on the disposal amount vis a vis the valuation					
Q.37. In my organization an evaluation is done on the duration taken during disposal of assets					
Q38. In my organization an evaluation is done on the duration taken to handover the items disposed					
Q.39. In my organization an evaluation is done on the process to identify any bottlenecks or litigation on the process					

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Q.40. In your own opinion, how could the institution management improve on committee selection methods?

Q.41. What in your opinion would enhance competitive bidding to improve the return on asset disposal?.....

Q.42. In your own opinion, how could the management train the procurement staff in the institution?

Q.43. What ways would you recommend for faster disposal asset identification?

Q44. How does procurement policies affect asset disposal in your organization?

Q45. How does changes in PPDA affect asset disposal in your organization?

Q46. What have been the disposal trends in your organization in the last 3 years?

	2015 (Kshs. M)	2016 (Kshs. M)	2017 (Kshs. M)
Disposable Assets			
Disposed Assets			
Return on Disposal			

Thank you for your contribution, time and effort.

END

Appendix III: Research Authorization



Central Office – P.O. Box 30099 – 001004

Telephone – 254 – 02 – 3201000

KP1/51/6/1/SA/ca

4th June, 2018

Robert Mahag S/N 14572

COAST REGION

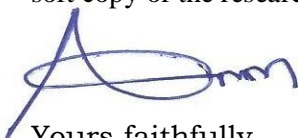
KILIFI

Dear Robert,

RE: RESEARCH AUTHORIZATION

Following your request for authority to carry our research on Influence of procurement practices on asset disposal in energy sector state corporations in Kenya, and also being a company sponsored course, we hereby authorize you to undertake the same from staff in ICT, Finance and Procurement departments.

On completion of the research you are expected to submit two (2) hard copies and one (1) soft copy of the research to our office..

A handwritten signature in blue ink, appearing to be 'A. Omondi'.

Yours faithfully,

For: THE KENYA POWER & LIGHTING CO. LTD

**Appendix IV: Sampling Frame -Full List of Energy Sector State Corporations
in Kenya**

NO	COMPANY NAME	TEL	EMAIL
	Kenya Power & Lighting Company Ltd Stima Plaza, Kolobo Road	+254203201000	customercare@kplc.com
	Kenya Electricity Generating Company Ltd Stima Plaza, Kolobot Rd.	+254203666000	info@kengen.co.ke
	Kenya Electricity Transmission Company Ltd Kawi complex, Block B Popo Lane, Off Red Cross Road, South C	+254204956000	info@ketraco.co.ke
	Rural Electrification Authority Kawi complex, Block B Popo Lane, Off Red Cross Road, South C	+25470919300	info@rea.co.ke
	Geothermal Development Company Ltd Kawi complex, Block B Popo Lane, Off Red Cross Road, South C	+254719037000	info@gde.co.ke

Source: GOK (2013). Presidential Review Committee on State Owned Entities