

**INFLUENCE OF SOURCING ETHICS ON
PROCUREMENT PERFORMANCE OF STATE
CORPORATIONS IN KENYA**

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**Influence of Sourcing Ethics on Procurement Performance of 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

To my parents James Kitheka and Jackline Kitheka and to my wife Carol and daughter
Jacklyne Samuel

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ABBREVIATIONS AND ACRONYMS

AGPO:	Access to Government Procurement Opportunities
ANOVA:	Analysis of Variance
CIPS:	Chattered Institute and Purchasing and Supply
EPC:	Ethical Policies and Codes
FSOB:	Foster School of Business
GOK:	Government of Kenya
ICC:	International Chambers of Commerce
ICT:	Information Communication Technology
ITC:	International Trade Centre
KHRC:	Kenya Human Rights Commission
KAA:	Kenya Airports Authority
KIA:	Kenya Institute of Administration
KISM:	Kenya Institute of Supplies Management
KPLC:	Kenya Power and Lighting Company
NGOs:	Non-Governmental Organizations
NHIF:	National Hospital Insurance Fund
PJ:	procedural Justice

PLUM:	Polytomous Universal Model
PP:	Procurement Performance
PPADA:	Public Procurement and Asset Disposal Act
PPDA:	Public Procurement and Disposal Act
PPDR:	Public Procurement and Disposal Regulations
PPOA:	Public Procurement and Oversight Authority
PPRA:	Public Procurement Regulatory Authority
RFQ:	Request for Quotation
SC:	Supply Chain
SCM:	Supply Chain Management
SD:	Supplier Diversity
SMEs:	Small and Medium Enterprises
SPSS:	Statistical Package for Social Sciences
SSE:	Supplier Selection Ethics
TPB:	Theory of Planned Behaviour
UNCITRAL:	United Nations Commission on International Trade Law
UK:	United Kingdom
VIF:	Variance Inflation Factor

OPERATIONAL DEFINITION OF TERMS

- Ethics:** Ethics refers to conforming to the accepted professional standards. It involves morality as a principle, values and norms that apply to our lives (Hashim, 2012).
- Ethical Codes and Policies:** Statements setting down corporate principles, ethics, rules of conduct, codes of practice or philosophy concerning responsibility to employees, shareholders, consumers, the environment, or any other societal aspects external to the firm (Jang, 2015).
- Probity:** Probity in procurement relates to fairness, impartiality and integrity of the process. Consistency in the treatment of, and interaction with potential suppliers is important in ensuring probity standards are met (PPOA, 2009).
- Procedural Justice:** The perception of fairness of formal procedures used for decision making and it focuses on the means (procedures) by which outcomes arise from the interaction between parties to an exchange (Nicholas, Monder & Nada, 2015).
- Procurement Performance:** Process through which the efficiency, effectiveness, transparency and quality of products is quantified. It measures how well a firm's procurement function achieves set goals and objectives (Sabiiti, Muhumuza & Basheka, 2011).

Public Procurement:	This is the acquisition by purchase, rental, lease hire purchase, licence, tenancy, franchise or by any other contractual means of any type of works, assets, services or goods by procuring entities using public funds (GOK, 2015).
Sourcing:	The entire set of business processes required to procure goods and services and for any supply chain function, the most significant decision being whether to outsource the function or make it in-house (Chopra & Meindl, 2012).
Sourcing Ethics	Process by which a firm at one stage of the supply chain takes responsibility for the ethical, social and environmental performance at other stages of the supply chain (Arruda, Wanjiru & Bird, 2010).
Supplier Diversity:	Process that intentionally aims at increasing the number of minority owned businesses that supply goods and services to the private and public sectors, either directly or as part of a wider emphasis on smaller enterprises (Beavers & Werblin, 2014).
Supplier Selection:	The process of picking up a vendor who is capable of delivering goods/services of the right quality and the right price, at the right place and at the right time (Vikas & Ramesh, 2015).

Supplier Selection Ethics: The extent to which procurement managers consider ethical, social and environmental criteria when choosing suppliers for their organizations (Goebel, Reuter, Pibernik & Sichtmann, 2012).

Unethical Behaviour: All kinds of irregular, or unprofessional practices and transactions, dealings and activities in the process of handling public or commercial transactions or in the execution of official duties (Osei, Badu & Owusu, 2010).

ABSTRACT

The main objective of this study was to find out the influence of sourcing ethics on procurement performance of Kenyan state corporations. Specifically, it sought to determine whether supplier selection ethics, ethical policies and codes, procedural justice and supplier diversity influence the procurement performance in Kenyan state corporations. It also sought to determine the moderating effect of organizational size on relationship between sourcing ethics and procurement performance. The inadequacy of literature on sourcing ethics, little attention in terms of research and the unethical behaviours witnessed in the Kenyan public procurement system provided the gap for this study. The main limitations of the study were that some of the respondents were unwilling to give the required information, and the study covered only state corporations leaving out county governments which are also considered public. Theories used were the theory of justice, Kantian ethics and the theory of planned behavior. The Guy's model at the work place and the Hunt-Vitell Ethical models were also used to support the study. The study employed a mixed research design and the study population was the procurement managers in the state corporations' procurement departments. A census study of all state corporations in Kenya was carried out. The study used a pragmatic research philosophy which is deemed to be most appropriate for the mixed methods research design adopted by the study. Data was collected using questionnaires which were self-administered by the researcher. Cronbach's alpha (α) reliability test was used to assess internal consistency of measurements. Data was collected from all the 170 procurement heads in all Kenyan state corporations. Descriptive statistics such as standard deviations and means were used and the inferential statistics used included Pearson correlation, analysis of variance, and ordinal regression analysis. Findings of the study showed that supplier selection ethics, ethical policies and codes, procedural justice and supplier diversity had significant and positive effect on procurement performance of the Kenyan state corporations. The regression results showed that procurement performance was significantly influenced by sourcing ethics. The study rejected the first four null hypotheses and concluded that the state corporations should adopt ethical sourcing

practices to improve procurement performance. It was established that organizational size does not significantly moderate the relationship between sourcing ethics and procurement performance. The study recommends that state corporations should regularly assess child and forced labour, ensure fairness in the sourcing processes, establish supplier appraisal audit policies and corruption prevention committees, adopt ethical guidelines by regulatory and professional bodies, ensure ethical use of information technology in procurement, as well as investing in the right information technology infrastructure to boost fairness and transparency in the procurement processes. The study also gave suggestions for further research.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Sourcing involves identifying, selecting, and developing suppliers. Strategic sourcing is concerned with formulation of long term purchasing policies and the supplier base. (Kenneth & Brian, 2012). One important consideration in designing a supply chain is the sourcing decision, that is, where to obtain your materials, in what quantities and at what time. Williem, Rijpkema, Rossi and Vosti (2014) explain that the sourcing strategy encompasses a variety of factors, including the number of suppliers that will be contracted, the type of relationship that will be pursued with the suppliers and the type and conditions of contracts that will be negotiated.

Firms can opt to use either single sourcing or multiple sourcing but more and more managers are recognizing the advantages of developing a close collaborative relationship with their suppliers. Multiple sourcing is considered to be the most suitable strategy in order to maintain equilibrium among them and reinforce the relationships. However, the choice of multiple sourcing for a firm depends on the trade-off between the benefits of multiple sourcing and those of single sourcing (Konstantinos, Vrassidas, George & Dimitra, 2010). According to Zeng (2017) using few or single supplier helps firms to maintain a competitive advantage over competitors and thus effective supplier selection has become a vital responsibility for the procurement function.

For some supplies, single sourcing may be too risky and therefore organizations may opt for dual sourcing where the firms use only two suppliers who may be treated differently, or similarly (on equal footing) or major-minor split of business opportunities depending on their capabilities. Constantino (2016) explains that dual sourcing is very important at a strategic level, especially when there are risks that may cause incapability or

unavailability of suppliers to provide required goods and services. In dual sourcing, firms use one main supplier that meets most of the orders and other secondary suppliers.

Many firms are also resorting to partnership sourcing where the buyers and sellers commit to ensure that there is continuous improvement and shared benefits through effective communication and collaboration to solve problems (McIvor, 2018). In partnership sources, the focus in the buyer-seller relationship shifts from price to minimizing total supply chain costs. According to Kenneth and Brian (2012) partnership sourcing is characterized by close working relationships between buying and selling firms, built on trust, open communication and mutual dependency. Farrell (2010) further explains that partnership sourcing is a collaborative approach in which buyers and suppliers work closely together, sharing risks and benefits.

Sourcing ethics focuses on conducting procurement activities at the highest possible standards of responsible, sustainable and socially responsible business practice. Companies across industries include ethical sourcing policies in their operational standards and principles. While the primary goal is to ensure that products/goods and services are procured and delivered ethically, responsibility extends beyond the act of sourcing goods and services. It also includes the processes of evaluating and engaging with a supply market through to managing relationships with suppliers. Not only has sourcing ethics become a mantra for mitigation of operational risk and protection of brand reputation, it also represents a means to gaining competitive advantage. If you are deploying best practice, your competitor's failure to source ethically can result in your competitive gain (CIPS, 2013). Sourcing ethics relates to conduct of state employees and their representatives in managing the sourcing processes. Sourcing ethics may include focusing on confidentiality, impartiality, fairness, appropriately competitive processes, consistency, transparency, avoiding conflicts of interest and compliance with procurement law. Sourcing ethics also concerns ensuring that suppliers conduct their businesses ethically (Government of South Australia, 2018).

Chopra and Meindl (2012) explain sourcing as the set of processes required to acquire goods and services and for any supply chain function, the most important decision being whether to outsource the function or make it in-house. The subject of sourcing ethics has been raised in many press articles and the major issues highlighted include child labour, minimum wages, and excessive overtime and workers' health and safety. As a responsible corporation or corporate citizen, a strong reputation with potential employees, customers and regulators can help sourcing companies build trust with suppliers. Governments are increasingly taking an interest in the sourcing ethics agenda. The Department for International Development (DFID) provides financial support for ethical trading initiative and has produced a report reviewing the codes of conduct of UK companies concerning sourcing ethics. The Organization for Economic Co-operation and Development (OECD) has agreed guidelines for multinational enterprises which cover a wide range of ethical and social issues (CIPS, 2013).

Wade (2013) in his study of Starbucks Coffee Company established that the suppliers are required to comply and expected to exceed local employment and environmental laws and regulations. He also emphasized on zero tolerance of any forced or involuntary labour either directly or indirectly by the suppliers, contractors or subcontractors. On environmental protection, the suppliers should establish and implement safety practices and standards for the identification and handling of hazardous waste, and suppliers must provide transparency into their operations and relevant records.

Contrary to private procurement, public procurement is operated within a political system and has therefore a great consideration for integrity, accountability, national interest and effectiveness (PPOA, 2009). Sourcing decisions in the Kenyan state corporations should therefore be guided by the applicable sourcing ethics as outlined in the Kenya's public procurement and asset disposal Act (PPADA), 2015 as well as the Public procurement and disposal regulations (PPDR), 2006. Mlinga (2010) explains that provisions under public procurement, if adhered to can go a long way towards solving problems of ethics in procurement. In order to ensure that the government owned entities

effectively compete with their private sector peers, the presidential taskforce on parastatal reforms recommended that the public procurement and disposal of goods and services framework be reviewed to free the public entities from any encumbrances while retaining fidelity to the constitution of Kenya 2010 (GOK, 2013).

Unethical behavior is defined as acts committed at high levels of government that distort policies or the central functioning of the state, enabling leaders to benefit at the expense of public good (Lindskog, Staffan & Brehmer, 2010). The applicable ethics in public procurement which the government owned entities must also adhere to include avoidance of collusion, avoidance of conflict of interest, equal opportunity, confidentiality and limited disclosure, avoidance of fraudulent practices, and avoidance of obstruction and undue delay in procurement processes (GOK, 2015).

Leenders, Johnson, Flynn and Fearon (2014) explain that in order to achieve value for money and to effectively contribute to the efficient service delivery, public procurement practice must adopt a strong ethical bent. It must be practiced so as to be void of leakages and loss, corruption and vendor favoritism. The way to address these concerns is by adopting a strong sense of ethics such as avoiding collusion, discouraging fake competition, removing any arbitrariness from the bid evaluation process, ensuring that the goods and services received reflect the precise quantities actually delivered and using slicing to avoid adopting the appropriate procurement method.

Kimaiyo (2012) narrates that the Kenyan public procurement system, has evolved from a crude system, with no regulations to an orderly legally regulated procurement system currently in use. However, many times the procurement process is complicated with disputable settlement mechanisms relating to tender awards, procedures unfairness, and lack of transparency. Many public entities experience difficulties during prequalification, staging competitive procurement process, warehousing supplies, carrying out quality assurance, clearing at customs, over and under-invoicing in imports and availing adequate finances equivalent to available resources.

Sabiiti *et al.* (2011) define procurement performance as a process of quantifying efficiency, effectiveness, transparency and acquisition of quality goods and services. According to Namukasa (2017) the public sector score card underpins procurement performance. The public sector core card measures performance in terms of achieving corporate objectives, user satisfaction, achieving organizational excellence, meeting financial targets, learning and innovation. Procurement performance defines the ability of the procurement function in any firm to meet its objectives through good management, effective governance and commitment towards achieving results. Muiruri and Kihara (2018) however explain that performance of procurement function pertains to adherence to both internal and external audits rather than to the procurements' functions general efficiency. Effective procurement performance measurement leads to benefits such as reduction in cost, more profits, enhanced supplier performance and competitive advantage.

Procurement performance is evaluated by whether the firm receives competitive bids, and whether purchase price savings are higher than expected. A common success measure in procurement has also been the percent of savings achieved. However, by using this measure one would only focus on the price aspect of the sourcing event, neglecting some of the other objectives that may have been pursued, and which may have actually led to a higher price (Schoenherr & Mobet, 2011). Musau (2016) also explains that procurement performance can be measured by using the saving tracking scorecard. This will help in tracking progress in meeting financial goals and quantifying the value of procurement's contribution to the organization. Performance varies widely across all of the procurement's key value drivers e.g. spend coverage, sourcing programme velocity, sourcing project yields and outcomes, compliance rates and operating costs regardless of the company size, industry or spend mix. Ayieko and Kinoti (2018) explain that many organizations desire effective procurement performance for efficiency and cost reductions and this is important for survival and growth for many firms.

Supply chain performance (public procurement included) can be assessed on the basis of cost measures, activity measures, customer responsiveness and flexibility (Wambaya, Oketch, Namusonge & Sakwa, 2018). Procurement is not just about reducing cost. Regardless of whether the organization has an in-house sourcing team or engages external suppliers, the procurement ‘middlemen’ facilitate much more than sourcing the cheapest vendors, receiving externally procured goods or overseeing orders and approving payment (Thomas, 2014). Procurement therefore plays a central role to profitability and performance and its focus is fast shifting from cost centric approach to a larger recognition of the importance of procurement relationships. The field of supply chain management and in particular procurement is quite vulnerable to ethical issues, majorly because procurement personnel are entrusted to spend huge financial resources in many firms (Rottig, Koufteros & Umphress, 2011). The procurement professionals are highly exposed to external organizational environment, representing an important risk to the firm reputation and performance when engaged in unethical conducts.

The statistics in the procurement review reports released by the public regulatory authority reveal that some state corporations have weaknesses to be addressed and others are doing fairly well in their procurement functions. PPOA in reviewing the procurement performance of the Kenya Power and Lighting Company (KPLC) established that the overall assessment of compliance was 26.33%, with reference to the Act, the regulations and guidelines in respect to the procurement transactions sampled for the period under review (2014/2015). This indicated that the overall performance of KPLC in procurement and disposal was poor and had weaknesses that needed to be addressed since it was below the minimum acceptable levels of compliance of 60% as set out in the Performance Monitoring Plan for Public Procurement System (PPOA, 2016).

The PPOA rated the overall assessment of National Hospital Insurance Fund (NHIF) for the year ending June 2010 at 72.1%, which was above the target of 60% set out in the Performance Monitoring Plan for Public Procurement system. The overall procurement performance of NHIF for the period under review was therefore satisfactory though

there were some weaknesses that needed to be addressed (PPOA, 2011). For the same period, the overall assessment of procurement performance at the Kenya Institute of Administration was calculated to be 31% which was below the target of 60%. It was deemed to be unsatisfactory with weaknesses that needed to be addressed, while the Procurement performance at Egerton University for the same period was 64.05%. The data released by the PPOA regarding the procurement performance of most state corporations indicates that there are weaknesses that need to be worked on even by those firms that exceeded the minimum target of 60% as set out in the Performance Monitoring Plan for Public Procurement System.

The Kenya Government forms state corporations to meet both commercial and social goals. They exist for various reasons including to correct market failures, to exploit social and political objectives, provide education, health, redistribute income or develop marginal areas. The majority of key state corporations that exist today were established in the 1960's and 1970's. By 1995, there were two hundred and forty (240) parastatals in Kenya. According to the presidential task force on parastatal reforms report of 2013, all entities previously known as state corporations are clustered into five broad classifications, that is purely commercial state corporations, commercial state corporations with strategic functions, executive agencies, independent regulatory agencies, and research institutions, public universities, tertiary education and training institutions (GOK, 2013). According to the report, the total number of state corporations in Kenya should be 187, but 17 of them are yet to be enacted and developed and thus currently, there are 170 operational state corporations in Kenya.

State corporations in Kenya play critical roles in the national development effort. First, government owned entities are important in promoting or accelerating economic growth and development. Secondly, they are critical to building the capability and technical capacity of the state in facilitating and/or promoting national development. Third, they are important instruments in improving the delivery of public services, including meeting the basic needs of the citizens. Fourth, they have been variously applied to

creation of good and widespread employment opportunities in various jurisdictions and lastly, the state corporations are useful for targeted and judicious building of international partnerships. They therefore play a major role in enabling social and economic transformation of the economies in which they operate (GOK, 2010).

1.2 Statement of the Problem

Consumers are nowadays more informed and want to know if the goods and services they are buying are sourced ethically. Sourcing ethics is an important tool for gaining new market opportunities, competitive advantage and sustainable solutions to products (Udit, 2015). According to Joachin (2011) sourcing ethics is gaining prominence and more companies are realizing the value of ethical sourcing practices. Stevensson (2009) explains that sourcing ethics is an area that has received little attention in terms of research, and he recommends that sourcing ethics should be explored more. Supplier selection and assessment must be conducted ethically to ensure fairness in procurement processes (Chopra & Meindl, 2012). Little is known about the relationship between sourcing ethics and a buying firm's performance (Vijay & Tan, 2013). Application of ethical sourcing guidelines is a major problem in many organizations because emphasis is being laid on what is acquired, rather than how it is acquired (ITC, 2010). Sourcing ethics issues and their effect on procurement performance in Kenyan state corporations has also been scantily addressed and this was the main focus of this study.

Mlinga (2010) explains that workers involved in public procurement should be cautious of any conflicts of interest that may arise in the course of their duties. They should be impartial, professional and make fair and equitable decisions. As ethical supply chain issues become more widely known, stakeholders are starting to question companies about their record and there has been rapid growth in ethical investment funds that encourage companies to look at issues of sourcing ethics. However, sourcing ethics is still a comparatively new concept for most companies (CIPS, 2010). Scholars in Africa have researched on unethical practices in public procurement but little has been done to

vividly explain how such unethical practices and non-compliance with the law affects procurement performance (Ombuki, Arasa, Ngugi & Muhwezi, 2014).

Unethical practices such as fraud, favoritism, extravagance and collusion are cited as major causes of inefficiencies in Kenyan public institutions leading to misuse of public money and loss of confidence in the public procurement process (Atika, Wamoto & Mbeche, 2018). Concerns have been raised that procurement performance of many government institutions has a lot of gray areas in the purchasing operations ranging from selection of incompetent and unethical suppliers, late deliveries, delivery of substandard materials and even paying for orders not delivered at all (Mutai & Okello, 2016). Sourcing ethics in an organization helps greatly in improving procurement performance and ethics in procurement plays a crucial role in informing the perceptions of stakeholders (Makali, Githii & Ombati, 2018). Practicing of ethics in procurement may be of great help in avoiding several problems relating to suppliers such as conflicts of interest, confidentiality of information, supplier relationship management, and avoidance of gifts and hospitality which may compromise sourcing decisions.

Ayoyi and Mukoswa (2015) in their review of ethical issues in public procurement in Kenya found out that, bribery, gift giving and entertainment guide decision making in procurement as opposed to price, quality and delivery. The inadequacy of literature and the emerging issues in Kenya's public procuring entities such as the chicken gate scandal at the Independent Electoral and Boundaries Commission (KHRC, 2015), hiring of buses at the Kenya Airports Authority (KAA) and the payment of dubious contractors through the Integrated Financial Management Information System (IFMIS) e-procurement in the devolution ministry among others clearly indicate that there is need to bridge the knowledge and practice gap in sourcing ethics. According Kangogo and Kiptoo (2013) political influence in Kenya, lack of clear ethical policies, unfair practices in public procurement, failure to implement current procurement law and policies by both professional and political leaders is an area of great concern since it may affect value for money procurement. Chemoiwo (2014) argues that procurement performance

issues have emerged strongly in the Kenyan government institutions. This is greatly attributed to the procurement malpractices and inefficiencies experienced in the Kenyan state corporations in the recent past. This study therefore sought to address the influence of sourcing ethics on procurement performance in Kenyan state corporations.

1.3 Research Objectives

1.3.1 General Objective

The general objective of this study was to investigate the influence of sourcing ethics on procurement performance of state corporations in Kenya.

1.3.2 Specific Objectives

1. To determine the influence of supplier selection ethics on procurement performance of Kenyan state corporations.
2. To examine the influence of ethical policies and codes on procurement performance of state corporations in Kenya.
3. To establish the influence of procedural justice on the procurement performance of state corporations in Kenya.
4. To assess the influence of supplier diversity on the procurement performance of state corporations in Kenya.
5. To determine the moderating effect of organizational size on the relationship between sourcing ethics and procurement performance of state corporations in Kenya.

1.4 Research Hypotheses

The study was guided by the following hypotheses:

H₀₁: There is no significant relationship between supplier selection ethics and procurement performance of state corporations in Kenya.

H02: There is no significant relationship between ethical policies and codes and procurement performance of state corporations in Kenya.

H03: There is no significant relationship between procedural justice and procurement performance of state corporations in Kenya.

H04: There is no significant relationship between supplier diversity and procurement performance of state corporations in Kenya.

H05: There is no significant moderating effect of organizational size on the relationship between sourcing ethics and procurement performance of state corporations in Kenya.

1.5 Justification of the Study

The findings of this study are of great benefit to various stakeholders as follows:

1.5.1 Management

This study helped the managers of the state corporations in understanding the implications of sourcing ethics on the performance of their procurement units and the entity as a whole. The study also provided a framework for sound decision-making as far as effective sourcing is concerned. This study provides important empirical information to the managers of the state corporations in order to save on unnecessary expenditures and this is critical in improving procurement performance and helps them operate within the required legal and ethical frameworks.

1.5.2 Scholars

The area of sourcing ethics in almost all organizations had been either lagging behind or neglected by most scholars. Much of their focus had been on transportation, routine procurement and internal distribution without considering strategic sourcing and

sourcing ethics. This study is therefore of great help in making the scholars of procurement management understand the benefits of sourcing ethics to an organization. Lastly, the study forms a basis for further studies in the field of sourcing ethics and performance of an organization's procurement function especially in the government owned entities. The study generated and developed new knowledge and ideas to narrow the research gap in the area of ethical sourcing.

1.5.3 Policy Makers

Even though there are guidelines and policies to guide the procurement process, there are still many ethical issues arising in public sector procurement. Many programmes and actions have been taken by the government, professional associations and non-governmental organizations (NGOs) to overcome ethical issues in public procurement, but these initiatives are still insufficient. This research studied the various ethical practices in sourcing and how they influenced the procurement performance in Kenyan state corporations and the findings of the study are useful in assisting the policy makers and oversight authorities to formulate good policies in future that will ensure that the procurement processes are transparent and maintain the accountability of the people performing the procurement functions.

1.6 Scope of the Study

The study was concerned with sourcing ethics and its influence on the procurement performance in Kenyan state corporations. The study covered all the state corporations in Kenya and it was conducted using a mixed methods research design. The study focused on all the one hundred and seventy (170) state corporations which are spread across the country, as re-classified by the presidential taskforce on parastatals reforms of October 2013. Data was specifically collected from the procurement heads in the state corporations. The scope of the study was chosen because of the many procurement activities in the state corporations, the strategic economic importance of the state

corporations, the growing public interest in public procurement and the impact of state corporations in societal development.

1.7 Limitations of the Study

The study covered all the operational 170 state corporations in Kenya and some of the procurement heads were reluctant to give the required information. This therefore forced the researcher to make several visits to the many and widespread state corporations so as to follow up and explain the importance of the research to the respondents as most of them were suspicious that they were being spied on. The respondents were however assured of the confidentiality of the information provided, and the processes to be followed to ensure such confidentiality is upheld. Proper logistical arrangements were also put in place to follow up on the questionnaires and ensure that there was a good response rate.

The research was also limited to state corporations only, leaving out sourcing ethics and procurement performance in the county governments which are also considered public. To take care of this, a census study was conducted, using a super-population of all the state corporations in the country so that the results could be representative of all government owned entities that may have existed, the existing ones and those that may be created in the future.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter dealt with the theoretical framework, the various sourcing ethics practices and their influence on procurement performance, conceptual framework, and critique of the existing literature on sourcing ethics, research gap and summary of the literature.

2.2 Theoretical Framework

The theories relevant to this study include the theory of justice, Kantian ethics and the theory of planned behaviour. The Guy's Model at the work place and the Hunt-Vitell ethical model were also used in explaining the ethical decision making process which is critical in sourcing ethics.

2.2.1 Models

a) Guy's Model at the Work Place

The Guy's model presents the ten core values that surround ethical dilemmas, illustrating the way in which employees can sensitize themselves to the values involved in a problem and reach a solution which maximizes the corporate values (Ashok & Naresh, 2011). Hassim (2012) explains that according to Guy, ethical decision making is the process of identifying a problem, finding alternatives and selecting among them so that the alternative chosen maximizes the most important ethical values while also achieving the objectives intended.

Guy's model identifies the following six steps to be followed in making ethical decisions, supported by ten core values and five rules consideration: identify the ethical problem, set the goals to be achieved, enumerate all the possible solutions to the

problem. All the options that will address the problem and achieve the goal are put under consideration, appraise all the alternatives to establish which one best meets the requirements of the situation, identify the one course of action that is most likely to produce the desired consequences within the constraints of the situations and make a commitment to the choice and implement it (Fan, 2005).

The ten core values are caring, honesty, accountability, the keeping of promises, pursuit of excellence, loyalty, fairness, integrity, respect for others and being responsible citizens. Ethical decisions will be made and will largely determine whether the procurement process should proceed, to make or buy the goods, services and works and which suppliers will be contracted. Therefore, good ethical decision making is really needed to avoid any problems occurring (Zou, 2006). To ensure an organization has a good ethical decision making process, ethical behaviour also needs to be taken into consideration because this will determine whether the decisions made by the decision makers are ethical or unethical in the procurement process.

The Guy's model at the workplace was used in this study to determine whether the state corporations conduct their supplier selection process in a fair and transparent way. It was also helpful in identifying the parameters that should be considered in supplier ethical assessment in determining which ethical suppliers to source from, that is, responsible citizens who respect their workers and are in pursuit of excellence. The ten core values covered in the model include equity, fairness and integrity which are key in ensuring that procedural justice is achieved when making ethical sourcing decisions.

b) Hunt-Vitell Ethical Model

Hunt and Vitell developed this model in 1986 and it recognizes the use of normative philosophies in ethical decision making. It combines deontological and teleological philosophical ethical decision making traditions into a single framework which explains ethical decision making (Ferrell, 2011). According to Ferrell, Mary, Linda and Jennifer

(2013) the model is used to evaluate whether the actions taken to obtain a certain outcome are ethical and whether they respect the rights of others. Using teleological principles, one can examine the outcome of each action to determine which ones will be more beneficial to most stakeholders

Because the model emphasizes on the greatest good for the largest number of stakeholders, the teleological evaluations determine which stakeholders will benefit from a decision, which ones will be harmed and if the benefits outweigh the harm. Martin and Jones (2010) used the Hunt-Vitell ethical model to study the supplier selection process and examine ethical beliefs and information asymmetries in supplier relationships. Ethical supplier selection decisions include transparency, child and forced labour, regard for workers' rights among other ethical sourcing practices.

Ferrell *et al.* (2013) explain that the model is important in making decisions where socially responsible buying or sourcing practices are concerned. Decisions related to supplier selection, transparency, and ethical assessment can be made on the basis of trade-offs between social benefits and economic concerns. For example, supply chain partners must decide on whether the use of child labour is acceptable since various stakeholders evaluate this decision. Specifically, the Hunt-Vitell model was very useful in this study in determining the ethicality of supplier selection process, transparency and ethical assessment of suppliers especially with regard to socially responsible procurement.

2.2.2 Theories

a) The Theory of Justice

The theory of justice was advanced by John Rawls in 1971 and it presented justice as fairness (Ercan, 2009). Before 1975, the study of justice was majorly concerned with distributive justice. However, marketing and organizational justice researchers have identified three important dimensions of justice that is distributive, procedural and

interactional. Distributive justice refers to the fairness of the outcomes that an individual receives (Chao-Min, Chiu, Wang & Shih, 2011). According to Nicholas *et al.* (2015) researchers were initially primarily concerned with the fairness of decision outcomes. The extent to which distributive justice exists is dependent upon the context, goals and motives of a particular situation with individuals evaluating the distribution of outcomes with respect to some distributive rule namely equality, equity, and need. Interactional justice refers to the perceived fairness of the interpersonal treatment received during the enactment of formal procedures. Interactional justice comprises of two distinct classes; interpersonal justice which impact upon individual's reactions to decision outcomes, and informational justice which impacts upon reactions to procedures. The former reflects the degree to which individuals are treated with dignity, politeness, and respect by those involved in executing procedures or determining outcomes, whereas the latter is concerned with the explanations provided to individuals regarding the distribution of outcomes or enactment of procedures. Nicholas *et al.* (2015) explain that procedural justice is shaped around concerns of formal procedures and equity distribution. The six principles applicable to procedural justice include applying criteria consistently, suppressing bias, using accurate information, providing opportunity to suppress errors, providing representation in decision making and ensuring ethical treatment.

Many other researchers in different studies have used the theory of justice in explaining the importance of procedural justice practices in dealing with suppliers for buyer-seller relationships (Liu, Huangb, Luoc & Zhao, 2012; Narsimhan, Narayanan & Srinivasan, 2013). Generally, the theory of justice requires decision makers to be guided by equity, fairness, and impartiality. It relies on three types of moral prescriptions, that individuals who are similar in a relevant respect should be treated similarly and individuals who are different in a relevant respect should be treated differently in proportion to the difference between them and that rules should be administrated fairly and clearly and that individuals should not be held responsible for matters over which they have no control.

Colquitt (2001) explains that organizational justice is defined by four main elements, which is procedural, interpersonal and informational justice. Procedural justice is positively related to organizational commitment, loyalty and satisfaction and it also affects motivation a great deal. According to Michael, John and Jin-Feng (2010) lack of procedural justice leads to adverse results such as bad performance and lack of or lower organizational commitment. Kwong and Leung (2002) also point out that when people feel that there is procedural justice, they are more likely to trust the person making decisions. A study by Robbins, Summers and Miller (2000) established that stakeholders adjust their effort and commitment based on levels of procedural justice. They established that procedural justice leads to improved performance in any organization.

The theory of justice was particularly important in explaining the concept of procedural justice because it was used to establish whether suppliers are equally treated without any form of discrimination, equity and fair dealings with the suppliers as well as ensuring that the procurement processes are themselves fair to all concerned stakeholders. The treatment and dealing with the suppliers should be in line with the basic principles of procedural justice.

b) Kantian Ethics

The reasoning in Kant's theory is best understood as reasoning from duty. Individuals are obligated to do what is right and moral laws define what is right and what is wrong. According to Ndolo and Njagi (2014) companies that practice Kantian ethics have a code of ethics and try to avoid improper behaviours. The Kantian approach to ethics is another way of saying that morality emanates from reason and that our moral duty is to act right in accordance with universal moral law. Companies should also adopt a code of ethical practice in order to avoid an ethical dilemma. Ultimately, compliance with ethics and good governance will be driven less by the threat of conforming to rules and more by the exercise of one's duty and responsibility. All employees fulfill their duties and codes of ethical principles will only succeed as a rule within a firm if it achieves

efficient choice and efficient decisions (Jernaj & Rozman, 2012). Duran and McNutt (2010) argue that Ethical codes and policies can be effectively established and implemented if Kantian ethical principles are adhered to and embedded as an integral part of a company's strategy. According to McNutt (2010), the adoption of a code of ethical principles would require duties to be identified and assigned, and failure to fulfill one's duty would frustrate the implementation of ethical principles.

The Kantian ethics theory was useful to this study by clearly explaining how Kenyan state corporations can come up with ethical policies and codes as well as ensuring that they are effectively followed so as to avoid unethical behaviors. Specifically such ethical policies and codes should cover areas such as conflict of interest, gifts and hospitality, confidentiality of information and any other behaviour considered unethical as per the organization's policies. Kantian ethics portray implementation of ethical codes as a must for firms to record better performance (Fang, 2006). Firms that focus on implementing ethical policies and codes have better reputation, higher returns and record improvement in performance. From a Kantian perspective, actions performed from an ethical motive contribute to the long term performance of the firm. Livia (2002) explains that using Kantian ethics, a firm can rationalize unethical behavior to monitor performance and maximize on productivity.

According to McNutt (2010) Kantian ethics also hold that in determining what is wrong or right, people should not be treated as ends and never purely as means to the ends of others. Making people work long hours for low pay in poor working conditions is a violation of ethics. Kantian ethics therefore came handy in this study in conducting ethical supplier assessments to ensure that procuring firms buy from ethical sources of supply that do not unfairly exploit their workers, uphold their rights and provide good working conditions for them.

c) The Theory of Planned Behaviour

The theory of planned behaviour (TPB) evolved from the theory of reasoned action developed by Ajzen and Fishbein in 1980 (Jiyun, 2010). The TPB states that human behaviours often result from a combination of intention or volition, and perceived behavioral control-our perception of how easily we could perform the behaviour of interest. According to Mohammed (2010) Ajzen developed the theory of reasoned action further into TPB by adding a new determinant of behavioral intention and perceived moral control. Individuals are more likely to engage in behaviors that they feel to have more control over and are prevented from carrying out behaviours over which they perceive not to have control over.

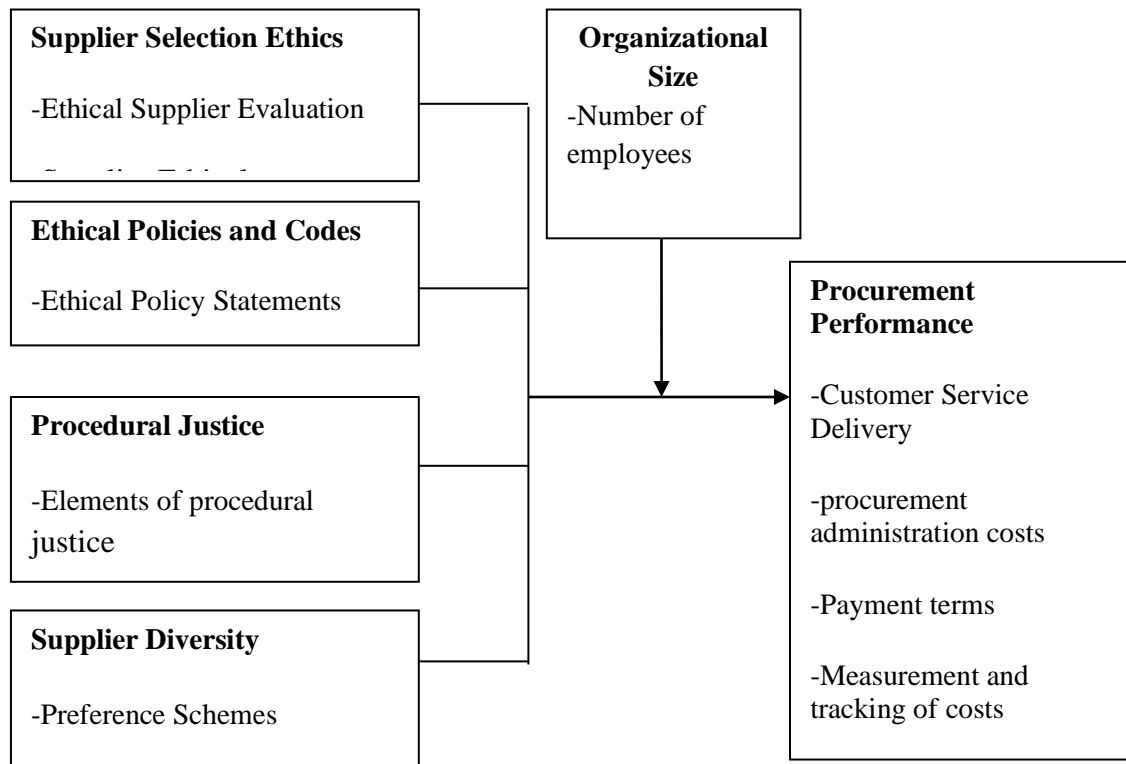
Ethics is the branch of moral philosophy with moral judgments and society requires individuals to behave according to those rules. The theory of planned behavior has been applied in many countries and employee contexts to evaluate ethical behavior (Henle, Reeve & Pitts, 2010). In the TPB, the intentions to carry out a given behavior as a function of three beliefs, that is attitude towards the behavior, the subjective norm and perceived behavioral control (Shahria, Ferdous & Polonsky, 2013).

Research by Conner and Sparks (1996) indicate that the theory of planned behavior can be used to explain the reasons for performance or non-performance as well as the frequency of performance. In a study of performance management system implementation in Malaysia, Noor, Nor, Mazlina and Rozita (2014) used the theory of planned behavior to explain how employees behave in implementing an organization's performance management system. Their study established that the theory of planned behavior is very useful in explaining the employee's behavior and initiatives to improve performance and the levels of commitment to the firm. Icek (2011) explains that using the theory of planned behavior, three factors guiding decisions and intentions can be identified, that is attitude, perceived social pressure and self-efficacy. He also points out that performance can be explained, not as a behavior but as a possible outcome of

different behaviors and effort. According to Armitage and Conner (2001) perceived behavioral control can independently predict behavior and thus affect performance. This therefore implies that the intention of state corporations to act ethically and control their behavior can influence their procurement performance.

This study focused on the intention of the Kenyan state corporations to procure from a wide range of suppliers so as to ensure a value for money procurement. Commitment to developing and implementing a supplier diversity programme can influence the state corporations' procurement decisions. Implementing a supplier diversity policy can change the state corporations' behavior, and a supplier diversity programme will add a new dimension to procurement personnel's job when they are enlightened on the advantages of procuring from minority owned enterprises. A strongly implemented supplier diversity policy can become a mandate, for example, the 30% procurement preference policy in Kenya for the minority owned enterprises. The policy therefore becomes a criterion for procurement performance measurement by the regulators/supervisors.

2.3 Conceptual Framework



Independent Variables

Moderating Variable

Dependent variable

Figure 2.1: Conceptual Framework

A conceptual framework is a summary in a diagrammatical manner of all the variables that a research problem is interested in investigating in a systematic way. The conceptual framework is born out of review of the documented literature in the area of interest to the researcher (Oseno, 2012). Sekaran and Bougie (2013) explain that a conceptual model helps the researcher to structure his discussion of the literature.

The conceptual framework for the study was derived from an extensive review of the existing literature on sourcing ethics as well as procurement performance. Vonderembsey and Tracey (2011) explain the importance of considering sourcing ethics,

giving an emphasis on selecting ethical suppliers. Consumers International (2011) also explains the growing demand for ethical sources of supply. ITC (2010) advocated for good ethical policies and codes to ensure ethics in sourcing. This has also been supported by Nikolay (2013) and Graafland (2012). Procedural justice as a component of sourcing ethics has been extensively covered by Provan and Sydow (2010) giving an emphasis on transparency, equity, impartiality and fair dealings with suppliers. Supplier diversity has been explained by Rodgers (2012) to be sourcing from visibly minority groups and in many countries' procurement law, it is a preference scheme. Procurement performance has been widely measured in terms of customer service (Iravo, Ongori & Munene, 2013). Kithika and Ochieng (2014) explain procurement performance in terms of cost reduction and customer service delivery. Chimwani, Iravo and Tirimba (2014) also measures procurement performance in terms of efficiency and effectiveness.

The models and theories reviewed in the theoretical framework show the measures of the different variables as illustrated in the conceptual framework. The Guy's model at the workplace addresses the concepts of honesty, integrity, fairness, caring and social responsibility (Hassim, 2012). These concepts are very crucial in supplier selection ethics. In ensuring that employees and suppliers behave ethically, organizations use policy statements and ethical codes of conduct as advocated for in Kantian ethics (Duran & McNutt, 2010). The theory of justice advocates for consistent application of criteria as well as consistent and fair treatment, suppressing bias, using accurate information and suppressing of errors (Nicholas *et al.*, 2015). These come in very handy in ensuring that there is procedural justice when treating suppliers as well as determining on how to applying the criteria chosen to ensure that there is ethics. The intention of the Kenyan state corporations to ensure that there is supplier diversity is crucial in sourcing ethics and this can be supported by the theory of planned behavior. Shahria *et al.* (2013) explain intentions of carrying out certain behavior to be influenced by attitude, subjective norm and perceived behavioral control

The conceptual framework in this study showed a diagrammatic representation of the study variables, the independent variable being sourcing ethics and the dependent variable was procurement performance.

2.4 Review of Variables

2.4.1 Supplier Selection Ethics

Organizational performance will largely be determined by making the right supplier selection decisions. According to Mlinga (2010) determining the optimal supplier who offers the best all round package of product and services for the customers is extremely important in the organizational buying process. Supplier selection is essentially a process and procuring entities should strive in ensuring that suppliers are efficiently selected in a transparent manner. Olivier, Haithem, Gilles and Wehrle (2015) in their survey of supplier selection in the public selector also agree that supplier selection is a very important element of supplier relationship management and that the competitiveness and profitability of a firm largely depend on the effectiveness of the supplier selection process.

Supplier evaluation depends largely on the supplier's abilities to meet the parameters of price, quality and delivery date required. However, the final decision must involve an ethical as well as a physical audit of the manufacturing entities. Mwikali and Kavale (2012) in their review of literature on optimal supplier selection recommended that supplier evaluation should be an open and transparent process, thorough and detailed to identify the salient and most important aspects of suppliers. It should be done by experts who are knowledgeable and have expertise to conduct the exercise professionally. According to Hald and Ellegaard (2011) supplier evaluation is an activity whose main aim is to acquire information and to manage supplier relations by simultaneous consideration of factors such as price, delivery, lead times and quality. Using a descriptive survey, Kannan and Tan (2011) also found out that supplier selection is a

vital role of the procurement function because a firm's suppliers can largely affect price, reliability, delivery and availability of its products.

Ombuki *et al.* (2014) however held the view that selecting the right suppliers can be effectively achieved by adhering to procurement law. Using an ex-post facto survey research design, their study established that the public procurement law in Kenya has brought some sanity in the performance of procurement functions in the public sector. It recommended that procuring entities should be encouraged to adhere to the procurement law so as to ensure competitive bidding and acquisition of services at the most reliable cost. Supplier selection should therefore be done according to the law and in a competitive manner. Jan and Per (2012) however, argue that strict regulations in the public sector that have dominated public procurement have underpinned the merits of tendering system as the main form of selecting suppliers in the public sector. Nyamongo, Mairura and Ombuki (2015) in a survey of procurement practices in state owned enterprises also agree that supplier selection procedures as guided by the public procurement law have serious limitations and have greatly contributed to using of unspecialized and briefcase suppliers as well as poor procurement performance in commercial state owned enterprises.

Apart from acting ethically in dealing with suppliers, it is becoming increasingly important to source only from ethical suppliers. This requires buyers to conduct an ethical assessment of the suppliers so as to understand whether a supplier employs unethical practices such as forced labour, poor working conditions, inadequate health and safety practices, poor regard for workers' rights and corporate social responsibility. A company should also watch out for suppliers involved in practices such as collusion with other suppliers to fix prices and divide up the market, lack of transparency, breach of confidentiality, dumping, bullying or threatening buyers and fraud or corruption (ITC, 2010). CIPS (2007) also outlines and describes the critical issues that buying organizations should watch out for when conducting supplier ethical assessments such as forced labour, employment relationships, fair remuneration, employees' working hours,

suppliers' treatment of employees, working within the law, health and safety, and discrimination. Consumers International (2011) also acknowledges that the consumer demand for responsibly-sourced products has steadily been growing. Touboulic, Chicksand and Walker (2014) in their study of supply chain relationships established that there is growing concern over sustainability and ethicality of business practices and buyers are forced to account for the malpractices of their suppliers and also their suppliers' suppliers through the idea of boundary less responsibility.

Vonderembse and Tracey (2011) in a survey of procurement ethics among manufacturing firms observed that supplier selection and assessment tactics positively impacts a buying firm's performance. They also demonstrated that high performing companies attach greater importance to key supplier selection criteria such as quality and delivery performance than low performing companies. Greater use of advanced supplier selection and monitoring practices tend to increase profitability and product quality. Rashid (2014) explains that firms should select reliable suppliers and maintain strategic alliances with them. This leads to quality improvement and growth in market share.

2.4.2 Ethical Policies and Codes

Certain aspects of ethics are covered by law, such as fraud, bribery and other unethical behaviour. However, ethics in procurement must go beyond legal requirements. Procurement functions may draw up statements of policy to guide its conduct in aspects such as conflicts of interest, business gifts and hospitality (ITC, 2010). According to PPOA (2009) a person has a conflict of interest with respect to procurement if the person or a relative of the person seeks, or has a direct or indirect pecuniary interest in another person or vendor who seeks a contract for the procurement. Nikolay (2013) in his comparison and analysis on the judicial system concerning conflict of interest found out that the proceedings for establishing the existence of conflict of interest are administrative in nature. These proceedings are conducted by administrative bodies,

result in the issuance of administrative acts and in the event that the existence of conflict of interest is established most countries impose administrative penalties. Buyers should always declare any conflicts of interest, for example, suppliers who are close friends or relatives or shareholding in a supplier firm.

Many researchers in this area have used different methodologies and designs. Mathenge (2012) provided empirical evidence that a good procurement management policy should outline what constitutes a conflict of interest and forbid procurement where a conflict does exist. Graafland (2012) in his survey of public procuring entities also established that in most organizations, employees who purchase goods and services from individuals or organizations with whom they have a personal or familial relationship leave the organization open to fraud at the worst or overpayment for items or services procured.

Peter (2011) in a documentary research of the UK bribery Act established that facilitation payments aside, promotional items like gifts, hospitality and related promotional expenses are now a subject of controversy as this is said to fall within prosecutorial discretion particularly in respect of the bribery of foreign public officials. Thus, even when gifts, hospitality or other related considerations are at modest levels an offence is committed where these offerings are meant to influence a public official and to procure or retain a particular business advantage. Jessica (2014) in a survey of gifts and hospitality in government contracts established that most public corruption cases involving government contractors include references to the offering of lavish gifts, meals, travel, or entertainment to government officials. Moreover, nearly all governmental bodies have enacted ethical restrictions that limit the gifts and hospitality that may be accepted by government officials. According to ITC (2010) business gifts other than items of very small intrinsic value such as business diaries or calendars should not be accepted. When it is not easy to decide between what is and what is not acceptable in terms of gifts and hospitality, the offer should be declined or advice sought from management.

The buyer should always be fair when dealing with suppliers. In practice, this means that the buyer should always respect the confidentiality of information provided by the supplier. For example, information on bids should be treated as confidential and kept securely. Where it is considered reasonable to reveal certain information, it must be with the permission of the supplier. The buyer should also ensure that the principle of probity, that is fairness, transparency and equality in treating suppliers is strictly adhered to (Wade, 2013). Pagell, Wu and Wasserman (2010) also emphasize that buyers should treat their suppliers fairly and as strategic partners and never to exploit them. According to Poppo and Zheng (2014) the perceptions of fairness affect the transaction costs and without such considerations, procurement contracts will only favour the party with more bargaining power.

Mlinga (2010) in a survey of ethics in public procurement established that confidentiality is an important principle to uphold if competition is not to be undermined and recommended that procuring entities need to have measures in place to manage the security and confidentiality of documents, including physical security of submissions and related documents, access to secure documents, and confidentiality of commercial information. Gesuka and Namusonge (2013) in a descriptive study of public procurement regulations in Kenya established that confidentiality is a major issue in public procurement and the lack of it results in non-compliance with public procurement regulations. It is a legal requirement in Kenya for the procuring entities to keep confidential all information relating to the procurement process, the contents of tenders, proposals or quotations (GoK, 2005).

Jang (2015) stated that one of the first indicators that a company is beginning to focus on ethical behaviour is to establish a code of ethics. It is the artefact that announces to all, an interest in business ethics by a corporation. To this effect, numerous writers have proposed the notion that a code of ethics should exist as a means of enhancing the ethical environment of an organization. According to Mapulanga (2015) ethics are the moral principles or values that guide officials in all aspects of their work. Ethical

behaviour encompasses the concepts of integrity, diligence, honesty, probity, fairness, trust, respect, consistency, avoiding conflicts of interest and not making improper use of an individual's position. The Kenyan Public Procurement and Asset Disposal Act, 2015 stipulate that all procurement and disposal shall be carried out in accordance with the codes of ethics that may from time to time be specified by the PPRA. The code of ethics developed by the PPRA should guide the public procuring entities as well as the winning bidders (GoK, 2015). In a survey of marketing ethics, Dinah and Pressley (2013) provided a good reason to develop a code of ethics and argued that ethical codes can positively influence the moral thinking of employees by providing a clear set of ethical values and enforcing these policies.

All public sector employees should model their behaviours based on the public sector values and at all times to act in an ethical manner. Ethical behavior includes avoiding collusion, avoiding fraudulent activities, and avoiding improper use of an individual's position and is an important principle for the public sector procurement. Arrowsmith (2010) explains that a favoured bidder in collusion with the procuring entity could make a very favourable bid to win the contract in accordance with the rules of the competition but the procuring entity could then allow the bidder to undermine terms of its bid. Hendi (2014) explains that fraud is essentially crime for a benefit which makes use of deception as its principal modus operandi. He argues that under the common law, fraud is characterized by four general elements that is, material false statement, knowledge that the statement was false when it was made, relying on the false statement by the victim and lastly, damages arising from the victim's reliance on the false statement. According to PPOA (2009) no procuring entity, public official, supplier or any other person should collude or attempt to collude with another to make any proposed price higher than would otherwise have been the case.

Any kind of fraudulent practice undermines the objective of value for money, which is critical to achieving the efficient delivery of service. No vendor, contractor, person or public official should be involved in fraudulent practice in any procurement process

(GoK, 2015). If a person acts contrary to this requirement the person should be disqualified from entering into a contract for the procurement or if a contract has already been entered into with the person, the contract should be voidable at the option of the buying entity (PPOA, 2009). Murray (2014) in a case study of procurement fraud and vulnerability asserts that procurement fraud has become a pertinent issue in many organizations and it is no longer just a perceived risk. Estimate by Kroll (2013) show that 19% of organizations globally have been victims of procurement fraud. The cost of procurement bribery and fraud has to be recouped from the market because prices paid will be higher than would be the case in a fraud free market.

According to Heungsik and John (2013) an ethics programme is essential in ensuring that employees behave in the right manner. An ethics programme is a set of activities, policies and procedures intended to support employees to understand and comply with ethical standards and policies set by the organization. An ethics programme begins with development of a code of conduct to guide employees on what is viewed as ethical behaviour. In a survey of public service organizations, they found out that ethical conduct influence behaviour. However, Clark and Leonard (2010) found that codes are ineffective in determining an employee's decision making. Ayoyi and Mukoswa (2015) in reviewing literature on ethical issues in Kenya's public procurement recommended that there is need for public procuring entities to establish a training policy and code of ethics to guide procurement staff in conduct of their duties and improve procurement performance.

2.4.3 Procedural Justice

Procedural justice is concerned with the processes by which outcomes are allocated or distributed among the parties to an exchange. Importantly, the basic assumption of procedural justice is that fair treatment determines an entity's reaction to decisions made by the other party and is therefore central to their behaviour vis-a-vis that party (Provan & Sydow, 2010). Procedural justice in procurement can be enhanced by ensuring that

probity standards are established and strictly adhered to in an organization. Probity in procurement relates to fairness, impartiality and integrity of the process. Consistency in the treatment of, and interaction with potential suppliers is important in ensuring probity standards are met (PPOA, 2009). Grandia, Steijn and Kuipers (2015) in their study of sustainable public procurement established that through effective commitment to change, procedural justice influences procurement both directly and indirectly.

The procurement objective of transparency which is closely related to the administrative principle of openness is the cornerstone of public procurement systems in and the public procurement principle, that possess the minimal, if not inexistent, reflect in the private/commercial context. Transparency consists of conducting procurement in an open manner so as to ensure that all parties involved in procurement and the general public know the rules applicable to the acquisition process and have access to the same information regarding procurement opportunities (Thomas, 2014). Hiroshi (2009) explains that transparency in procurement processes is important because it largely determines efficiency and competitiveness in public procurement. Lack of transparency discourages suppliers and contractors and this may result in substantial losses.

Promoting transparency in procurement complements procedure control and serves as an effective tool for confronting unethical behaviour but it takes a special concerted effort and requires great administrative burden. Entities should make transparent their procurement proceedings by making public their procurement announcements and making public the results of procurement proceedings. (Mpeera, Ntayi, Ngoboka, Mutebi & Sitenda, 2012). Lisa and Johan (2011) also agree that public procurement laws are designed to ensure that there is increased efficiency in the public procurement processes.

In Kenya, the PPRA takes advantage of the developments in internet technology to promote transparency and supports the procuring entities in this area. However, lack of access to such technology is not an excuse for not promoting transparency. The

publication of the results of RFQs on notice boards for example serves as effective mechanisms for promoting transparency. To the extent possible procuring entities should make public procurement announcements, the results of bidding processes and the awards of contracts (PPOA, 2009). In the case of a major purchase, it is usually a good idea to also debrief unsuccessful bidders after the selection process. This gives them some benefit for the effort that they have invested in preparing and submitting their offers, and enhances your company's reputation for fairness openness and transparency (Leenders *et al.*, 2014).

Jeanette (2011) in a descriptive study on public procurement benchmarking explains that transparency in government procurement provides an assurance for both domestic and foreign investors that contracts will be awarded in a fair and equitable manner. Public service agencies should therefore strive to maximize overall value for money for citizens and this requires considering issues such as client satisfaction, public interest, fair play, honesty, justice and equity. According to Siriluck (2013) good governance in procurement consists of integrity, transparency, accountability and fairness. It requires a fair process of transactions and services with accountability administration. Laurie and Gabriela (2012) provided empirical evidence that policy makers in public procurement must ensure procedural fairness and transparency within a more complex evaluative matrix, and that public perception of favouritism can backfire for local governments.

Kinoti, Arasa, Waititu and Guyo (2013) in a study of supply chain management ethics recommended that procurement decisions in government ministries should be made objectively free from any personal considerations and the suppliers should be paid promptly. Government procurement managers should also maintain integrity and be fair by making supplier pricing confidential and giving all the suppliers equal opportunity to compete for tenders. Buyers should consider probity training for staff involved in tendering. Probity advisors could be appointed to advice on appropriate action to address probity issues arising from the tender process. The level of probity oversight should be commensurate with the scale and complexity of the procurement, and the degree of

probity risk. Melkonian, Monin, and Noorderhaven (2011) in a survey of supply chain relationships established that in the context of supplier search and evaluation, procedural justice relates to the situation where parties involved assess the fairness of the formal procedures governing the process. When the process is perceived as fair, each party will experience procedural justice and vice-versa and this affects performance and relationship management.

According to Yuling, Zehua and Hui (2018) procuring entities should understand that information sharing is the key driver of procedural justice and they should train their employees on how to communicate and handle their suppliers so as to consolidate the fairness perception of their suppliers. Narasimhan, Narayanana, and Srinivasan (2013) investigated justice in supply chain relationships and concluded that procedural justice is important in improving performance in the supply chain, but its role is an under-investigated subject in the literature. Nicholas *et al.* (2015) explored the impact of procedural justice in procurement management and established that procedural justice ensures equality of opportunity, bias suppression, representativeness, ethicality, consistent and fair treatment of all stakeholders. According to World Bank (2011) Good procurement is impartial, consistent and therefore reliable. It offers all interested contractors, suppliers, and consultants a level playing field, thus expanding the purchaser's options and opportunities.

2.4.4 Supplier Diversity

Supplier diversity is a proactive business practice to provide diverse suppliers equal access to procurement opportunities (Beavers & Werblin, 2014). Rodgerson (2012) explains that the concept of supplier diversity involves procuring goods and services from the business run by visible minority groups. There are many different types of diverse suppliers but the most common are women in business enterprises, ethnic minority business enterprises, disabled business enterprises, lesbian, gay, bisexual and transgender (LGBT) businesses, small and medium enterprises (SMEs). A supplier

diversity strategy that invites competition in the firm's supply chain is an on-going process-not a short term project. It is important to set goals and measure progress. The principle goal of a supplier diversity strategy is to institutionalize opportunities for companies to compete and to be part of a firm's supply chain (FSOB, 2009).

Magoro (2010) in a study of public procurement policy in South Africa established that the primary objectives of procurement that is fairness, equity, transparency and cost effectiveness are undermined by secondary objectives of considering categories of groups of people who are disadvantaged including people with disabilities, women and youth. Pauw and Wolvaardt (2011) also found out that equity as a pillar of procurement lays foundation for preferential procurement. Preferential procurement widens market opportunities for smaller entities and integrates them into the mainstream of the economy.

Supplier diversity programmes can provide manufacturers with that feel good aura of social responsibility that companies often champion as proof they are model corporate citizens. Manufacturers that have implemented supplier diversity programmes also say the payoff has come in the form of stronger relationships with their supply base, new business opportunities and a more agile supply chain (Katz, 2011). The 30% affirmative action procurement reservations and preferences for Women, Youth and Persons with Disabilities in Kenya was a directive by His Excellency the President that procurement rules be amended to provide for 30% of all Government contracts to be set aside to Women, Youth and Persons with Disabilities. The aim is to facilitate enterprises owned by these special groups to participate and do business with the government. The initiative aims at uplifting their economic empowerment, create jobs and revolutionize the domestic economy (GoK, 2015). Muema, Muturi and Kiage (2015) in a survey of Kenyan flower firms also found out that supplier diversity has leveled the playing field and minority suppliers can compete on equal terms therefore improving the firms' performance.

Worthington (2009) in his study explains supplier diversity as a form of socially responsible purchasing which can lead to improved organizational performance, contribute to strategic objectives, build stakeholder relationships and help in responding to changing external concept. Amrou and Klassen (2010) also agree that a multidimensional index to operationalized socially responsible purchasing includes supplier diversity among other aspects. Globally the case for supplier diversity has gradually gained traction. Whilst the cause was initiated by private sector to harness value for money, increase efficiency and competition as well as accessing goods and services of the highest value, the concept is slowly being adopted by the public sector. The Government of Kenya through the public procurement and disposal preference and reservations regulations, 2013 reserves at least 30% of all procurement spend to women, youth and persons with disabilities. It spells out how supplier diversity is to be implemented in the public sector (Kiragu, 2015). Kirton (2013) in a survey of four countries notes that in Kenya, the Act contains special provisions regarding how public procurement activities are to be conducted. Preferences and reservations shall apply to candidates such as disadvantaged groups, micro, small and medium enterprises. According to Health Research and Educational Trust (2015) various case studies have shown that supplier diversity leads to greater innovations, cost reductions, easier compliance with government regulations and better understanding of sourcing processes and sources.

2.4.5 Organizational Size

The firm size can be defined as the physical capacity of the firm, the employees available, to an organization, the input or output, or the resources available to the firm. The number of personnel employed by an organization has proved to be the best measure or indicator of organizational size (Romea, 2016). Nassar, Almsafir and Al-Mahrouq also agree that the number of employees is the most commonly used indicator of organizational size though it has the disadvantage of rigidity. Farahnaz and Alireza (2012) explain that the measurement of firm size can be done in several ways or

methods such as sales volume, number of employees, assets and value add features. However, measuring the employees' enrolment is a better choice in measuring organizational size than using sales or assets.

According to Edwina, Mildred and Roberta (2013) size is the firm's magnitude as reflected in the number of people in the organization. The size of an organization as defined by the number of employees has received a lot of attention from managers and scholars because organizational size influences the firm's efficiency and effectiveness. Hofler (2010) also explains that organizational size is a contingency variable that affects the effectiveness of different organizations. Nzioka (2010) in a study of the relationship between firm size and financial performance of commercial banks in Kenya argued that organizational size is a construct of interest to many scholars because it traditionally has a lot of explanatory power to many aspects relating to the functioning of organizations.

According to the theories of the firm, a connection exists between the size of an organization and profitability. Large firms are more profitable than smaller firms within the same industry (John, Fred, Ahmad, & Han, 2010). The European Central Bank (2015) in a survey of European commercial banks established that organizational size had a significant negative effective effect on performance of the firm. Borio and Zhu (2015) also found out that the performance of an organization is strongly influenced by its size. Ignacio, Justin Fran and Henk (2012) in a study of management innovation established that organizational size has a moderating role on performance and management innovation. According to Cohen, Ben-Tura, and Vashdi (2012) the size of an organization has a significant moderating effect and it can influence attitudes and behaviors in an organization. From a resource based perspective, organizational size is important for the firm since it leads to more profits and it significantly moderates the relationship between firm drivers and performance. Chelliah, Pandian, Sulaiman, and Munusamy, (2010) however argue that organizational size has a moderating effect only for smaller firms with regard to internationalization when they acquire international knowledge and experience.

2.4.6 Procurement Performance

Performance of a firm should not be measured by financial performance only but also by operational and market indicators (Wadongo, Odhuno & Kambona, 2010). Iravo, Ongori and Munene (2013) explain that dissatisfied customers will be disloyal to the organization and are more likely to bad mouth the firm and talk about their bad experience. Kitheka and Ochieng (2014) in their survey of supermarkets in Western Kenya argued that the performance of an organization can be evaluated by how it reduces cost or increases value. Performance monitoring is important because in many industries, the supply chain represents roughly 75% of the operating budget expense. Three common measures of performance measures used when evaluating procurement performance are efficiency, responsiveness and effectiveness. According to Kakwezi and Nyeko (2014) measuring performance is difficult because it covers broad areas such as the procurement functions and departments, procurement employees, supplier base, procurement process on a given contract, among many others. They however agree that the most important measures of procurement performance are efficiency and effectiveness. Chimwani *et al.* (2014) also concur that procurement performance starts from purchasing efficiency and effectiveness in the procurement function in order to change from being reactive to being proactive to attain set performance levels in an entity. They also argue that for any organisation to change its focus and become more competitive, performance is a key driver to improving quality of services

Ogulaba and Kiarie (2014) also agree that managing procurement performance begins with measuring purchasing efficiency and effectiveness. Public procurement in Kenya is also highly influenced by the efficiency and effectiveness of the tendering procedures conducted by the procurement department. To present performance of procurement, implementation of different performance measurement methods is crucial. Efficiency and productivity should be regularly recorded because they are key indicators in monitoring procurement performance (Erik, Daniel, Martin & Oliver, 2014). Procurement performance in the public sector concentrates on contracts performance

that is, costs or prices, timely deliveries and quality of goods and services as well as performance based contracts (Keith & Rene, 2012). Gabriella, Roberto and Gian (2011) explain that procurement performance in the public sector can be highly enhanced by asking end users to give feedback inform of customer satisfaction surveys that seek to ensure both objective and subjective evaluation of contract performance.

There is need for a firm to have coherent methods of performance measurement in the procurement function of the procuring entities. Focussing on financial performance and neglecting non-financial performance cannot improve the procurement operations because only partial performance is considered. According to Gioconda (2010) the need for performance measurement in procurement has long been recognized but for a variety of reasons, many organizations fail to measure it adequately. Tawfik, Mady and Sarah (2014) provided empirical evidence linking purchasing strategies to two dimensions of procurement performance, which is efficiency and effectiveness. Broadly, procurement performance perspectives include on-time delivery, receiving the exact ordered quantities, bargaining for the best prices and quality assurance of the delivered parts and items. Rupert and Brandmeier (2010) used an empirical study to show indicators of procurement best practice discussed as procurement performance levers, because their implementation serves as a good guideline on how successful the procurement function should be. They include commercial levers, technical levers and supply chain process levers. Measurement of procurement performance has always been a big problem for many procurement professionals in the Kenyan public sector. It is however unavoidable since it provides the basis of assessing how well the state corporations are doing in attaining their predetermined goals (Muya & Nyabwari, 2016). Goebel, Reuter, Pibernik and Sichtmann (2012) however caution that if ethical behaviour is desired in procurement, the performance management system should be modified to account for ethical behaviour rather than over focussing on traditional performance measures such as cost savings, price and quality.

2.5 Empirical Review

Legal regulations in a country make sure that procurement is carried out in the most ethical manner. Pillars of good public procurement are equity, ethics and fair dealing, accountability and transparency, open and effective competition and they all lead to value for money procurement. The provisions in the Acts and Codes of Ethics provide a technical solution to an adaptation problem. People are not born unethical, they acquire such behaviours as they grow up and the laws and code of ethics will not work well if there is no system that is going to reverse the way people think and behave. We should ensure that we inculcate ethical behaviours to our industry professionals (Mlinga, 2010).

Mpeera *et al.* (2012) in his study on social value orientation and regulatory compliance in Ugandan public procurement established that self-interested public procurement officers follow rules which they do not believe in but which are perceived by the government to promote transparency and accountability. He also found out that regulatory compliance is a function of legitimacy and perceived receipt of entitled procedural outcome according norms of justice and norms of fairness. Kinoti *et al.* (2013) studied the implementation of supply chain management ethics in government ministries in Kenya and established that there is a high level of awareness of procurement regulation and this influences the implementation of supply chain management ethics in Kenyan government ministries. The study also established a high degree of correlation between transparency and accountability and supply chain management ethics. The study recommended that supply chain practitioners should be trained on how to comply with the procurement law so as to facilitate the implementation of supply chain management ethics.

Ndolo and Njagi (2014) in a study on the role of ethics in procurement process effectiveness in Kenyan water sector established that a code of ethics is very necessary as a remedy to the malpractices in the procurement process. The study recommended that the procurement personnel should be trained in ethics to provide them with the

much needed knowledge and also improve efficiency in procurement. Makali *et al.* (2018) studied ethics and procurement in Humanitarian organizations in Kenya and they explain that ethical behavior in procurement performance is of great concern today due to stakeholder pressure. Organizations are therefore adopting ethics in procurement because they have realized it can lead to better performance. The study established that ethics involves honesty, integrity, fairness, trust and respect.

A study by Sandra and Nadine (2016) on supplier selection criteria established that considering ethics in supplier selection ensures effective, social and responsible procurement. The ethical issues to consider in supplier selection include regard for community, environment, workers' rights and work place safety. Byoung-Chung and Nam (2016) established that ethical standards for supplier selection and ethical decision making are key in improving procurement performance. According to Wright (2015), firms are now expected to take responsibility for any unethical behaviours exhibited by their suppliers. Sourcing ethics for organizations with a focus on improving labour standards of their suppliers when sourcing has become important, relevant and more common. Rasmus (2015) explains that it is critical to reduce the risk of selecting unethical suppliers and poor quality products which can ruin the firm's reputation. Sourcing ethics aims to assess and improve social and environmental conditions within suppliers and an evaluation of what procurement processes can be employed so as to avoid doing business with unethical supplier organizations.

In procurement management, government employees and representatives must always be guided by ethical standards and probity in all aspects of the procurement process. The procurement code of ethics should identify professional conduct standards for all government workers. In the procurement process, the areas that should be covered by the code of ethics include confidentiality, conflicts of interest, gifts/hospitality, process integrity, accountability, communication and information management (Government of South Australia, 2018). Ethical standards have become a significant influence on a firm's competitiveness and therefore adhering to ethical policies and codes of conduct is

considered as an effective method of improving procurement performance. Procurement ethical codes help procuring entities to ensure its employees comply with procurement law and satisfy stakeholder needs (Kilonzo, 2017). PPRA (2016) released the revised code of ethics for suppliers' validation in Kenyan public institutions. The code of ethics was issued pursuant to section 181 of the Public Procurement and Asset Disposal Act, 2015 and it emphasizes on ethical issues such as professionalism, corruption, fraudulent practices, impartiality, integrity, gifts, favours and other benefits, collusion and conflicts of interest among others. Sandra and Nadine (2016) also explain that a code of conduct is essential in setting acceptable ethical standards and expectations. Firms should also provide ethics training based on ethical policies and codes to prevent corruption in daily activities.

The existence of procedural justice significantly improves procurement performance and also affects stakeholder satisfaction. Procedural justice when dealing with suppliers influences their commitment to the firm, and its presence in sourcing process ensures effective and honest communication from both suppliers and buyers. The buying organizations must therefore create a conducive and stable environment for procedural justice to thrive (Yuling *et al.*, 2018). Procedural justice ensures that public procurement procedures and decisions can be challenged and any disputes amicably resolved. Government agencies should ensure that there is fair, equitable and non-discriminatory complaint handling procedure (Wood & Petterd, 2017). All processes and procedures in procurement must be clear, open, well understood, communicated and applied equally to all parties so that buyers and sellers are able to transact on the basis of mutual trust and respect (Government of South Australia, 2018). Sourcing ethics has implications for supplier selection because procurement staffs have to consider ethics and supplier diversity. Diverse sourcing criteria emphasizes on non-discrimination and promoting disadvantaged suppliers. Firms should proactively come up with supplier diversity sourcing programmes to avoid diversity discrimination, and also source from suppliers that support disadvantaged groups (Sandra & Nadine, 2016).

Chimwani *et al.* (2014) studied the factors influencing procurement performance in the Kenyan public sector, and the study measured performance in terms of efficiency, effectiveness and dependability. Their study concluded that procurement performance should be realigned with key performance indicators such as performance contracts and service charter so as to enhance service delivery. The study also suggested further research on areas such as leadership, ethics, integrity and governance. Maina (2011) found out that weak oversight authority, non-transparent practices among other factors influence the implementation of procurement law in Kenya. His study concluded that inefficiencies in procurement lead to increased procurement costs, causing longer cycle times and lower quality procurement decisions in the government.

Kiage (2013) studied factors affecting procurement performance in the Kenyan ministry of energy and found out that there was poor contract management at the ministry, characterized by delays in the payments to suppliers which hampers greatly on their service delivery. His study also measured procurement performance in terms of efficiency and effectiveness and recommended that management of the procurement process should be administered by qualified, competent and experienced procurement professionals. This will not only help maintain good procurement standards but also will help achieve high levels of efficiency and effectiveness in the procurement function. Ndiga and Ismail (2016) further explain that the most common indicators of procurement performance include efficiency (cost of transactions and time), transparency, openness and workers' professionalism. These indicators must first be established by the firm before evaluating its procurement performance.

Intense competitive pressure to improve delivery performance, quality, and responsiveness, while simultaneously reducing cost has forced many organizations to re-examine their strategic priorities. For many, this has included recognizing the need to re-focus on core competencies and outsource non-core activities (Vijay & Tan, 2013). They measured performance in terms of delivery reliability, quality, responsiveness and cost reduction and their study established that considerable similarity can be observed in

attitudes towards supplier selection. The most important elements are operational performance, in particular due date performance and commitment to quality followed by capability. They recommended that there is need for organizations to re-examine their objectives in procurement planning. Strategic alignment with suppliers both directly and indirectly impacts performance. A summary of the major studies is shown in Table 2.1.

Table 2.1: Summary of Literature

Studies	Focus	Methodology and Summary of Findings
Nikolay (2013)	Conflict of interest in the European public law	The study used a crosssectional survey design and it established that conflict of interest declaration is an extremely important government instrument in fighting corruption because it adversely affects procurement and organizational performance in the public sector. The study concluded that conflict of interest regulations are part of the national legislations of all EU member states.
Jang (2015)	Changes in the contents of corporate codes of ethics.	Using a longitudinal research design, the research found out that ethical codes have become more prescriptive; they are more concerned with social responsibility and are more likely to identify their moral and legal authority. It emphasizes on the importance of using ethical codes to avoid uncertainty in addressing possible ethical dilemmas.
Hendi (2014)	To be corrupt or not to be corrupt	Using a descriptive survey design, the study found out that understanding the mechanisms by which potential offenders decide to engage or not to engage in corruption help the government to find mechanisms of eradicating corruption. The study suggests that companies may improve their performance by eradicating corruption and learning from their past mistakes.

Studies	Focus	Methodology and Summary of Findings
Kinoti, <i>et al.</i> (2013)	Influence of procurement regulatory framework on the implementation of SCM ethics in Kenyan government ministries	Using a descriptive and correlational survey designs, the study established that implementation of SCM ethics is crucial for procurement performance and recommended that government ministries should strive to implement SCM ethics for increased efficiency, transparency and accountability in procurement
Ombuki, <i>et al.</i> (2014)	Determinants of procurement regulatory compliance by Kenyan public universities	Using an ex-post facto survey research design, the study established the PPDA (2005) in Kenya has brought some sanity in the performance of procurement functions in the public sector. It recommended that procurement professionals should be encouraged to strictly adhere to the procurement laws so as to ensure competitive bidding and acquisition of services at the most reliable cost.
Gioconda, Marvin, Gonzales and Mueller (2013)	Impact of e-procurement on procurement practices and procurement performance	The study used a descriptive survey design and established that e-procurement usage positively affects procurement performance. The study suggested that procurement performance can best be measured using parameters such as efficiency, delivery reliability, and information transfer and customer satisfaction.
Chimwani <i>et al.</i> (2014)	Factors influencing procurement performance in the Kenyan public sector	The study used a descriptive design and concluded that factors such as records management, procurement procedures, and information technology and staff qualifications affect procurement performance. The study measured the procurement performance through assessment of efficiency, effectiveness and dependability

2.6 Critique of Existing Literature

Many of the studies reviewed have addressed some of the ethical sourcing issues including integrity, transparency, accountability, confidentiality, discrimination, conflict of interest, among others. Some of the studies are however lacking in one or more aspects, have shallow or partial coverage of the variables or fail to explain how the applicable ethical issues influence procurement performance. Some of the studies also received a low response rate and therefore they may not have had representative results.

Mapulanga (2015) in his study of public procurement legislation in Malawi established that procurement law implementation greatly affects the procurement process. His study recommended that there should be reforms in the public procurement systems to ensure transparency, accountability and value for money. The study however touches very little on sourcing ethics, yet this is a very pertinent issue in public procurement law. The study also does not clearly elaborate how the public procurement legislation influences procurement performance in the public sector. Using a descriptive and correlation design, Kinoti *et al.* (2013) did a research on the influence of supplier relationship management on the implementation of supply chain management ethics in Kenyan government ministries. Their study explained that ethical concerns have become evident in situations of asymmetric relationships across the organizations. They recommended that government procurement managers should maintain integrity and be fair by making supplier pricing confidential and giving all the suppliers an equal opportunity to compete for tenders. Their study only covered the government ministries which may not be fully representative of all the public procuring entities in Kenya and therefore the results may not be a true reflection of ethics in public procuring entities.

Mathenge (2012) using a case study did a critical analysis of the ethical considerations in procurement management. His study covered ethical issues in the procurement process including conflicts of interest and discrimination. The study established that procurement ethics leads to efficiency and effectiveness but it does not explain how the

efficiency and effectiveness of the procurement function can be measured and sustained. His use of a case study limits the study and therefore additional research with large samples is necessary to support the findings and generalize the findings to other public procuring entities in Kenya.

Mpeera *et al.* (2012) in studying social value orientation and regulatory compliance in Ugandan public procurement briefly explained ethics as one of the measures in regulatory compliance. Studies on public procurement law ought to give more attention to procurement ethics because they form the basis of public procurement legislation. Ndolo and Njagi (2014) used a descriptive survey to explain the role of ethics in procurement process effectiveness. They explained ethics as the guidelines or rules of conduct by which we aim to live on, and the importance of procurement ethics in enhancing effectiveness. Their study did not address how the same procurement ethics can be used in ensuring efficiency because the procurement function would basically aim at achieving the right balance between effectiveness and efficiency. Procurement effectiveness and efficiency has been vividly explained by Kiage (2013) in his study of the factors affecting procurement performance in the Kenya's ministry of energy.

Vijay and Tan (2013) conducted a survey on attitudes of managers towards supplier selection and assessment and implications for business performance. They emphasized on the importance of effective supplier selection and concluded that suppliers can no longer be viewed as independent entities to be dealt with at arm's length but as extensions of the buying firm itself. The study clearly mentions how to measure procurement performance (delivery reliability, quality, responsiveness and cost reduction) but it fails to address clearly how such performance is influenced by ethical supplier selection and assessment.

2.7 Research Gap

The studies reviewed agree on the different ethical practices and their importance for better organizational performance (Kinoti *et al.*, 2013; Hendi, 2014; Nikolay, 2013). There also seems to be a consensus among the different researchers that procurement performance can broadly be measured through customer service delivery and operational cost reduction (Chimwani *et al.*, 2014; Gioconda *et al.*, 2013). Tawfik *et al.* (2014) in an empirical study clearly proves that procurement performance is linked to the efficiency and effectiveness of the function, although there might be cases of disagreements especially with the various designs used by the authors or a few variations in research findings.

Udit (2015) in a study of ethical sourcing identified various dimensions of sourcing ethics such as child labour, environment, sweatshops and racial discrimination. The study leaves a gap since it does not address other important dimensions such as conflicts of interests, gifts and hospitality, open and fair competition. The study does also not address how the sourcing ethics dimensions identified affects procurement performance. A survey on ethical judgments in supply chain management by Byoung-Chun and Nam (2016) focused on ethics in bidding, information management, payments and inventory management. The study provides insights in understanding how ethical judgments affect relationship management. It therefore clearly leaves a gap to be addressed on how such ethical judgments affect the firms' procurement performance.

Makali *et al.* (2018) in their study of ethics and procurement performance of Humanitarian organizations in Kenya focused on gifts, conflicts of interest, confidentiality and sharp practices as areas of concern in sourcing ethics. The study only measured procured performance in terms of response time. The study however suggested further research be conducted in a wider geographical area, and explain how sourcing ethics could influence other aspects of procurement performance such as cost reduction. Musyoka (2017) in his study on procurement ethics and organizational

performance in Kenya established accountability, transparency, honesty and integrity, conformity to professionalism as measures of sourcing ethics. The study suggested that further research should be done to establish the link between ethics and performance. Cost reduction was also not used as a measure of procurement performance, hence the need to establish how sourcing ethics influences costs in the procurement process.

Many public sector organizations are experiencing difficulties in implementing and sustaining supply chain ethics or they are partly implementing some of the ethical sourcing practices. According to Kelly (2009) ethics is a very important issue in public procurement and procurement officials have the responsibility of ensuring that the core values of honesty, integrity and transparency are followed and disseminated in the organizations they work for. Public procurement officials should be trained about ethics because ethical training can open debates on potential ethical dilemmas experienced in public procurement functions. Kinoti *et al.* (2013) however used descriptive and correlational survey designs, to establish that implementation of SCM ethics is crucial for procurement performance and recommended that government ministries should strive to implement SCM ethics for increased efficiency, transparency and accountability in procurement. The study was only confined to the government ministries, focused on only five major supply chain management ethical practices and therefore suggested further research on other factors affecting supply chain management ethics as well as a study in the private sector organizations.

Many assumptions and lack of adequate or correct information about ethical sourcing have greatly contributed to unethical practices in the public sector procurement. Trepte (2005) in an investigation of procurement ethics points out that opportunity for unethical behaviour in procurement is raised by the relationship between the government and the procurement agents. An unethical agent can conceal information related to the procurement process, the bidders and the products from the principal. It has become fashionable to assume that public and unethical behaviour go hand in hand as if unethical practices were an inevitable consequence of the procurement function within

the government. Hendi (2014) on the other hand used a descriptive survey design to study unethical behaviours in public procurement and the study found out that understanding the mechanisms by which potential offenders decide to engage or not to engage in unethical behaviour help the government to enact mechanisms of eradicating unethical behaviour. The study suggested that companies may improve their performance by eradicating unethical behaviour and learning from their past mistakes.

Gioconda *et al.* (2013) in his study of procurement practices and procurement performance used a survey design and established that e-procurement usage positively affects procurement performance. The study suggested that procurement performance can best be measured using parameters such as efficiency, delivery reliability, and information transfer and customer satisfaction. Chimwani *et al.* (2014) on the other hand used a descriptive design to study the factors affecting procurement performance in the Kenyan public sector and concluded that factors such as records management, procurement procedures, and information technology and staff qualifications affect procurement performance. The study measured the procurement performance through assessment of efficiency, effectiveness and dependability.

The focus of many studies is on how specific ethical sourcing practices such as fraud, corruption and conflict of interest affect the overall organizations' performance and not specifically their influence on procurement performance. Vijay and Tan (2013) in studying the attitudes of US and European managers to supplier selection and assessment and implications for business performance established that ethics, fairness, transparency, openness to site valuations and insurance/litigation refer directly to the character and integrity of the supplier. The study however had a low response rate of 48% and did not give any suggestions for further study. Supplier ethical assessment was very shallowly mentioned in the study, yet firms are increasingly focusing on buying from ethical sources of supply.

Stevensson (2009) in his study of the transparency of supply chain management ethics established that there are many questions that may be raised on the transparency of ethics and suggested further studies on how supply chain management ethics can be based upon corporate actions and business operations. The study also suggested a research on why employees do not apply or follow the ethical guidelines. Nigel and Li (2011) studied ethical procurement strategies for international aid non-governmental organizations in the UK and suggested further research on evaluation of ethical procurement risk, development of a collaborative risk rating system for ethical procurement, together with an auditable due diligence process consisting of the formulation of an ethical procurement code of conduct and associated operational performance indicators.

Mlinga (2010) studied ethics in public procurement with a focus on the education and training of construction industry practitioners. The study identified several ethical issues in procurement but their effect on organizational and procurement performance was not clearly explained. The study only concentrated on construction industry practitioners and never gave any suggestions for further research and can therefore not be representative of the entire Tanzania's public procuring entities.

Mpeera *et al.* (2012) studied social value orientation and regulatory compliance in Ugandan public procurement and suggested a further research on expected utility and procedural justice in public procurement. The study was only confined to the Ugandan context and the relationship between various unethical behaviours (corruption and collusion) and procurement performance was not well captured in the study. Ndolo and Njagi (2014) studied the role of ethics in procurement process effectiveness in the Kenyan water sector and recommended that there is need for the establishment of procurement training policy and code of ethics. The study was only a census study of the water sector in Kenya, gave no suggestions for further research and it only focused on the effectiveness of the procurement process without addressing efficiency which is a key issue in controlling the resources used in meeting the procurement objectives. The

study also addressed only two dimensions of ethics (government policy and organizational ethical codes), leaving out issues such as supplier ethical assessment, procedural justice and supplier diversity, which form a very good basis for studying sourcing ethics.

2.8 Summary

Empirically reviewed and critiqued literature on sourcing ethics and procurement performance explains the relevant research gaps that form the basis of this study. The Guy's model at the workplace was used to explain how the state corporations can select their suppliers in an ethical manner, fairly and transparently. The model is also useful in explaining the concept of procedural justice since it covers the six steps followed in making ethical decisions and also describes the ten core values in ethical decision making. The Hunt –Vitell ethical model was also employed to explain how supplier selection can be done ethically. The model recognizes the use of normative philosophies in ethical decision making.

The theories used in the study are the theory of justice, Kantian ethics and the theory of planned behavior. The theory of justice identifies the three important dimensions of justice, that is, distributive, procedural and interactional. The study mainly focused on procedural justice which can be used to explain if the suppliers are equally treated and whether the procurement processes are fair to all parties concerned. Kantian ethical principles are of great importance in describing how firms can develop and implement ethical policies and codes. The study used the Kantian ethics theory to describe how the Kenyan state corporation can develop and implement ethical policies in their sourcing processes. The theory of planned behavior on the other hand was helpful in explaining how firms can enhance ethics in supplier diversity by proactively developing supplier diversity programmes and preference schemes aimed at uplifting disadvantaged suppliers.

There is consensus that sourcing ethics is an empowering tool for customers to make ethically informed decisions in their procurement functions (Udit, 2015). Many companies however face challenges in their supply chains in identifying and selecting suppliers who abide by sourcing ethics standards. Though the literature on sourcing ethics is not adequate, several authors have explained some of the sourcing ethics practices or dimensions and how they relate to an organization's procurement performance.

Buying firms should be fair when dealing with suppliers and also select suppliers who are ethical because they will also be held responsible for the ethicality of their suppliers (Consumers International, 2011). Codes of ethics in procurement are an indication that a firm focuses on ethical behavior (Jang, 2015). Employees should be guided to source ethically and this can be effectively done through an ethics programme which begins with the development of ethical policies and codes. Procedural justice is key in ensuring sourcing ethics prevail. Procedural justice is enhanced by promoting probity standards which emphasize on fairness, impartiality and the integrity of the procurement process (PPOA, 2009). Procedural justice plays a great role in ensuring procurement criteria is applied consistently, bias is eliminated, errors are suppressed and that all parties are treated ethically (Nicholas *et al.*, 2015). Supplier diversity programmes should be a proactive initiative by procuring entities to ensure that there is no diversity discrimination and that disadvantaged groups are given equal opportunity (Sandra & Nadine, 2016). Ethics in supplier diversity provides a level playing field and ensures minority suppliers can equally compete (Muema *et al.*, 2015).

Research has shown that procurement performance is largely measured in terms of efficiency and effectiveness (Chimwani *et al.*, 2014; Tawfik *et al.*, 2014). Managing procurement performance in many organizations starts by measuring the efficiency and the effectiveness of the procurement function (Ogulaba & Kiarie, 2014). More specific indicators of procurement performance include the cost of transactions, time and workers' professionalism (Ndiga & Ismail, 2016). Sometimes, procurement performance

management is not very easy since it has to cover very wide areas such as the procurement departments, procurement employees, suppliers and even specific procurement contracts.

The review and critique of literature shows that there is a theory and practice gap regarding the influence of sourcing ethics on procurement performance and this provides the basis for this study. Most of the existing literature gives a partial picture of sourcing ethics since it does not cover all dimensions of sourcing ethics and procurement performance. The theory and practice gap on sourcing ethics and procurement performance among state corporations in Kenya is so evident from the widespread unethical behavior being witnessed in public procuring entities.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter focused on the methods that were used for this study. It describes the research design, research philosophy, the target population, data collection techniques and instruments, data analysis and presentation methods. The chapter also discussed the statistical model that was used in the analysis and the tests that were used for hypothesis testing.

3.2 Research Design

The study adopted a descriptive research design involving a mixed method approach, because it included both qualitative and quantitative methods. The qualitative research was used to explore meaning, purpose or reality and the quantitative research was used to maximize objectivity, replicability and generalizability of findings and predictions (Alise & Teddlie, 2010). Mixed methods offer an especially promising path towards using research design in ways that support rigorous enquiry (Plano, 2010; Creswell, 2010). The mixed method approach has been successfully employed in other descriptive studies such as (Ayuma, Namusonge & Iravo, 2015; Njuguna, Oloko & Oyugi, 2014).

The descriptive design was the most appropriate because the study was concerned with finding out what relationship existed between the independent and dependent variables by collecting quantifiable data (Kothari, 2013). The data was collected from the target population in order to determine the current status with regard to sourcing ethics and procurement performance in government owned entities. The research sought to obtain information that described the phenomena that existed at the time of study, and inferences were drawn to explain the nature of relationship between the study variables. The descriptive design was also appropriate because it enabled the researcher to

combine both quantitative and qualitative research approaches. Descriptive design has been successfully employed by different authors for studies on procurement performance such as (Mathenge, 2012; Ndolo & Njagi, 2013; Ombuki *et al.*, 2014; Mlinga, 2010; Mpeera *et al.*, 2012). Descriptive studies are particularly useful in understanding the characteristics of organizations that follow certain common practices and they are undertaken in order to ascertain and be able to describe the characteristics of the variables of interest in a situation (Sekaran & Bougie, 2013).

3.3 Research Philosophy

Research philosophy is the foundation of knowledge and the nature of that knowledge contain important assumptions about the researcher's view of the world. Research philosophies could be positivism, realism, interpretism or pragmatism. These philosophies share a common set of assumptions, and their commonalities identify them as examples of broader philosophies (Saunders, Lewis & Thornhill, 2015). The study was based on theoretical foundations from which hypotheses were derived, and quantitative methods were used for logic and evidence testing. Factual data was established for causal relationships and the study of supplier selection ethics, ethical codes and policies, procedural justice and supplier diversity sought to establish possible relationships and the strength of the relationships

This research used mixed methods and was therefore grounded on pragmatism. Mkansi and Acheampong (2012) explain that mixed method approach is believed to be deeply rooted in pragmatism. Lee and Nickerson (2010) also assert that pragmatism is a more adequate research paradigm for mixed research than positivism. According to Goran (2012) pragmatism is concerned with action and change and the interplay between knowledge and action makes it appropriate as a basis for research approaches intervening into the world not merely observing it. Pragmatism has an interest not only for what "is" but also for what "might be" and is used in action for making purposeful difference in practice. The three kinds of pragmatism; functional, referential and

methodological make it even more suitable for mixed researches. Pragmatism should be viewed as ontology not just epistemology. Simon (2016) explains that Ontology is concerned with the nature of reality, and because of complexities of the research environment, researchers using qualitative methodologies have grappled with this issue for a long time. Epistemology is the theory of knowledge and it reflects that it is possible to acquire knowledge about the world, unmediated without interferences. However, the situation is that the social constructions of reality affect or influence objectivity and this relates back to ontology.

3.4 Target Population

The target population refers to the entire group of people, events or things of interest that the researcher wishes to investigate (Sekaran & Bougie, 2013). The study was a census study since it focused on all the Kenyan state corporations. A census describes a population that is subject to the variations of chance. A complete census for scientific generalizations describes a population that is one of the infinity of populations that will result by chance from same underlying social and or economic cause systems, and such a population may be called a super population (Stanek, 2000). A super population approach uses census data to infer to a greater population that hypothetically could exist, may have existed, or may exist in the future (Benjamin, Kevin, & Mikaela, 2015). For scientific generalizations, the findings of this study from the census data are therefore applicable to all public procuring entities at both the national and county levels.

The target population of this study was therefore comprised of the procurement heads in all the operational 170 state corporations in Kenya which include the commercial state corporations, executive agencies, independent regulatory agencies, research institutions, public universities, tertiary education and training institutions (GoK, 2013). The procurement heads were used as key informants to provide data on sourcing ethics and procurement performance because they have in-depth knowledge and experience about sourcing practices in the state corporations. Marshall (1996) describes a key informant

as an expert source of information. He further explains that the key informant approach has the advantage of gathering very high quality data within a short duration. The choice of the state corporations was justified by the fact that ethical issues are becoming a major concern especially in public procurement with the government fighting hard to ensure that there is value for money procurement and that public funds are used for justifiable reasons (Chemoiywo, 2014). The population of the study was highlighted as follows:

Table 3.1: State Corporations in Kenya

S/No.	Categories of State Corporations	Number of Entities
1	Commercial state corporations	34
2	Commercial state corporations with strategic functions	19
3	Executive agencies	52
4	Independent regulatory agencies	20
5	Research institutions, public universities, tertiary education and training institutions	45
Total Inventory of State Corporations in Kenya		170

Source: (GOK, 2013)

3.5 Data Collection Instrument

The study used both primary and secondary data and the main instrument for data collection was a questionnaire, with both open ended and closed questions. According to Kothari (2013) the closed questions in a questionnaire are majorly used in limiting the respondents to the study variables while the open ended questions enable free response and opinions from the respondents. The questionnaire was designed to address each of the specific objectives of the study and was divided into three sections. Section A

covered general information about the respondents and the contextual factors, section B covered sourcing ethics and procurement performance section C covered additional information.

3.6 Data Collection Procedure

Data collection involves the collection of research data using both secondary and primary data sources to get information, facts, proof, truths and evidence about a research problem (Babbie, 2015). The researcher obtained an introduction letter from Jomo Kenyatta University of Agriculture and Technology and Permission to collect data was sought from the state corporations. The data collection involved administration and completion of the research instrument by the procurement heads in the state corporations. The administration of the questionnaire was done by the researcher and trained research assistants using drop and pick technique so as to facilitate the clarification and seeking of more information that arose during the data collection process. E-mails were also used to make any clarifications that the respondents needed. Self-administered questionnaires have also been successfully used in other descriptive studies (Kinoti *et al.*, 2013; Waithaka, Bulah & Kimenchi, 2016).

3.7 Pilot Study

To refine the data collection instrument, a pilot study was conducted in Mombasa County using a sample size of eighteen (18) state corporations which was approximately 11% of the total 170. This was adequate for the purpose of testing the feasibility of the research design, data collection techniques and analysis (Mugenda & Mugenda, 2003). The pilot study was used to identify any ambiguous or repetitive questions in the research instrument. Cooper and Schindler (2013) explain that pilot testing is necessary to detect weaknesses in design, and also to provide proxy data for selecting a representative sample. According to Malhotra, Nunan and Birks (2017) questionnaires are piloted so as to observe the reaction of the respondents and to correct questions that

are found to be ambiguous. Mombasa County was chosen for piloting because of convenience, accessibility and cost effectiveness.

3.7.1 Reliability

The reliability of the research instrument was used to gauge the goodness of the variables of measurement. Cronbach’s alpha coefficient was used to measure the internal consistency of study measures as follows and the results were as shown in Table 3.2.

$$\alpha = \frac{Kc}{(V + (K - 1)c)}$$

Where: K= Total number of components/items

V=Average variance for each component/item

C=Average of all the co-variances between the components

Table 3.2: Cronbach’s Alpha Reliability Results

S/No.	Variables	Number of Items Per Variable	Cronbach’s Coefficient	Alpha
1.	Supplier Selection Ethics	8	0.725	
2.	Ethical Policies and Codes	9	0.886	
3.	Procedural Justice	10	0.938	
4.	Supplier Diversity	10	0.918	
5.	Procurement Performance	8	0.866	
Overall Cronbach’s Alpha coefficient		45	0.949	

The Cronbach's alpha coefficient ranges from 0 to 1 and alpha coefficients of 0.70 and above are considered appropriate (Sekaran & Bougie, 2013). The measures in the study were found to be highly reliable because they all had alpha coefficients greater than the minimum acceptable alpha of 0.70 (Hair *et al.*, 2010). Supplier selection ethics had an alpha coefficient of 0.725, ethical policies and codes 0.886, procedural justice 0.938, supplier diversity 0.918 while procurement performance had 0.866. The overall Cronbach's alpha coefficient for all the constructs in the study was 0.949.

3.7.2 Validity

To ensure construct validity, the questionnaire was guided by the conceptual framework in order to reflect and measure the key elements of sourcing ethics and procurement performance. To ensure content validity, a thorough review of literature was carried out so as to identify appropriate measures of the different variables, that is, supplier selection ethics, ethical policies and codes, procedural justice and supplier diversity.

Construct validity was also ensured by using experts. According to Kothari (2013) a panel of experts can examine the items and determine the specific items that the research instrument intended to measure. A group of experts in the field of procurement and supply chain management were issued with the research instrument to assess if the questionnaire was useful in determining the influence of sourcing ethics on procurement performance of Kenyan state corporations. The recommendations given by the experts as well as the responses from the pilot study were used in improving the questionnaire.

3.8 Data Processing and Analysis

Collected data was first checked for accuracy before analysis was done. Only fully filled questionnaires were considered so as to help in testing for the distribution of data. Data was analyzed using both descriptive and inferential statistics. The descriptive statistics used included mean, standard deviations, percentages and frequencies. According to Kothari (2012) the clustering tendency and describing of data characteristics can be done

using descriptive statistics. Inferential statistics used to show the relationships between variables were correlation analysis, regression analysis and Analysis of Variance (ANOVA). The statistical package for social sciences (SPSS version 22) was used to compute, analyze and present the research findings. The collected data was first coded to enable the categorization of the responses. Data was also cleaned by checking for any errors that may have been committed during entry. Thus, interpretation of the data was done by drawing inferences from the computed frequencies, percentages, means and standard deviations. The findings of the study were presented using frequency distribution tables.

3.8.1 Measurement of Variables

The various variables conceptualized in the conceptual model were measured as shown in Table 3.3.

Table 3.3: Measurement of Variables

Variable	Dimensions	Data	Measure
1. Supplier Selection Ethics	-Ethical supplier evaluation -Supplier ethical assessment	-Objectivity in Supplier evaluation -Specifications -Collusion -Child/Forced labour -Supplier work conditions -Health and safety practices	5-point likert scale where 1 is the lowest and 5 greatest level of agreement/disagreement with statements on supplier selection ethics. (Q5-Q12)
2.Ethical Policies and Codes	-Ethical policy statements -Ethical code of conduct	-Conflicts of interest -Beneficial shareholding -Information accuracy -Fraudulent practices Inappropriate influence	5-point likert scale where 1 is the lowest and 5 greatest level of agreement/disagreement with statements on ethical policies and codes (Q15-Q23)

Variables	Dimesion	Data	Measure
3.Procedural Justice	-Elements of procedural Justice -Dealing with suppliers	-Transparency -Bid evaluation process -Consistency of standards -Fairness -Payment deadlines Dispute management	5-point likert scale where 1 is the lowest and 5 greatest level of agreement/disagreement with statements on procedural justice. (Q26-Q35)
4.Supplier Diversity	-Preference schemes -Inclusion of minorities	-Preference schemes -Diversity in community Supplier Diversity programmes -Management commitment -Competition among diverse suppliers -Progressiveness -Partnerships with minority suppliers	5-point likert scale where 1 is the lowest and 5 greatest level of agreement/disagreement with statements on supplier diversity. (Q38-Q47)
5.Procurement Performance	-Customer service delivery -Operational costs reduction	-Responsiveness -Clarity -information provisioning -cost reduction -Payment terms -Measurement and tracking costs	5-point likert scale where 1 is the lowest and 5 greatest level of agreement/disagreement with statements on whether procurement performance is influenced by ethical sourcing (Q50-Q57)

3.8.2 Ordinal Regression Analysis

Quantitative data was mainly analyzed using descriptive and inferential statistics. Thus, interpretation of the data was first done by drawing inferences from the computed frequencies, percentages, means, variances and standard deviations (Kothari, 2013). The ordinal regression procedure was employed to establish the relationship between the independent variables and the dependent variable. According Muriithi, Kihoro and Waititu (2012) the ordinal regression procedure helps in building models, making predictions and evaluating usefulness of predictor variables where the dependent variable is of ordinal nature. Olweny (2014) also explains that the SPSS ordinal procedure (Polytomous Universal Model-PLUM) helps in preserving the natural ordering of the collected data. Pearson correlation and Analysis of Variance (ANOVA) was also used to show the relationship between each of the independent variables and the dependent variable (Sekaran & Bougie, 2013). The following regression model was adopted in the study:

$$f(\Pr(Y_{ij} \leq y_{ij})) = \emptyset_j - (\beta_1 X_{i1} + \beta_2 X_{i2} + \beta_3 X_{i3} + \beta_4 X_{i4})$$

Where: $f()$ = Link function

Y_{ij} = Cumulative probability of the j^{th} category for the i^{th} case

\emptyset_j = Threshold for the j^{th} category

$\beta_1 \dots \beta_4$ = regression coefficients

$X_{i1} - X_{i4}$ = values of predictors for the i^{th} case

3.8.3 Test for Moderation Effect

To explain the moderation effect of organizational size on the relationship between sourcing ethics and procurement performance, the following moderated regression model was used:

$$f(\Pr(Y_{ij} \leq y_{ij})) = \emptyset_j - (\beta_2 X_{i1} + \beta_2 X_{i2} + \beta_3 X_{i3} + \beta_4 X_{i4} * S)$$

Where: $f()$ = Link function

Y_{ij} = Cumulative probability of the j^{th} category for the i^{th} case

\emptyset_j = Threshold for the j^{th} category

$\beta_1 \dots \beta_4$ = regression coefficients

$X_{i1} - X_{i2}$ = values of predictors for the i^{th} case

S = Organizational Size (Moderating variable)

The moderating effect was the joint effect of organizational size and sourcing ethics. The significance of the moderating effect of organizational size on the relationship between sourcing ethics and procurement performance of Kenyan state corporations was evaluated at a p-value of .05. If the reported p-value < .05 then the moderating effect was significant, otherwise insignificant if the reported p-value > .05.

3.8.4 Hypothesis Testing

The study was based on the premise that sourcing ethics influenced the procurement performance of the state corporations in Kenya. Five hypotheses were set to guide the study and they were tested at 5 percent significance level (within 95 percent confidence interval) which is significant for social sciences. The Karl Pearson Product Moment (Beta) test was used to test the four stated hypotheses with the test decision criteria set such that the study rejects the null hypothesis (H_0) if $\beta \neq 0$ and p-value ≤ 0.05 . Otherwise, the study fails to reject H_0 . This was summarized in Table 3.4.

Table 3.4: Hypothesis Test

Hypothesis Statement	Hypothesis Test	Decision Rule
H₀₁ : There is no significant relationship between supplier selection ethics and procurement performance of state corporations in Kenya	Beta test H₀ : $\beta_1=0$; H_A : $\beta_1 \neq 0$	Reject H₀₁ if P-value ≤ 0.05 otherwise fail to reject H₀₁ if P-value > 0.05 $f(\lambda_1) = \emptyset_1 - (\beta_1 X_{i1})$
H₀₂ : There is no significant relationship between ethical policies and codes and the procurement performance in Kenyan state corporations	Beta test H₀ : $\beta_2=0$; H_A : $\beta_2 \neq 0$	Reject H₀₂ if P-value ≤ 0.05 otherwise fail to reject H₀₂ if P-value > 0.05 $f(\lambda_2) = \emptyset_2 - (\beta_2 X_{i2})$
H₀₃ : There is no significant relationship between procedural justice and procurement performance in Kenyan state corporations	Beta test H₀ : $\beta_3=0$; H_A : $\beta_3 \neq 0$	Reject H₀₃ if P-value ≤ 0.05 otherwise fail to reject H₀₃ if P-value > 0.05 $f(\lambda_3) = \emptyset_3 - (\beta_3 X_{i3})$
H₀₄ : There is no significant relationship between supplier diversity and procurement performance in Kenyan state corporations.	Beta test H₀ : $\beta_4=0$; H_A : $\beta_4 \neq 0$	Reject H₀₄ if P-value ≤ 0.05 otherwise fail to reject H₀₄ if P-value > 0.05 $f(\lambda_4) = \emptyset_4 - (\beta_4 X_{i4})$
H₀₅ : There is no significant moderating effect of organizational size on the relationship between sourcing ethics and procurement performance of state corporations in Kenya.	H₀ : $\beta_s=0$; H_A : $\beta_s \neq 0$	Reject H₀₅ if P-value ≤ 0.05 otherwise fail to reject H₀₅ if P-value > 0.05 $f(\lambda_s) = \emptyset_s - (\beta_s X_{is})$

3.8.5 Qualitative Data Analysis

Qualitative data refers all non-numeric data or data that has not been quantified and can be a product of all research strategies (Saunders *et al.*, 2015). According to Sekaran and Bougie (2013) qualitative data analysis is not a step-by-step linear process but data coding may help in simultaneously developing ideas on how the data will be displayed as well as to draw some preliminary conclusions. Qualitative data collected through the unstructured section of the questionnaire was analyzed through computer aided content analysis. Glaser and Laudel (2009) explain that content analysis is appropriate for analyzing data that has been collected or gathered in unstructured manner. Duriau, Reger and Pfarrel (2007) on the other hand explain that computer aided content analysis has the advantage that it can combine qualitative and quantitative approaches and still maintain rich meaning with strong qualitative meaning.

Using content analysis, presence of similar words were detected, characters and sentences were presented in a logical manner. According to Stefan and Stefan (2012), content analysis is an effective tool for analyzing qualitative research information in a systematic and logical manner. In analyzing qualitative data, content of text was excavated and the underlying meaning of responses appropriately interpreted. Specifically, the collected data was formally assessed to provide the basis for content analysis, related categories of information were grouped together and the data was analyzed according to their relevance in structured dimension. The process followed was borrowed from the four step analysis of qualitative data using content analysis advanced by Mayring (2008) that is, material collection, descriptive analysis, category selection and material evaluation.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

In this chapter, the findings of the study and the discussions of the results are presented. The chapter contains the research response rate, tests for normality, factor analysis of the measures of variables, demographic characteristics, descriptive statistics, correlation of variables, regression analysis results, testing of hypotheses and the discussion of major findings.

4.2 Response Rate

A total of 170 state corporations across Kenya were targeted for the study. Out of the 170 targeted corporations, 137 filled and returned the questionnaires, which represented 80.59% response rate. According to Zikmund, Babin, Carr and Griffin (2012) a 50% response rate is adequate, 60% is good and 70% and above is very good. The response rate of 80.59% for this study was therefore considered satisfactory to make conclusions for the study. Most of the respondents that did not return their questionnaires claimed that they considered such information to be very private, while a few either misplaced or were not willing to respond to the questions. The data obtained from the procurement heads was representative because the procurement heads met the criteria of being key informants since they played a key role in public procurement, most of them shared the information willingly, communicated effectively and they were neutral in giving the information. According to Marshall (1996) the key characteristics of a key informant include their role in the community, willingness to communicate knowledge, communicability and impartiality.

4.3 Factor Analysis

To understand how each variable specifically contributed to the procurement performance of the Kenyan state corporations, factor analysis was carried out for all the independent variables. The principal component analysis method was also used to describe the interdependencies among both the independent and the dependent variables, by explaining which factors explained most of the information in the original values.

4.3.1 Factor Analysis of Supplier Selection Ethics

The study applied the Kaiser-Meyer Olkin (KMO) measures of sampling adequacy and Bartlett's test of Sphericity on eight (8) supplier sourcing ethics measures in order to examine the dimensionality of supplier selection ethics and procurement performance. This was also helpful in finding out if all the variables were significant to procurement performance. The results were presented in Table 4.1.

Table 4.1: KMO and Bartlett's Test on Supplier Selection Ethics Measures

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.850
Approx. Chi-Square	462.639
Bartlett's Test of Sphericity Df	28
Sig.	.000

The KMO measures of sampling adequacy show the value of test statistic as 0.850, which is close to 1, representing greater acceptability of the use of factor analysis and sufficient inter correlations of supplier selection ethics measures. Bartlett's test of sphericity is significant (chi-square=462.639, p=0.000).The p-value<0.05 indicating a highly significant relationship among the variables.

To identify the group of factors which explained most of the information carried by other variables, the constructs were subjected to a variance test through principal component analysis. Table 4.2 shows the variances, Eigen values and the cumulative percentages.

Table 4.2: Total Variance Explained in Supplier Selection Ethics

Component	Initial Eigen Values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.699	46.243	46.243	3.699	46.243	46.243
2	1.177	14.716	60.960	1.177	14.716	60.960
3	.984	12.302	73.261			
4	.819	10.234	83.495			
5	.551	6.891	90.386			
6	.313	3.915	94.302			
7	.269	3.365	97.666			
8	.187	2.334	100.000			

Extraction Method: Principal Component Analysis.

The variances identified the Eigen values which indicated the variance of each factor or component in comparison with the total variance of all the items shown in the construct. To factor analyze the eight items related to supplier selection ethics, principal component analysis with a promax rotation was used. The variance matrix showed two variables that had Eigen values of more than 1.0 which meant that these were the supplier selection ethics variables that had the highest influence on procurement performance. Component one had the highest variance of 3.699 which accounted for 46.243% of the variance. Component two had the second highest variance of 1.177 contributing 14.716% of the variance. Cumulatively, the two factors were critically driving supplier selection ethics and they accumulated to 60.96% of the total variance.

Table 4.3 shows the component matrix for supplier selection ethics. According to David, Patrick, Philip & Kent (2010) factors that qualify for further analysis should have a threshold of 0.4 and above.

Table 4.3: Component Matrix for Supplier Selection Ethics

Statement	Component	
	1	2
Priority is given to suppliers meeting specifications		.836
There are mechanisms to ensure objective supplier evaluation		.767
Assessment of suppliers' health and safety practices	.873	
Regular assessment of suppliers' work conditions	.869	
Assessment of suppliers' regard for workers' rights	.867	
Regular assessment for forced labour	.842	
No selection of colluding suppliers	.817	
Regular assessment for child labour	.644	

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Results presented in Table 4.3 shows the components made for supplier selection ethics. The variable comprised of eight (8) factors and they were all retained for subsequent analysis because they all met the threshold of 0.4 and above. The correlations in both component one and two were therefore considered significant in explaining supplier selection ethics as a variable. The variables in component one (1) were renamed as supplier ethics and those in component two (2) were renamed as supplier evaluation. Descriptive statistics for the two identified components were performed and presented in Table 4.4.

Table 4.4: Descriptive Results of Supplier Evaluation and Supplier Ethics

Procurement Performance is driven by the evaluation criteria and process as well as the ethics of suppliers.		
	Supplier Ethics	Supplier Evaluation
Measurement		
Mean	3.33	3.98
Cronbach's Alpha	0.712	0.723

Using the Principal Component rotation method and Promax with Kaiser Normalization resulted into the two components shown in Table 4.4. Component one (supplier ethics) had a mean score of 3.33 and a Cronbach alpha of 0.712 while component two (supplier evaluation) had a mean score of 3.98 and a Cronbach alpha of 0.723. The Cronbach alpha results were acceptable for both components and this qualified the variables for further and subsequent analysis. These results were consistent with the findings by Ombuki et al. (2014) that ethical supplier evaluation had an effect on performance of organizations.

4.3.2 Factor Analysis of Ethical Policies and Codes

Various dimensions of ethical policies and codes were used in the study to find out the degree to which they influence procurement performance of Kenyan state corporations. KMO and Bartlett's test were used to find out the dimensions that were driving procurement performance and the results were presented in Table 4.5.

Table 4.5: KMO and Bartlett's Test on Ethical Policies and Codes

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.816
Bartlett's Test of Sphericity	Approx. Chi-Square	229.017
	Df	36
	Sig.	.000

The KMO measure of sample adequacy was 0.816 which indicated that the set of variables was suitable for factorization. The Bartlett's test of sphericity was significant (chi-square 229.017, p=0.000) which implied that the variables were correlated hence suitable for factorization. The total variance of ethical policies and codes is shown in Table 4.6

Table 4.6: Total Variance Explained in Ethical policies and Codes

Component	Initial Eigen Values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.056	33.959	33.959	3.056	33.959	33.959
2	1.232	13.687	47.646	1.232	13.687	47.646
3	.992	11.021	58.667			
4	.856	9.514	68.182			
5	.722	8.019	76.200			
6	.651	7.238	83.438			
7	.615	6.839	90.277			
8	.457	5.073	95.350			
9	.418	4.650	100.000			

Extraction Method: Principal Component Analysis

The nine measures of ethical policies and codes were subjected to factor analysis and the results showed that there were two critical factors driving use of ethical policies and codes in state corporations which accumulated to 47.646% of the total variance in this construct. Factor 1 had 33.959% and factor 2 had 13.687%. These two factors had the greatest influence on ethical policies and codes and hence procurement performance of state corporations in Kenya and they all had Eigen values of more than 1.0. Table 4.7 shows the component matrix for ethical policies and codes.

Table 4.7: Component Matrix for Ethical Policies and Codes

Statement	Component	
	1	2
Code of conduct prevents inappropriate influence on procurement procedures	.809	
Firm verifies accuracy of information	.695	
Firms' policy on confidentiality of information	.688	
Ethical guidelines prevent misuse of power	.637	
Code of ethics prevents collusion	.490	
Firms' Policy on gifts and hospitality	.488	
Staff to declare conflict of interest		.837
Staff not to deal with supplier firms in which they have beneficial shareholding		.860
Code of ethics prevents any procurement fraud		.497

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

The results shown in the component matrix for ethical policies and codes revealed that all the nine (9) variables in ethical policies and codes had met the threshold value of 0.4 and therefore none was dropped. The variables for component one were renamed information ethics and those for component two as conflicts. Their Cronbach alphas and means were as shown in Table 4.8.

Table 4.8: Descriptive Results of Information Ethics and Conflicts

Measurement	Procurement Performance is driven by Information Ethics and Conflicts	
	Information Ethics	Conflicts
Mean	4.03	3.93
Cronbach's Alpha	0.881	0.862

Information ethics had a mean score of 4.03 with a Cronbach alpha of 0.881 while conflicts had a mean of 3.93 with a Cronbach alpha of 0.862. Therefore, information ethics and conflicts of interest are factors that strongly influence procurement performance and this supported research findings by Ayoyi and Mukoswa (2015) that procurement performance can be improved if there is ethics in information management and procurement without conflicts of interests.

4.3.3 Factor Analysis of Procedural Justice

The ten measures of procedural justice were subjected to factor analysis and the results obtained are shown in Table 4.9.

Table 4.9: KMO and Bartlett's Test on Procedural Justice

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.795
Bartlett's Test of Sphericity	Approx. Chi-Square	256.345
	Df	45
	Sig.	.000

The results in Table 4.9 show that the KMO measure of sample adequacy was 0.795 which indicated that the sets of variables were suitable for factorization. Bartlett's test of Sphericity was significant (chi-square 256.345, p=0.000). The total variance explained by the various procedural justice measures was illustrated in Table 4.10.

Table 4.10: Total Variance Explained for Procedural Justice

Component	Initial Eigen Values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.197	31.973	31.973	3.197	31.973	31.973
2	1.216	12.164	44.137	1.216	12.164	44.137
3	1.010	10.103	54.241	1.010	10.103	54.241
4	.974	9.736	63.977			
5	.877	8.766	72.743			
6	.677	6.771	79.514			
7	.662	6.618	86.132			
8	.576	5.765	91.897			
9	.443	4.433	96.330			
10	.367	3.670	100.00			

Extraction method: Principal Component Analysis

The factor analysis results of the ten measures of procedural justice showed that there were three critical factors driving the application of procedural justice in the state corporations. Factor 1 had the highest variance of 31.973% while factor 2 had 12.164% and factor 3 had 10.103%. These three factors had the greatest influence on procedural justice hence procurement performance of state corporations. The component matrix for procedural justice was as shown in Table 4.11.

Table 4.11: Component Matrix for Procedural Justice

Statement	Component		
	1	2	3
There is consistent application of same standards when screening suppliers	.874		
There's transparency in opening suppliers' bids	.801		
There's transparency when inviting supplier to offer	.761		
There is unbiased dispute resolution		.811	
Suppliers are dealt with objectively without favour		.753	
Equal opportunity is given to all suppliers		.629	
Payment deadlines are met as per law and without favouritism		.609	
There is equity when evaluating suppliers' offers			.914
Bid evaluation process is always very clear			.829
Procurement processes are evaluated for fairness			.753

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

Rotation converged in 5 iterations

Further factor analysis revealed that all the ten (10) factors in the variable had surpassed the recommended threshold of 0.4 and therefore they were all considered for further analysis. Three components were extracted for procedural justice variable. The indicators in the first component were named as transparency, those in the second component were named as dealing with suppliers and those in component three were named as fairness in evaluation. The Cronbach alpha and the mean for the procedural justice component factors were as shown in Table 4.12.

Table 4.12: Descriptive results of Procedural Justice

Measurement	Procurement performance is driven by transparency, dealing with suppliers and fairness in supplier evaluation		
	Transparency	Dealing with suppliers	Fairness in evaluation
Mean	4.02	4.17	4.05
Cronbach's Alpha	0.756	0.812	0.789

The factor results identified the three components shown in Table 4.12. The mean score for transparency was 4.02 with cronbach alpha of 0.756. The second component which was named as dealing with suppliers had a mean score of 4.17 with a cronbach alpha of 0.812 and agreed by the respondents. The third component identified as fairness in evaluation had a mean score of 4.05 and a cronbach alpha of 0.789. These statistics therefore indicated that the variables could be subjected to further inferential analysis. Therefore, transparency in the evaluation of suppliers, fairness and impartiality when evaluating and dealing with suppliers are key in ensuring that there is procedural justice. This is in agreement with Siriluck (2013) who established that a good procurement system should ensure that there is integrity, transparency, accountability and fairness.

4.3.4 Factor Analysis of Supplier Diversity

To establish the factors that were driving supplier diversity in the Kenyan state corporations, KMO and Bartlett's test were taken. The KMO measures of adequacy explained the extent to which the indicators of this construct belonged to each other. This was presented in Table 4.13.

Table 4.13: KMO and Bartlett's Test on Supplier Diversity

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.781
Bartlett's Test of Sphericity	Approx. Chi-Square	252.851
	Df	45
	Sig.	.000

The KMO measure of sample adequacy was 0.781 and this indicated that the set of variables were suitable for factorization. Bartlett's test of Sphericity was significant (Chi-square 252.851, p= 0.000). Table 4.14 shows the total variance explained in the supplier diversity variables.

Table 4.14: Total Variance Explained for Supplier Diversity

Component	Initial Eigen Values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.231	32.310	32.310	3.231	32.310	32.310
2	1.263	12.634	44.944	1.263	12.634	44.944
3	1.031	10.309	55.253	1.031	10.309	55.253
4	.845	8.448	63.701			
5	.805	8.046	71.748			
6	.700	7.003	78.751			
7	.638	6.383	85.134			
8	.609	6.092	91.226			
9	.501	5.010	96.236			
10	.376	3.764	100.00			

Extraction Method: Principal Component Analysis

The analysis of variance identified the Eigen values which are the elements that describe the degree of change in each variable in relationship to the total overall variables. The percentage of variance and cumulative percentages which were explained by the extracted factors before and after the rotation were also shown. The ten measures of supplier diversity were subjected to factor analysis and the results showed that there were three very important factors driving supplier diversity and they accumulated to 55.253% of the total variance explained. Factor 1 had the highest variance of 32.310%, factor 2 had the second highest variance of 12.634% while factor 3 had the third highest variance of 10.309%. These three factors had Eigen values of more than 1.0 and had the greatest influence on supplier diversity hence procurement performance. Results presented in Table 4.15 show the components that were made for supplier diversity. The variable comprised of ten (10) factors and they were all retained for further analysis because they met the threshold of 0.4 and above.

Table 4.15: Component Matrix for Supplier Diversity

Statement	Component		
	1	2	3
Firm sets goals to measure diversity progress	.640		
Firm has in place preferential policy as per the act	.575		
Top management is committed in developing and implementing supplier diversity programmes	.548		
Firm creates awareness on preference schemes	.547		
Firm is committed to strengthening strategic partnerships with minority owned businesses		.950	
The firm ensures competition among diverse suppliers		.790	
Firm has a small supplier diversity programme		.780	
There's positive progress in broadening supply base			.878
Firm has mentorship programmer for minority owned businesses			.765
Firms shortlist of suppliers has broad mix of suppliers			.619
Extraction Method: Principal Component Analysis. Rotation Method: Promax with Kaiser Normalization.			
Rotation converged in 5 iterations			

The three components identified in Table 4.15 were named as government preference schemes, minority inclusion and broadening of supply base respectively. The descriptive results for these three identified variables are presented in Table 4.16.

Table 4.16: Descriptive Results of Supplier Diversity

Procurement Performance is driven by government preference schemes, minority inclusion and broadening supply base			
Measurement	Government preference Schemes	Minority Inclusion	Broadening Supply Base
Mean	3.89	4.11	4.02
Cronbach's Alpha	0.766	0.813	0.804

The mean score for the first component (government preference schemes) was 3.89 and a Cronbach alpha of 0.766 and agreed by the respondents. This is in support of Kiragu (2015) who observed that the government preference schemes are important in spelling out how supplier diversity can be accomplished. The mean score for minority inclusion component was 4.11 and Cronbach alpha of 0.818. This supported the findings by Muema *et al.* (2015) that inclusion of minority owned businesses ensures a level playing field and helps in improving ethical sourcing in any organization. The third component was broadening the supply base and it had a mean score of 4.02 and a Cronbach alpha of 0.804 and agreed by the respondents. This is in support of findings by Rodgerson (2012) who found out that the firm can enhance supplier diversity by having a broad supply base and procuring goods and services by visibly minority groups.

4.3.5 Factor Analysis of Procurement Performance

Procurement performance in the study was measured in terms of customer service delivery and operational cost reduction. The eight measures used to establish how procurement performance was affected by sourcing ethics were subjected to factor analysis in order to establish if they were well conceptualized before proceeding with more detailed analysis. The KMO and Bartlett's test of Sphericity for procurement performance were as shown in Table 4.17.

Table 4.17: KMO and Bartlett's Test on Procurement Performance

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.796
Bartlett's Test of Sphericity	Approx. Chi-Square	148.240
	Df	28
	Sig.	.000

The KMO measure of sample adequacy was 0.796 which indicated that the variables were suitable for factorization. The Bartlett's test of Sphericity was also significant (Chi-square 148.240, $p= 0.000$) implying non-correlation among the variables hence suitable for factorization. Table 4.18 showed the total variance of procurement performance measures.

Table 4.18: Total Variance Explained for Procurement Performance

Component	Initial Eigen Values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.472	30.896	30.896	2.472	30.896	30.896
2	1.116	13.948	44.844	1.116	13.948	44.844
3	1.046	13.077	57.922	1.046	13.077	57.922
4	.913	11.409	69.331			
5	.889	11.116	80.446			
6	.582	7.272	87.718			
7	.531	6.637	94.355			
8	.452	5.645	100.000			

Extraction Method: Principal Component Analysis

After subjecting the eight measures of procurement performance to factor analysis, the results showed that there were three critical factors influencing procurement performance which accumulated to 57.922% of the total variance in this construct. Factor 1 had the highest variance of 30.896%, factor 2 had 13.948% and factor 3 had 13.077%. Factor loading analysis was also performed and the component matrix for procurement performance shown in Table 4.19.

Table 4.19: Component Matrix for Procurement Performance

Statement	Component		
	1	2	3
Responding and resolving customers' problems fast	.650		
Procuring exact quantities from suppliers	.631		
Procuring only from approved suppliers	.494		
Obtaining better payment terms		.841	
Better measurement, tracking and reporting incurred costs and realized benefits.		.800	
Reduction in procurement administrative costs		.701	
Relevant and timely advice by procurement unit			.811
Availing information and resources to customers			.765

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

Rotation converged in 6 iterations

The results presented in Table 4.19 show that there were three components extracted for procurement performance variable and that all the eight (8) factors in the variable were considered for further analysis since they met the threshold of 0.4 and above. The first component was named as responsiveness, the second was named as cost reduction and the third component was named as information provisioning. The reliability test for the three components of procurement performance was also performed and the Cronbach alpha coefficients and the means shown in Table 4.20.

Table 4.20: Descriptive Results of Procurement Performance

Measurement	Procurement performance is affected by responsiveness, cost reduction and information provisioning		
	Responsiveness	Cost Reduction	Information Provisioning
Mean	4.01	4.05	4.34
Cronbach's Alpha	0.846	0.866	0.879

The Cronbach alpha for procurement responsiveness was 0.846 which was above the minimum threshold of 0.70. The mean score was 4.01 which implied that most of the respondents agreed that procurement performance was facilitated by responsiveness. The mean score for cost reduction was 4.05, with a Cronbach alpha of 0.866 and agreed by the respondents. The mean score for information provisioning was 4.34 with a Cronbach alpha of 0.879 and agreed by the respondents. These results were in support of Tawfik *et al.* (2014) that procurement performance is best established through measurement of efficiency and effectiveness. Responsiveness, timely information provisioning and solving customer problems as well as cost reduction are considered among the best measures for procurement performance. The variables were also deemed fit for subsequent inferential statistics.

4.4 Demographic Characteristics

The category or classification of state corporations, years of existence, number of employees and the management structure are covered in this section.

4.4.1 Classification of State Corporations

The results for the classification of the different state corporations considered in this study were as presented in Table 4.21.

Table 4.21: Classification of State Corporations

Categories of State Corporations	Frequency	Percent	Cumulative Percent
Commercial State Corporations	44	32.1	32.1
Executive Agencies	42	30.7	62.8
Independent Regulatory Agencies	15	10.9	73.7
Research/Education/Training Institutions	36	26.3	100
Total	137	100	

Table 4.21 indicated that out of those that responded, 32.1% of the state corporations were commercial state corporations, 30.7% were executive agencies, 10.9% were independent regulatory agencies and 26.3% were research/education/training institutions. The results show that there was a good spread of the state corporations covered in the study and the results would therefore be a true representation of all the government procuring entities.

4.4.2 Years of Existence

The respondents were asked to state the number of years that their state corporations had been in existence and the results were presented in Table 4.22

Table 4.22: Years of Existence

Duration	Frequency	Percent	Cumulative Percent
Less than 5 years	2	1.4	1.4
5-10 years	13	9.5	10.9
11-15 years	34	24.9	35.8
16-20 years	63	46.0	81.8
Over 20 years	25	18.2	100
Total	137	100	

Table 4.22 shows that 46% of the state corporations have been in existence for at least 16-20 years, 24.9% for 11-15 years, 18.2% for over 20 years, 9.5% for 5-10 years and only 1.5% for less than 5 years. This clearly indicated that majority of the state corporations have been there for long and have cumulatively high levels of experience in procurement related matters, and could therefore adequately respond to questions relating to ethical sourcing and procurement performance.

4.4.3 Number of Employees

To know whether the Kenyan state corporations had sufficient workforce, the respondents were requested to indicate the number of employees working in their procurement units and the results presented in Table 4.23.

Table 4.23: Number of Employees

Number of Employees	Frequency	Percent	Cumulative Percent
5-10	4	2.9	2.9
11-15	12	8.8	11.7
16-20	81	59.1	70.8
Above 20	40	29.2	100.0
Total	137	100.0	

The results in Table 4.23 indicated that 59.1% have 16-20 employees in their procurement unit, 29.2% have more than 20 employees, and 8.8% have 11-15, while only 2.9% have 5-10 employees in their procurement units. This clearly showed that many state corporations had a sizeable number of employees, indicating that they have many procurement related activities, sourcing included that are being performed by the state corporations.

4.4.4 Management Structure

The nature of the state corporations' management structure was determined by asking the respondents whether it was centralized or decentralized. The results obtained were as shown in Table 4.24.

Table 4.24: Nature of Management Structure

Management Structure	Frequency	Percent	Cumulative Percent
Centralized	117	85.4	85.4
Decentralized	20	14.6	100.0
Total	137	100.0	

Table 4.24 showed that 85.4% of the state corporations that responded had a centralized management structure while only 14.6% had a decentralized management structure. The quality of decisions made by the management and the speed of decision making is highly depended on the nature of management’s structure. Employees in a decentralized management structure are usually more motivated since they have the autonomy to make faster and quality decisions on their own and this positively affects the level of procurement performance, both qualitative and quantitative.

4.5 Descriptive Statistics

4.5.1 Supplier Selection Ethics on Procurement Performance

The study sought to determine the influence of supplier selection ethics on procurement performance. Table 4.25 summarizes the respondents’ level of agreement on how supplier selection ethics affected procurement performance in Kenyan state corporations.

Table 4.25: Supplier Selection Ethics on Procurement Performance

Statement	SDA	DA	SMA	A %	SA	Mean	SD
	%	%	%		%		
There are mechanisms to ensure objective supplier evaluation	1.5	0.7	14.6	60.6	22.6	4.02	0.732
Priority is given to suppliers meeting specifications	0	1.5	20.4	61.3	16.8	4.01	0.655
No selection of colluding suppliers	1.5	3.6	25.5	54.0	15.3	3.78	0.802
Regular assessment for forced labour	13.1	26.3	14.6	39.4	6.6	3.64	0.642
Regular assessment for child labour	12.4	32.1	16.1	28.5	10.9	3.62	0.639
Regular assessment of suppliers' work conditions	15.3	32.1	13.9	28.5	10.5	3.86	0.652
Assessment of suppliers' regard for workers' rights	11.7	34.3	19.0	25.5	9.5	3.87	1.199
Assessment of suppliers' health and safety practices	17.5	29.9	4.4	24.8	23.4	4.07	0.943
Overall Mean Score=3.44							
N=137; KEY: SDA= Strongly Disagree; DA= Disagree; SMA=Sometimes Agree; A= Agree; SA=Strongly Agree; SD= Standard Deviation.							

Most of the respondents agreed that their organizations conducted regular assessments of their suppliers' work conditions to ensure an ethical source of suppliers as shown by a mean score of 4.07. Most of the respondents (60.6%) also agreed that their organizations have mechanisms in place to ensure objectivity in supplier evaluation, with a mean score of 4.02. 61.3% of the respondents agreed that priority is given to suppliers who meet specifications, recording a mean score of 4.01. 54.0% of the respondents also agreed that their organizations never select suppliers who collude either externally or internally in order to hike the prices.

Table 4.25 Shows on a scale of 1-5 the extent to which the respondents felt supplier selection ethics affected procurement performance of Kenyan state corporations (where 1=strongly disagree, 2=disagree, 3=neutral 4=agree and 5= strongly agree). Overall, most of the respondents had a neutral agreement that supplier selection ethics affected procurement performance with an overall mean score of 3.44. The standard deviations of majority of the responses were in the range of approximately 1.0 and this shows that the responses to the statements were not deviating much from the mean. Supplier selection ethics therefore qualified as an important variable in enhancing procurement performance in the state corporations. These results were in line with the findings of Gilles and Wehrle (2015) that the competitiveness and profitability of the firm largely depends on supplier selections ethics.

4.5.2 Ethical Policies and Codes on Procurement Performance

The study sought to establish the influence of ethical policies and codes on procurement performance and the findings were presented in Table 4.26.

Table 4.26: Ethical Policies and Codes on Procurement Performance

Statement	SDA %	DA %	SMA %	A %	SA %	Mean	SD
Staff to declare conflict of interest	2.9	0	18.2	65.0	13.9	3.87	0.756
Staff not to deal with supplier firms in which they have beneficial shareholding	7	2.2	15.3	60.6	21.2	3.99	0.722
Firms' Policy on gifts and hospitality	0	1.5	19.7	51.8	27.0	4.04	0.726
Firms' policy on confidentiality of information	0.7	1.5	25.5	52.6	19.7	3.89	0.754
Firm verifies accuracy of information	0.7	1.5	13.1	59.1	25.5	4.07	0.714
Code of ethics prevents collusion	0	2.2	16.8	58.4	22.6	4.01	0.696
Code of ethics prevents any procurement fraud	0.7	2.9	20.4	55.5	20.4	3.92	0.768
Ethical guidelines prevent misuse of power	0	2.9	10.2	59.9	27.0	4.11	0.693
Code of conduct prevents inappropriate influence on procurement procedures	2.2	0.7	14.6	53.3	29.2	4.07	0.815
Overall Mean Score = 4.00							
N=137; KEY: SDA= Strongly Disagree; DA= Disagree; SMA=Sometimes Agree; A= Agree; SA=Strongly Agree; SD= Standard Deviation.							

A majority of the respondents agreed that ethical guidelines prevent misuse of power with a mean score of 4.11. Many respondents also agreed that their firm's verify the accuracy of information given and received from the suppliers and also that the code of conduct guiding procurement activities in their organizations prevent inappropriate influence on any procurement procedure both with means of 4.07. The overall mean for ethical policies and codes was 4.00 indicating that many of the respondents agreed that ethical policies and codes affected the procurement performance of state corporations.

The results in Table 4.26 show that 65.0% of the respondents agreed that staff always declare any conflict of interest in their procurement processes. 60.6% also agreed that their procurement staffs are not allowed to deal with supplier firms in which they have beneficial shareholding. 59.9% also agreed that ethical guidelines prevent misuse of power in the organization. The results show that for all the statements, on ethical policies and codes, most of the respondents agreed on their importance, with the least percentage being 51.8% for those who agreed that the firm has a policy on gifts and hospitality being followed by the procurement staff. These results were in support of a study by Heungsik and John (2013) which revealed that an ethics programme outlining ethical policies and codes is essential in boosting performance.

4.5.3 Procedural Justice on Procurement Performance

The study sought to establish the influence of procedural justice on procurement performance. The results were presented in Table 4.27.

Table 4.27: Procedural Justice on Procurement Performance

Statement	SDA	DA	SMA	A	SA	Mean	SD
	%	%	%	%	%		
There is transparency when inviting supplier to offer	1.5	0.7	15.3	69.3	13.1	3.92	0.665
There is transparency in opening suppliers' bids	0	1.5	21.2	60.6	16.8	3.93	0.660
Bid evaluation process is always very clear	0.7	1.5	21.2	47.4	29.2	4.02	0.793
There is equity when evaluating suppliers' offers	0.7	1.5	22.6	59.1	16.1	3.88	0.708
There is consistent application of same standards when screening suppliers	0	1.5	19.0	57.7	21.9	4.00	0.686
Suppliers are dealt with objectively without favour	0	0.7	17.5	54.0	27.7	4.09	0.691
Procurement processes are evaluated for fairness	0	0.7	17.5	60.6	21.2	4.02	0.647
Equal opportunity is given to all suppliers	0	2.2	17.5	60.6	19.7	3.98	0.680
Payment deadlines are met as per law	0.7	1.5	16.1	56.9	24.8	4.04	0.732
There is unbiased dispute resolution	0	1.4	8.8	51.8	38.0	4.26	0.678
Overall Mean Score= 4.02							
N=137; KEY: SDA= Strongly Disagree; DA= Disagree; SMA=Sometimes Agree; A= Agree; SA=Strongly Agree; SD= Standard Deviation.							

Most of the respondents agreed that their organizations resolve disputes with suppliers in an unbiased manner, with a mean score of 4.27. Most of the respondents also agreed that they objectively dealt with suppliers without favoritism with a mean score of 4.09. They also agreed that payment deadlines are met as per the procurement law in order to encourage supplier participation, with a mean score of 4.04. The overall mean score for procedural justice was 4.02 indicating that most of the respondents agreed that it was necessary to enhance procedural justice in order to improve procurement performance.

69.3% of the respondents agreed that they ensured transparency when inviting suppliers to offer and 60.6% agreed that there is transparency in opening the suppliers' bids. To enhance procurement performance, 60.6% of the respondents agreed that they give equal opportunities to all the suppliers irrespective of gender, race or religious affiliations and they evaluate all their procurement processes for fairness. This was in line with the study

by Noorderhaven (2011) which established that procedural justice affects procurement and relationship management.

4.5.4 Supplier Diversity on Procurement Performance

The study also sought to determine the influence of supplier diversity on procurement performance. The findings for the descriptive results were as shown in Table 4.28.

Table 4.28: Supplier Diversity on Procurement Performance

Statement	SDA %	DA %	SMA %	A %	SA %	Mean	SD
Firm creates awareness on preference schemes	0.7	0.7	13.1	73.7	11.7	3.95	0.586
Firm's shortlist of suppliers has broad mix of suppliers	0	0.7	21.2	58.4	19.7	3.97	0.664
Firm has in place preferential policy as per the procurement law	0	0.7	22.6	47.4	29.2	4.05	0.741
Firm has a small supplier diversity programme	0	1.5	16.8	55.5	26.3	4.07	0.699
Firm has mentorship programmes for minority owned businesses	2.9	2.2	8.0	65.7	21.2	4.00	0.804
Top management is committed in developing and implementing supplier diversity programmes	2.2	2.9	10.2	52.6	32.1	4.09	0.856
The firm ensures competition among diverse suppliers	0	2.2	15.3	62.8	19.7	4.00	0.664
Firm sets goals to measure diversity progress	0	0	13.9	53.3	32.8	4.19	0.659
There is positive progress in broadening supply base	0.7	0	8.0	59.9	31.4	4.21	0.647
Firm is committed to strengthening strategic partnerships with minority owned businesses	0.7	0.7	4.4	53.3	40.9	4.33	0.655
Overall Mean Score = 4.09							
N=137; KEY: SDA= Strongly Disagree; DA= Disagree; SMA=Sometimes Agree; A= Agree; SA=Strongly Agree; SD= Standard Deviation.							

The results in Table 4.28 indicated that Most of the state corporations were committed to strengthening strategic partnerships with minority owned businesses with the highest mean score of 4.33. Many of the respondents also agreed that their firms had always shown positive progress in broadening their supply base as indicated with a mean score of 4.21. Overall, the responses on supplier diversity had a mean score 4.09, indicating that most of the respondents agreed that their firms were embracing supplier diversity in order to improve their procurement performance. 73.7% of the respondents agreed that supplier diversity in their firms is enhanced by creating awareness on the government’s preference schemes and 65.7% agreed to the statement that mentorship programmes for the minority owned business improves their procurement performance.

4.5.5 Procurement Performance

A number of questions were asked to determine how the procurement performance in the state corporations was influenced by sourcing ethics and the results were as shown in Table 4.29.

Table 4.29: Procurement Performance

Statement	SDA %	DA %	SMA %	A %	SA %	Mean	SD
Responding and resolving customers’ problems fast	2.2	1.5	14.6	73.0	8.8	4.40	0.685
Relevant and timely advice by procurement unit	0	1.5	17.5	65.0	16.1	4.26	0.629
Availing information and resources to customers	0.7	0.7	27.0	41.6	29.9	3.99	0.818
Procuring exact quantities from suppliers	0	0.7	15.3	66.4	17.4	4.01	0.600
Procuring only from approved suppliers	0	1.5	20.4	60.6	17.5	3.94	0.662
Reduction in procurement administrative costs	0	0	27.7	50.4	21.9	3.94	0.705
Obtaining better payment terms	0.7	1.5	2.4	63.5	21.9	4.04	0.685
Better measurement, tracking and reporting incurred costs and realized benefits.	0.7	0	7.3	48.2	43.8	4.34	0.680
Overall Mean Score= 4.09							
N=137; KEY: SDA= Strongly Disagree; DA= Disagree; SMA= Sometimes Agree; A= Agree; SA=Strongly Agree; SD= Standard Deviation.							

Most of the respondents agreed that the procurement functions responded promptly to all customer queries and procurement related matters and solving any problem with the first call, giving a mean score of 4.40. Most of the respondents also agreed that there was better measurement, tracking, and reporting of incurred costs and realized benefits in the procurement functions with a mean score of 4.34. They also agreed that the procurement functions gave timely and well founded advice relevant for decision making. Table 4.29 on procurement performance showed an overall mean score of 4.09 indicating that most of the respondents agreed that sourcing ethics influenced procurement performance.

The results shown in Table 4.29 indicate that 73.0% of the respondents agreed that through sourcing ethics, they were able to respond and solve their customers' problems fast and with the first call. 65.5% also agreed that the procurement unit was able to give relevant and timely advice to the firm by engaging in sourcing ethics. Through sourcing ethics, 66.4% of the respondents agreed that their firms are able to procure the exact quantities required from the suppliers. These results were in agreement with the findings by Chimwani *et al.* (2014) that procurement performance begins with efficiency and effectiveness in procurement so as to shift from being reactive to proactive to attain the set procurement levels in an organization.

4.6 Correlation Results of Sourcing Ethics and Procurement Performance

To establish the relationship between sourcing ethics and procurement performance in state corporations, Pearson Bivariate Correlation was used. According to Kothari (2013) correlation coefficient determines the strength of the relationship between dependent and independent variables. Table 4.30 showed the correlation results to illustrate the relationships.

Table 4.30: Correlation Results

		SSE	EPC	PJ	SD	PP
SSE	Pearson Correlation	1	.682**	.522**	.659**	.784**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	137	137	137	137	137
EPC	Pearson Correlation	.682**	1	.622**	.609**	.668**
	Sig. (2-tailed)	.000		.001	.000	.000
	N	137	137	137	137	137
PJ	Pearson Correlation	.522**	.622**	1	.632**	.722**
	Sig. (2-tailed)	.002	.000		.000	.000
	N	137	137	137	137	137
SD	Pearson Correlation	.659**	.609**	.632**	1	.694**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	137	137	137	137	137
PP	Pearson Correlation	.784**	.668**	.722**	.694**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	137	137	137	137	137

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

Key: **SSE**= Supplier Selection Ethics; **EPC**=Ethical Policies and Codes; **PJ**=Procedural Justice; **SD**=Supplier Diversity; **PP**=Procurement performance.

Table 4.30 showed a varied degree of interrelationships between sourcing ethics and procurement performance. There was a significant positive correlation ($r=0.784$) between supplier selection ethics and procurement performance. Supplier selection ethics had a strong influence on the procurement performance of Kenyan state corporations, with a significant p-value of 0.000. This therefore implies that if the state corporations effectively engage in supplier selection ethics, they are likely to boost their procurement performance. These results were in agreement with the study by Vonderembse and Tracey (2011) which revealed that ethics in supplier selection and assessment positively impacts on a firm's performance.

There is also a significant positive relationship ($r=0.668$, $p\text{-value}=0.000$) between ethical policies and codes and procurement performance. This therefore implies that a change in ethical policies and codes would influence the procurement performance of Kenyan state corporations. This was in support of results by researchers on different elements covered in ethical policies and codes since they all agreed that the elements of ethical policies and codes positively influenced procurement performance (Nikolay, 2013; Mathenge, 2013; Gesuka & Namusonge, 2013).

Procedural justice also had a positive correlation with procurement performance giving a coefficient correlation of 0.722 and a significant p -value of 0.000. This was in support of study findings by Grandia *et al.* (2015) that procedural justice affects procurement performance both directly and indirectly. Hiroshi (2009) also established that efficiency which is a measure of procurement performance is highly influenced by procedural justice. The findings also supported research findings by Narasimhan *et al.* (2013) who found out that procedural justice was important in improving performance.

The correlation coefficient between supplier diversity and procurement performance also showed a positive significant relationship ($r=0.694$, $p\text{-value}=0.000$). These results lent support to the findings by Katz (2011) that those organizations which adopt supplier diversity strategies have seen them pay off in different aspects of performance. Worthington (2009) also agreed that ethics in supplier diversity can lead to improved procurement performance. The results generally show that all the variables had a positive relationship with procurement performance.

4.7 Regression Results

Ordinal regression analysis was performed to assess the relationship between the independent variables (supplier selection ethics, ethical policies and codes, procedural justice and supplier diversity) and the dependent variable (procurement performance). The regression analysis was first done for every independent variable and then overall regression analysis was done to determine the influence of sourcing ethics on procurement performance of the Kenyan state corporations.

4.7.1 Supplier Selection Ethics.

To avoid distorting the natural ordering of the data, the SPSS ordinal procedure (Polytomous Universal Model-PLUM) was used to perform the regression of supplier selection ethics against procurement performance of Kenyan state corporations. The aggregate mean score of supplier selection ethics measures were regressed on aggregate mean score of procurement performance measures. The equation used for the model was $f(\Pr(Y_{i1} \leq y_{i1})) = \emptyset_1 - (\beta_1 X_{i1})$ and the results were as shown in Table 4.31:

Table 4.31: Regression Results for Supplier Selection Ethics

a) Model Fitting Information						
Model	-2 Log Likelihood	Chi-Square	Df	Sig.		
Intercept Only	288.353					
Final	259.787	28.566	13	.008		
Link function: Complementary Log-log.						
b) Goodness-of-Fit						
	Chi-Square		Df	Sig.		
Pearson	189.754		195	.593		
Deviance	144.521		195	.997		
Link function: Complementary Log-log.						
c) Pseudo R-Square						
Cox and Snell					.699	
Nagelkerke					.693	
McFadden					.743	
Link function: Complementary Log-log.						
d) Parameter Estimates						
		Estimate	Std. Error	Wald	df	Sig.
	Procurement Performance=1	.268	.294	2.010	1	.000
	Procurement Performance=2	.318	.388	2.031	1	.000
	Procurement Performance=3	.342	.454	2.144	1	.000
Threshold	Procurement Performance=4	.367	.463	2.372	1	.000
	Procurement Performance=5	.413	.502	3.147	1	.003
Location	Supplier Election Ethics =0	.429	.534	.973	1	.024
	Supplier Election Ethics =1	0 ^a			0	

Table 4.31(a) (model fitting) gives the results of the ordinal regression model compared with complementary Log-log link function. From the results, the -2LL of the model with only intercept is 288.353 while the -2LL of the model with the intercept and the independent variable (supplier selection ethics) is 259.787. The difference (Chi-Square statistics) is $288.353 - 259.787 = 28.566$ and it is significant at .05 because the p-value = .008 < .05. This therefore means that there is a significant association between the dependent variable (procurement performance) and the independent variable (supplier selection ethics) in complementary Log-log link function.

Table 4.31(b) (goodness of fit) show the results for the test of consistency between the observed data and the fitted model. The null hypothesis is stated as the observed data is consistent with the estimated values in the model fitted. The null hypothesis was accepted and it was concluded that the observed data was consistent with the estimated values in the fitted model since the p-values were insignificant (p-values = .593 and .977).

The Pseudo R-Squared results in Table 4.31(c) show that the independent variable has strong predictive value in the model. The likelihood value for Cox & Snell's Pseudo R-squared is .699, the likelihood value for Nagelkerke is .693 while the McFadden's likelihood value is .743. This implies that supplier selection ethics can be used to predict the value of procurement performance in Kenyan state corporations.

The Parameter of estimates presented in Table 4.31(d) show the coefficients, their standard errors, the Wald test and the p-values at 95% confidence interval. The threshold coefficients represent the intercepts and the following models were derived to show the prediction categories of the influence of supplier selection ethics on procurement performance of Kenyan state corporations:

$$f(\emptyset_1) = 0.268 - (0.429X_1)$$

$$f(\emptyset_2) = 0.318 - (0.429X_1)$$

$$f(\emptyset_3) = 0.342 - (0.429X_1)$$

$$f(\emptyset_4) = 0.367 - (0.429X_1)$$

$$f(\emptyset_5) = 0.413 - (0.429X_1)$$

Under the location parameters, the variables are positive indicating that the presence of supplier selection ethics increases the likelihood of higher value for procurement performance among Kenyan state corporations. Supplier selection ethics is statistically significant as a predictor variable, $p\text{-value} < .05$. This lends support to a study by Mlinga (2010) which concluded that ethics in supplier selection is paramount in enhancing organizational performance. The findings are also consistent with those of Byoung-Chung and Nam (2016) who found out that supplier selections ethics plays a key role in improving an organization's procurement performance.

4.7.2 Ethical Policies and Codes

To preserve the natural ordering of data, the SPSS ordinal procedure (Polychotomous Universal Model-PLUM) was used to perform the regression of ethical policies and codes against procurement performance. The aggregate mean score of ethical policies and codes measures were regressed on aggregate mean score of procurement performance measures. The equation used for model was: $f(\Pr(Y_{i2} \leq y_{i2})) = \emptyset_2 - (\beta_2 X_{i2})$ and the results were as shown in Table 4.32:

Table 4.32: Regression for Ethical Policies and Codes

a) Model Fitting Information						
Model	-2 Log Likelihood	Chi-Square	Df	Sig.		
Intercept Only	338.483					
Final	.000	338.483	18	.000		
Link function: Complementary Log-log.						
b) Goodness-of-Fit						
	Chi-Square	df	Sig.			
Pearson	281.058	270	.309			
Deviance	121.142	270	1.000			
Link function: Complementary Log-log.						
c) Pseudo R-Square						
Cox and Snell						.915
Nagelkerke						.923
McFadden						.514
Link function: Complementary Log-log.						
d) Parameter Estimates						
		Estimate	Std. Error	Wald Df	Sig.	
Threshold	Procurement Performance=1	.411	.380	2.998 1	.007	
	Procurement Performance=2	.521	.474	3.348 1	.004	
	Procurement Performance=3	.653	.492	3.683 1	.000	
	Procurement Performance=4	.684	.536	3.913 1	.000	
	Procurement Performance=5	.702	.612	4.258 1	.001	
Location	Ethical Policies & Codes=0	.501	.254	.000 1	.002	
	Ethical Policies & Codes=1	0 ^a	.	. 0	.	

The model fitting information given in Table 4.32(a) gives the results of the ordinal regression model compared with complementary Log-log link function. From the results, the -2LL of the model with only intercept is 338.483 while the -2LL of the model with intercept and the independent variable (ethical policies and codes) is .000. The difference (Chi-square statistics) is $338.483 - .000 = 338.483$ which is significant at .05 because $p\text{-value} < .05$. This therefore means that there is a significant association between the dependent variable (procurement performance) and the independent variable (ethical policies and codes) in complementary Log-log link function.

The results presented in Table 4.32(b) (Goodness of fit) show the test of consistency between the observed data and the fitted model. The null hypothesis was stated as the observed data is consistent with the estimated values in the model fitted. The null hypothesis was accepted and it was concluded that the observed data was consistent with the estimated values in the model since the $p\text{-values} > .05$ ($p\text{-values} = .309; 1.000$).

The Pseudo R-squared results presented in Table 4.32(c) show that the fitted model has a strong predictive value of the outcomes. The Cox & Snell's Pseudo R-squared likelihood value was .915 implying that the model predicts the outcome almost perfectly. The Nagelkerke full model also almost perfectly predicted the model with a likelihood value of .923. For McFadden's R-squared, the ratios of the likelihood show that the model could moderately predict the outcome as its likelihood is .514.

The parameter of estimates results presented in Table 4.32(d) show the significance of ethical policies and codes as a predicting variable. The threshold coefficients represent the intercepts and the following models were derived to show the prediction categories of the influence of ethical policies and codes on procurement performance of Kenyan state corporations:

$$f(\emptyset_1) = 0.411 - (0.501X_2)$$

$$f(\emptyset_2) = 0.521 - (0.501X_2)$$

$$f(\emptyset_3) = 0.653 - (0.501X_2)$$

$$f(\emptyset_4) = 0.684 - (0.501X_2)$$

$$f(\emptyset_5) = 0.702 - (0.501X_2)$$

Under the location parameter, the variables are positive indicating that the presence of ethical policies and codes increases the likelihood of higher value of response. Ethical policies and codes was also statistically significant with a p-value of .002 which is <.05. This is in support to findings by Heungsik and John (2013) who established that having proper ethical policies and codes affects performance in the long run. Kilonzo (2017) also established that ethical standards have a significant influence on a firm's competitiveness and if ethical policies and codes are strictly adhered to, they lead to improved procurement performance.

4.7.3 Procedural Justice

To preserve the natural ordering of the data, the SPSS ordinal procedure (Polychotomous Universal Model-PLUM) was used to perform the regression of procedural justice against procurement performance of Kenyan state corporations. The aggregate mean of procedural justice measures were regressed on aggregate mean score of procurement performance measures. The equation used for the model was $f(\Pr(Y_{i3} \leq y_{i3})) = \emptyset_3 - (\beta_3 X_{i3})$ and the results were as shown in Table 4.33:

Table 4.33: Regression for Procedural Justice

a) Model Fitting Information						
Model	-2 Log Likelihood	Chi-Square		Df		Sig.
Intercept Only	339.621					
Final	206.734	132.887		17		.000
Link function: Complementary Log-log.						
b) Goodness-of-Fit						
	Chi-Square	Df				Sig.
Pearson	145.635	255				1.000
Deviance	137.407	255				1.000
Link function: Complementary Log-log.						
c) Pseudo R-Square						
Cox and Snell						.621
Nagelkerke						.626
McFadden						.634
Link function: Complementary Log-log.						
d) Parameter Estimates						
		Estimate	Std. Error	Wald	Df	Sig.
	Procurement Performance=1	.301	.053	.627	1	.004
	Procurement Performance=2	.594	.102	.606	1	.001
	Procurement Performance=3	.734	.062	.628	1	.008
Threshold	Procurement Performance=4	.758	.079	.849	1	.008
	Procurement Performance=5	.788	.081	1.105	1	.007
Location	Procedural Justice=0	.702	.065	1.521	1	.017
	Procedural Justice=1	0 ^a	.	.	0	.

The model fitting information given in Table 4.33(a) gives the results of the ordinal regression model compared with complementary Log-log link function. From the results, the -2LL of the model with only intercept is 339.621 while the -2LL of the

model with intercept and the independent variable (procedural justice) is 206.734. The difference (Chi-square statistics) is $339.621 - 206.734 = 132.887$ which is significant at .05 because $p\text{-value} < .05$. This therefore means that there is a significant association between the dependent variable (procurement performance) and the independent variable (procedural justice) in complementary Log-log link function.

The results presented in Table 4.35(b) (Goodness of fit) show the test of consistency between the observed data and the fitted model. The null hypothesis was stated as the observed data is consistent with the estimated values in the model fitted. The null hypothesis was accepted and it was concluded that the observed data was consistent with the estimated values in the model since the $p\text{-values} > .05$ ($p\text{-values} = 1.000; 1.000$).

The Pseudo R-squared results presented in Table 4.33(c) show that the fitted model has a strong predictive value of the outcomes. The Cox & Snell's Pseudo R-squared likelihood value was .621 implying that the model strongly predicts the outcome. The Nagelkerke full model implied a strong predictive power of the model with a likelihood value of .626. For McFadden's R-squared, the ratio of the likelihood shows that the model could strongly predict the outcome as its likelihood is .634.

The parameter of estimates results presented in Table 4.33(d) show the significance of procedural justice in predicting procurement performance. The threshold coefficients represent the intercepts and the following models were derived to show the prediction categories of the influence of procedural justice on procurement performance of Kenyan state corporations:

$$f(\emptyset_1) = 0.301 - (0.702X_3)$$

$$f(\emptyset_2) = 0.594 - (0.702X_3)$$

$$f(\emptyset_3) = 0.734 - (0.702X_3)$$

$$f(\emptyset_4) = 0.758 - (0.702X_3)$$

$$f(\emptyset_5) = 0.788 - (0.702X_3)$$

Under the location parameter, the variables are positive indicating that the presence of procedural justice increases the likelihood of higher value of response. Procedural justice was also statistically significant with a p-value of .017 which is <.05. This supports the findings by Laurie and Gabriela (2012) who established that for a firm to improve its procurement performance, it must ensure that there is fairness in the procurement processes. These findings are also consistent with findings by Yuling *et al.* (2018) who established that procedural justice significantly improves procurement performance and affects stakeholder satisfaction.

4.7.4 Supplier Diversity

To avoid distorting the natural ordering of the data, the SPSS ordinal procedure (Polytomous Universal Model-PLUM) was used to perform the regression of supplier diversity against procurement performance of Kenyan state corporations. The aggregate mean score of supplier diversity measures were regressed on aggregate mean score of procurement performance measures. The equation used for the model was

$f(\Pr(Y_{i4} \leq y_{i4})) = \emptyset_4 - (\beta_4 X_{i4})$ and the results were as shown in Table 4.34:

Table 4.34: Regression Results for Supplier Diversity

a) Model Fitting Information						
Model	-2 Log Likelihood	Chi-Square	df	Sig.		
Intercept Only	352.154					
Final	124.371	227.783	18	.000		
Link function: Complementary Log-log.						
b) Goodness-of-Fit						
	Chi-Square	Df	Sig.			
Pearson	162.041	270	1.000			
Deviance	111.632	270	1.000			
Link function: Complementary Log-log.						
c) Pseudo R-Square						
Cox and Snell				.810		
Nagelkerke				.817		
McFadden				.646		
Link function: Complementary Log-log.						
d) Parameter Estimates						
		Estimate	Std. Error	Wald	Df	Sig.
Threshold	Procurement Performance=1	.635	.901	2.995	1	.004
	Procurement Performance=2	.674	.877	2.997	1	.018
	Procurement Performance=3	.722	.846	3.199	1	.006
	Procurement Performance=4	.722	.846	4.198	1	.006
	Procurement Performance=5	.801	.952	4.605	1	.036
Location	Supplier Diversity=0	.684	.081	4.050	1	.023
	Supplier Diversity=1	0 ^a	.	.	0	.

Table 4.34(a) (model fitting) gives the results of the ordinal regression model compared with complementary Log-log link function. From the results, the -2LL of the model with only intercept is 352.154 while the -2LL of the model with the intercept and the independent variable (supplier diversity) is 124.371. The difference (Chi-Square statistics) is $352.154 - 124.371 = 227.783$ and it is significant at .05 because the p-value = .000 < .05. This therefore means that there is a significant association between procurement performance and supplier diversity in complementary Log-log link function.

Table 4.34(b) (goodness of fit) show the results for the test of consistency between the observed data and the fitted model. The null hypothesis is stated as the observed data is consistent with the estimated values in the model fitted. The null hypothesis was accepted and it was concluded that the observed data was consistent with the estimated values in the fitted model since the p-values were insignificant (p-values = 1.000 and 1.000).

The Pseudo R-Squared results in Table 4.34(d) show that the independent variable has strong predictive value in the model. The likelihood value for Cox & Snell's Pseudo R-squared is .810, the likelihood value for Nagelkerke is .817 while the McFadden's likelihood value is .846. This implies that supplier selection ethics can be used to predict the value of procurement performance in Kenyan state corporations.

The Parameter of estimates presented in Table 4.34(d) show the coefficients, their standard errors, the Wald test and the p-values at 95% confidence interval. The threshold coefficients represent the intercepts and the following models were derived to show the prediction categories of the influence of supplier diversity on procurement performance of Kenyan state corporations:

$$f(\emptyset_1) = 0.635 - (0.684X_4)$$

$$f(\emptyset_2) = 0.674 - (0.684X_4)$$

$$f(\emptyset_3) = 0.722 - (0.684X_4)$$

$$f(\emptyset_4) = 0.722 - (0.684X_4)$$

$$f(\emptyset_5) = 0.801 - (0.684X_4)$$

Under the location parameters, the variables are positive indicating that the presence of supplier diversity increases the likelihood of higher value for procurement performance among Kenyan state corporations. Supplier diversity is statistically significant as a predictor variable, $p\text{-value} < .05$. Pauw and Wolvaardt (2011) also established that supplier diversity greatly determines the level of procurement performance in an organization.

The SPSS ordinal procedure (Polytomous Universal Model-PLUM) was used to perform the regression of all sourcing ethics measures against procurement performance of Kenyan state corporations. The results for the overall ordinal regression analysis for all the variables are shown in Table 4.35.

Table 4.35: Overall Regression Results for Sourcing Ethics

a) Model Fitting Information						
Model	-2 Log Likelihood	Chi-Square	df	Sig.		
Intercept Only	651.563					
Final	.000	651.563	60	.000		
Link function: Complementary Log-log.						
b) Goodness-of-Fit						
	Chi-Square	Df		Sig.		
Pearson	3025.668	1780		1.000		
Deviance	384.975	1780		1.000		
Link function: Complementary Log-log.						
c) Pseudo R-Square						
Cox and Snell				.991		
Nagelkerke				1.000		
McFadden				.990		
Link function: Complementary Log-log.						
d) Parameter Estimates						
	Estimate	Std. Error	Wald	Df	Sig.	
Threshold	Procurement Performance=1	.386	.086	1.373	1	.041
	Procurement Performance=2	.608	.078	1.307	1	.009
	Procurement Performance=3	.708	.070	1.256	1	.013
	Procurement Performance=4	.823	.072	2.043	1	.036
	Procurement Performance=5	1.197	.069	2.022	1	.001
Location	Supplier Selection Ethics (X ₁)	.106	.062	1.240	1	.006
	Ethical Policies & Codes (X ₂)	.117	.072	2.175	1	.002
	Procedural Justice (X ₃)	.235	.081	2.184	1	.015
	Supplier Diversity (X ₄)	.430	.077	3.600	1	.039
e) Test of Parallel Lines						
Model	-2 Log Likelihood	Chi-Square	df	Sig.		
Null Hypothesis	.000					
General	.000 ^b	.000	900	1.000		

The model fitting information given in Table 4.35(a) gives the results of the ordinal regression model compared with complementary Log-log link function. From the results, the -2LL of the model with only intercept is 651.563 while the -2LL of the model with intercept and the independent variable is .000. The difference (Chi-square statistics) is $651.563 - .000 = 651.563$ which is significant at .05 because $p\text{-value} < .05$. This therefore means that there is a significant association between the procurement performance and sourcing ethics in complementary Log-log link function.

The results presented in Table 4.35(b) (Goodness of fit) show the test of consistency between the observed data and the fitted model. The null hypothesis was stated as the observed data is consistent with the estimated values in the model fitted. The null hypothesis was accepted and it was concluded that the observed data was consistent with the estimated values in the model since the $p\text{-values} > .05$ ($p\text{-values} = 1.000; 1.000$).

The Pseudo R-squared results presented in Table 4.35(c) show that the fitted model has a strong predictive value of the outcomes. The Cox & Snell's Pseudo R-squared likelihood value was .991 implying that the model predicts the outcome almost perfectly. The Nagelkerke full model perfectly predicted the model with a likelihood value of 1.000. For McFadden's R-squared, the ratios of the likelihood show that the model could almost perfectly predict the outcome as its likelihood is .990.

From Table 4.35(d) the under the location parameters, all variables have positive coefficients indicating that the presence of the four variables increases the likelihood of higher value of procurement performance. The following models were developed from the parameters:

$$f(\emptyset_1) = 0.386 - (0.106X_1 + 0.117X_2 + 0.235X_3 + 0.430X_4)$$

$$f(\emptyset_2) = 0.608 - (0.106X_1 + 0.117X_2 + 0.235X_3 + 0.430X_4)$$

$$f(\emptyset_3) = 0.708 - (0.106X_1 + 0.117X_2 + 0.235X_3 + 0.430X_4)$$

$$f(\emptyset_3) = 0.823 - (0.106X_1 + 0.117X_2 + 0.235X_3 + 0.430X_4)$$

$$f(\emptyset_3) = 1.197 - (0.106X_1 + 0.117X_2 + 0.235X_3 + 0.430X_4)$$

The four measures of sourcing ethics were found to significantly influence procurement performance of state corporations in Kenya. For supplier selection ethics $p = .006 < .05$; ethical policies and codes $p = .002 < .05$; procedural justice $p = .015 < .05$; supplier diversity $p = .039 < .05$. The study therefore concluded that sourcing ethics had statistical significant influence on the procurement performance of state corporations in Kenya. Table 4.35(e) shows the results for the test of parallel lines. The test of parallel lines (proportional odds) is used to determine the adequacy of the model. The model null hypothesis was stated that the slope coefficients in the model are the same across the response categories. The p -value = $1.00 > .05$ indicated that there was no significant difference for the corresponding slope coefficients across the response categories, meaning that the model assumption of parallel lines was not violated in the model with the complementary Log-log link function.

The response from the procurement managers of the state corporations indicated that there were other factors which influence procurement performance but had not been factored in the study, majorly sustainable supply chains, bench marking and supplier development. For example, Eduardo and Moneva (2013) established that there is a significant link between sustainable supply chain management and profitability as well as customer service. This was also supported by Zhu and Cote (2004) who demonstrated in their study that sustainable supply chain management can yield not only environmental but also financial benefits. Rupert and Florian (2010) explained that procurement benchmarking is one of the best practices that constitute a superior performance of the procurement unit. There is need to analyze data from supply chain benchmarks rigorously with a view to improving performance. Pilar, Elsebeth and Luitzen (2010) explained that the more demanding and less used forms of supplier development may lead to improved performance if the suppliers have enough absorptive

capacity. David and Paul (2012) also established that there is a significant positive relationship between supplier development and procurement performance.

4.9 Analysis of Variance (ANOVA)

To test the significance of the independent variables (supplier selection ethics, ethical policies and codes, procedural justice and supplier diversity) stepwise ANOVA was conducted and the results presented in Table 4.36.

Table 4.36: Stepwise ANOVA

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.235	1	.235	16.833	.001 ^b
	Residual	18.878	135	.140		
	Total	19.114	136			
2	Regression	6.239	2	3.119	32.466	.000 ^c
	Residual	12.875	134	.096		
	Total	19.114	136			
3	Regression	8.422	3	2.807	34.923	.000 ^d
	Residual	10.692	133	.080		
	Total	19.114	136			
4	Regression	10.486	4	2.835	40.106	.000 ^e
	Residual	8.628	132	.065		
	Total	19.114	136			

a. Dependent Variable: Procurement Performance.

1. Predictors: (Constant), Supplier Selection Ethics.

2. Predictors: (Constant), Supplier Selection Ethics; Ethical Policies and Codes.

3. Predictors: (Constant), Supplier Selection Ethics; Ethical Policies and Codes; Procedural Justice.

4. Predictors: (Constant), Supplier Selection Ethics; Ethical Policies and Codes; Procedural Justice; Supplier Diversity.

The ANOVA test results for supplier selection ethics showed an F statistic of 16.833, significant at 0.05 ($p < 0.05$) and this indicated that a good percentage of the change in procurement performance was as a result of the influence that the supplier selection ethics measures had. The ANOVA test on supplier section ethics and ethical policies and codes had an F statistic of 32.466 and was also significant at 0.05 ($p < 0.05$). For supplier selection ethics, ethical policies and codes and procedural justice, the F statistic was 34.923 and was also significant at 0.05 ($p < 0.005$). Finally, the ANOVA test results for all the four independent variables (supplier selection ethics, ethical policies and codes, procedural justice and supplier diversity) had an F statistic of 40.106 and it was significant at 0.05 ($p < 0.05$). The ANOVA results indicated that the chosen model for the study was significant and that the variables tested suitably fitted in the model.

4.10 Moderation Effect of Organizational Size

To test for the moderation effect of organizational size on the relationship between sourcing ethics on procurement performance of state corporations in Kenya, the study fitted the following model and the regression results were as shown in Table 4.37:

$$f(\text{Pr}(Y_{ij} \leq y_{ij})) = \emptyset_j - (B_1X_{i1} + B_2X_{i2} + B_3X_{i3} + B_4X_{i4}*S)$$

Table 4.37: Parameter Estimates for Model With Interaction Term

		Estimate	Std. Error	Wald	Df	Sig.
Threshold	Procurement Performance=1	.391	.091	.475	1	.047
	Procurement Performance=2	.612	1.004	.448	1	.012
	Procurement Performance=3	.710	.098	.275	1	.024
	Procurement Performance=4	.854	.118	.157	1	.017
	Procurement Performance=5	1.314	.231	.038	1	.009
Location	Supplier Selection Ethics (X ₁)	.329	.032	1.242	1	.000
	Ethical Policies & Codes (X ₂)	.701	.075	.179	1	.000
	Procedural Justice (X ₃)	.350	.079	.190	1	.002
	Supplier Diversity (X ₄)	.421	.081	.618	1	.000
	Organizational Size (S)	3.158	2.849	.710	1	.015
	X ₁ *S	-2.946	3.145	.641	1	.331
	X ₂ *S	-4.384	5.482	.128	1	.350
	X ₃ *S	2.968	3.843	.147	1	.425
	X ₄ *S	2.192	5.744	.419	1	.432

The results in Table 4.37 show that organizational size is significant when combined with sourcing ethics as a predictor variable (p-value=.015<.05). This is consistent with findings by Vintila and Florinita (2013) who established that the relationship between firm size and its performance is significant, though negative. The European Central Bank (2015) also concur that organizational size influences performance significantly. However, with the introduction of the interaction term (X*S) the model becomes insignificant. When organizational size (moderator) was regressed with supplier selection ethics, ethical policies and codes, procedural justice and supplier diversity, it was established that its moderating effect was insignificant with p-values>.05 (X₁*S p-value=.432; X₂*S p-value=.425; X₃*S p-value=.350; X₄*S=.331). This therefore implied that organizational size has predictive value on procurement performance but it has no

significant moderating effect on the relationship between sourcing ethics and procurement performance of state corporations in Kenya.

4.11 Hypothesis Testing

The five null hypotheses set for the study were tested and the results were presented in the following section:

4.11.1 Test of Hypothesis One

To assess the relationship between supplier selection ethics and procurement performance, the null hypothesis one was set as follows:

H₀₁: There is no significant relationship between supplier selection ethics and procurement performance of state corporations in Kenya.

The regression results for supplier selection ethics in Table 4.31 revealed that $\beta=0.429$ and p-value = 0.024. This showed a significant positive relationship between supplier selection ethics and procurement performance. The decision rule for hypothesis testing was to reject **H₀₁** if P-value ≤ 0.05 otherwise fail to reject **H₀₁** if P-value > 0.05 . The results showed that P-value < 0.05 and $\beta \neq 0$ and therefore the null hypothesis was rejected and it was concluded that there is a statistically significant and positive relationship between supplier selection ethics and procurement performance in the Kenyan state corporations.

4.11.2 Test of Hypothesis Two

To assess the relationship between ethical policies and codes and procurement performance, null hypothesis two was set as follows:

H₀₂: There is no significant relationship between ethical policies and codes and procurement performance among state corporations in Kenya.

The regression results in Table 4.32 revealed that $\beta=0.501$ and p- value= 0.002. This showed a significant positive relationship between ethical policies and codes and procurement performance. The decision rule for hypothesis testing was to reject **H₀₂** if P- value ≤ 0.05 otherwise fail to reject **H₀₁** if P- value > 0.05 . The results showed that $P < 0.05$ and $\beta_2 \neq 0$ and therefore the null hypothesis was rejected and it was concluded that there is a statistically significant and positive relationship between ethical policies and codes and procurement performance in the Kenyan state corporations.

4.11.3 Test of Hypothesis Three

To assess the relationship between procedural justice and procurement performance, the null hypothesis three was set as follows:

H₀₃: There is no significant relationship between procedural justice and procurement performance of state corporations in Kenya.

The aggregate mean scores of procedural justice were regressed on the aggregate mean scores of procurement performance and the findings were presented in Table 4.33. The results showed that there was a significant positive relationship between procedural justice and procurement performance ($\beta_3=0.702$ and $p=0.017$). The decision rule for testing hypothesis 3 was to reject **H₀₃** if P- value ≤ 0.05 otherwise fail to reject **H₀₃** if P- value > 0.05 . The null hypothesis 3 was therefore rejected since P-value < 0.05 and $\beta_3 \neq 0$

and the study concluded that there is a statistically significant positive relationship between procedural justice and procurement performance in Kenyan state corporations.

4.11.4 Test of Hypothesis Four

The relationship between supplier diversity and procurement performance was assessed by setting null hypothesis 4 as follows:

H₀₄: There is no significant relationship between supplier diversity and procurement performance of state corporations in Kenya.

The aggregate mean scores of supplier diversity were regressed against the aggregate mean scores of procurement performance and the results presented in Table 4.34. The results indicated that there was a positive relationship between supplier diversity and procurement performance ($\beta_4=0.684$ and P-value=0.023). The decision rule for testing hypothesis 4 was to reject **H₀₄** if P- value ≤ 0.05 otherwise fail to reject **H₀₄** if P- value > 0.05 . The null hypothesis 4 was therefore rejected since P-value <0.05 and $\beta_4 \neq 0$ and the study concluded that there is a statistically significant positive relationship between supplier diversity and procurement performance in Kenyan state corporations.

4.11.5 Test of Hypothesis Five

The moderating effect of organizational size on the relationship between sourcing ethics and procurement performance of Kenyan state corporations was assessed by setting null hypothesis 5 as follows:

H₀₅: There is no significant moderating effect of organizational size on the relationship between sourcing ethics and procurement performance of state corporations in Kenya.

The regression results shown in Table 4.37 indicated that $\beta_5 \neq 0$ and P-value $>.05$. The decision rule for testing hypothesis 5 was to reject **H₀₅** if P- value ≤ 0.05 otherwise fail

to reject H_{05} if P- value > 0.05 . The study therefore failed to reject null hypothesis 5 since $P\text{-value} > 0.05$ and $\beta_s \neq 0$ and the study concluded that There is no significant moderating effect of organizational size on the relationship between sourcing ethics and procurement performance of state corporations in Kenya. The tests and the decisions made for each of the four null hypotheses were summarized in Table 4.38.

Table 4.38: Hypotheses Test Summary

Hypotheses	Decision
H₀₁ . There is no significant relationship between supplier selection ethics and procurement performance of State Corporations in Kenya	Rejected H ₀₁
H₀₂ . There is no significant relationship between ethical policies and codes and procurement performance in Kenyan state corporations	Rejected H ₀₂
H₀₃ . There is no significant relationship between procedural justice and procurement performance in Kenyan state corporations	Rejected H ₀₃
H₀₄ . There is no significant relationship between supplier diversity and procurement performance in Kenyan state corporations	Rejected H ₀₄
H₀₅ . There is no significant moderating effect of organizational size on the relationship between sourcing ethics and procurement performance of state corporations in Kenya.	Failed to reject H ₀₅

4.12 Optimal Conceptual Framework

From the study findings, the independent variables (supplier selection ethics, ethical policies and codes, procedural justice and supplier diversity) were found to positively and significantly influence procurement performance of state corporations in Kenya. Organizational size was found not to have a significant moderating effect on the relationship between sourcing ethics and procurement performance of the Kenyan state

corporations. Based on the study findings, the optimal conceptual framework was derived as follows:

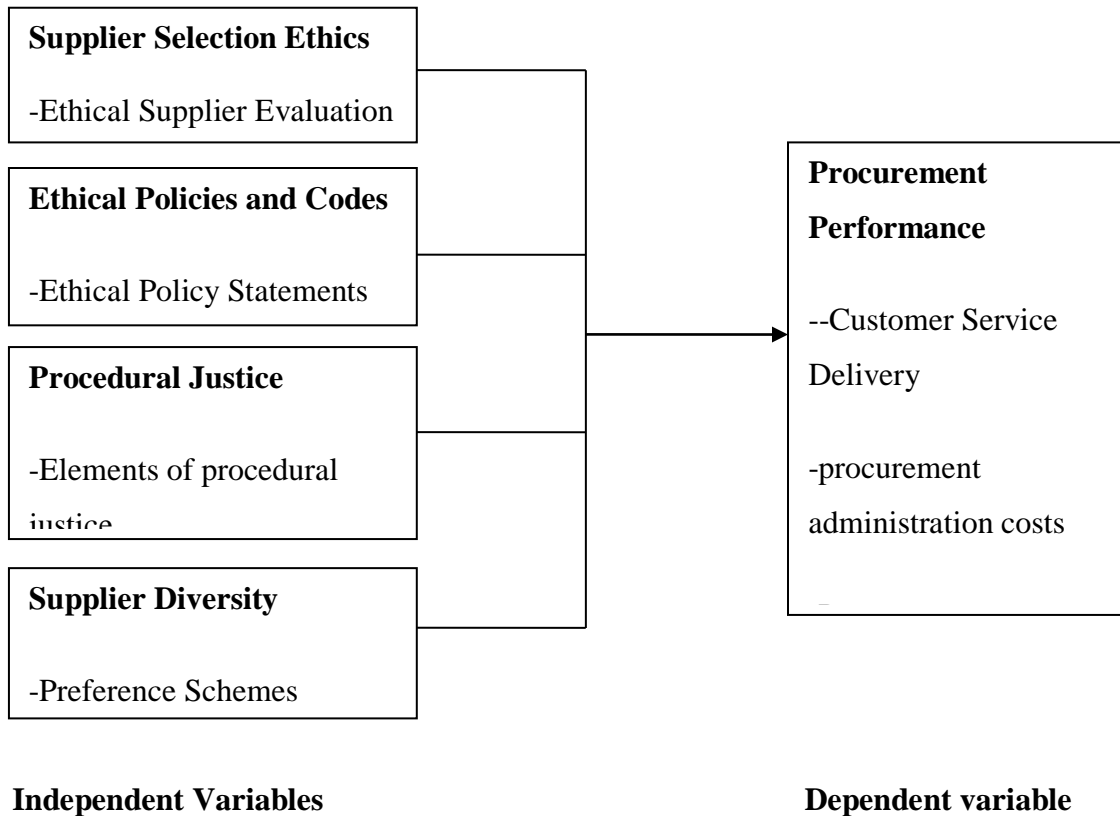


Figure 4.2: Optimal Conceptual Framework

4.13 Qualitative Analysis

4.13.1 Supplier Selection Ethics

For supplier selection ethics, the respondents were asked to state what other supplier selection practices are used in their organizations to ensure that there is optimal procurement performance. Many of the respondents indicated that they use prequalified

suppliers who have been selected through an open tendering process and they are also allowed to use the prequalified suppliers of other established public procuring entities. Other respondents indicated that they conducted a lot of due diligence to ascertain the ownership and the capabilities of the supplier organizations during supplier selection. The other response that was dominating among many respondents was that they emphasized on clear, open and written communication between the procuring entity and the suppliers.

The respondents were also requested to recommend any other supplier selection practices they felt would improve the overall procurement performance. A majority of the respondents recommended for more adoption of electronic procurement because the benefits were evident from the e-procurement initiatives by the government. Others recommended benchmarking with the best rated public procuring entities and other multinationals in order to adopt the best supplier selection practices in the market. Others felt that their management should make supplier evaluation a continuous exercise and participate actively in the development of their suppliers.

4.13.2 Ethical Policies and Codes

The study also sought to establish what other specific ethical policies and codes their firms had put in place for their procurement functions. Many of the respondents said that their procurement functions had put in place supplier appraisal audit policies to ensure that the suppliers complied with the ethical guidelines set by the procuring entity. Others explained that their organizations had established corruption prevention committees which keenly follow up on all the procurement processes to ensure that ethical policies and codes are adhered to. Other respondents also explained that they had incorporated the Public Procurement and Regulatory Authority's code of ethics into their own ethical policies and codes while others noted that they had adopted the ethical guidelines from the Kenya Institute of Supplies Management (KISM).

The respondents were also required to state what other ethical policies and codes they would recommend to their organizations so as to improve their procurement performance. Most of the respondents felt that having ethical policies and codes incorporating the ethical use of information technology in their procurement processes would go a long way in avoiding unethical procurement practices. Other respondents also advised that suppliers should be encouraged to adopt a responsible attitude towards various community groups and this can be effectively achieved if it is incorporated in their ethical policies and codes.

4.13.3 Procedural Justice

On procedural justice, the respondents were requested to state how else their organizations ensured that there was procedural justice in their procurement processes. A majority of the respondents explained that they provided information sought by the suppliers regarding the outcome of any tender process whether the suppliers were successful or not. This helps them in boosting the confidence of the suppliers with the procuring entity. Other respondents explained that their management had put in place a set of procedures for all key procurement processes, closely monitored them and corrected any process deviations as soon as they are noticed.

The respondents were also requested to explain the challenges they faced in ensuring that there is fairness and impartiality in their procurement processes. Most of the respondents cited lack of information technology infrastructure for automating the procurement processes especially where they have offices in marginalized areas. Other respondents cited lack of goodwill from some of their employees in ensuring that equal opportunity is given to all the potential suppliers. They felt that some of their employees were leaking some confidential information to some suppliers and therefore leading to unfair competition amongst the suppliers.

4.13.4 Supplier Diversity

The study also sought to know what other strategies the state corporations use in diversifying their supplier base. Most of the respondents explained that from time to time, they organize supplier sensitization programmes in conjunction with other players like the Public Procurement Regulatory Authority (PPRA) and the Kenya Institute of Supplies Management (KISM). Other respondents also indicated that they conduct market surveys in order to identify new sources of supply and alternative products of superior quality.

The respondents were also requested to state what challenges they experienced in implementing the procurement preference schemes by the government. Many stated that most of the suppliers that are registered under the Access to Government Procurement opportunities (AGPO) had very little or no experience and therefore end up delivering poor quality products and services. This is also attributed to the fact that most of such suppliers lack financial capacity to consistently maintain supplies of the required quality to the state corporations. Other respondents also felt that most of the small business owners are ignorant of the public procurement law in Kenya. This leads to heavy penalties due to noncompliance with the procurement law and many a times this pushes them out of business.

4.13.5 Procurement Performance

The study also sought to know what other procurement performance measures the state corporations used. Most of the respondents explained that they do periodic supplier appraisals, use framework contracts and also measure the success of e-procurement implementation to enhance efficiency in procurement. Other respondents also stated that they used negotiated payment terms for high value procurements and that they hold regular meetings with their suppliers with an aim of improving relationships both internally and externally. Most of the respondents recommended that the suppliers

should be encouraged to openly report to the top management on any observed unethical procurement practices. Others felt that establishing anticorruption committees to handle any corruption related matters would go a long way in enhancing ethical sourcing in the state corporations. Other ethical strategies recommended by the respondents in order to improve procurement performance include continuous training of procurement professionals on ethical sourcing as well as full adoption of e-procurement so as to enhance transparency and accountability.

4.14 Discussion of Key Findings

This section discussed the findings of the study based on the objectives and the hypothesis set. The general objective of the study was to find out the influence of sourcing ethics on procurement performance among the state corporations in Kenya. The variables under study were supplier selection ethics, ethical policies and codes, procedural justice and supplier diversity.

4.14.1 Influence of Supplier Selection Ethics on Procurement Performance

Pearson Correlation was used in computing the correlation between supplier selection ethics and procurement performance. The findings showed that there was a strong positive correlation between supplier selection ethics and procurement performance ($r=0.784$, $p<0.05$). Ordinal regression results showed that supplier selection ethics influenced procurement performance of the Kenyan state corporations ($\beta_1=0.106$; $p<0.05$). The ANOVA results showed an F statistic of 34.923 and $p\text{-value}<0.05$, indicating the significance of supplier selection ethics in determining the procurement performance of the Kenyan state corporations. The study also rejected the null hypothesis one (H_{01}) and therefore concluded that there is a significant positive relationship between supplier selection ethics and procurement performance of state corporations in Kenya.

These findings were in agreement with those of Burt, Petcavage and Pinkerton (2010) who emphasized that there should be ethics in supplier selection decisions because they greatly enhance performance in a many aspects. According to Leenders *et al.* (2014) ethical behaviours and ethical decision making in supplier selection are vital in enhancing performance especially in the management of the different buyer-seller relationships. The findings also lend support to those of Reham, Gavin and Fox (2009) who in their study of supply management's ethical responsibility found out that higher levels of perceived ethics in supplier selection had a significant positive impact on supply management's performance.

4.14.2 Influence of Ethical Policies and Codes on Procurement Performance

To compute the correlation between ethical policies and codes and procurement performance, Pearson Correlation was used and the findings indicated that there was a strong positive correlation between ethical policies and codes and procurement performance ($r=0.668$, $p\text{-value}<0.05$). The ordinal regression results also showed the positive significant relationship existing between ethical policies and codes and procurement performance ($\beta=0.117$; $p\text{-value}<0.05$). The ANOVA results showed an F statistic of 32.466 and $p\text{-value}<0.05$ indicating that ethical policies and codes were significant in determining the procurement performance of the state corporations. The second null hypothesis (H_{02}) of the study was also rejected and therefore concluding that there is a significant relationship between ethical policies and codes and procurement performance.

These findings of the study supported the research by Katamba, Nkiko and Consolate (2016) who found out that embracing and living by the ethical policies and codes is highly rewarding and it's key in sustaining the ethical agenda. They however cautioned that when poorly introduced in an organization, ethical policies and codes will work against the firm since it will be received with intentional rebellion from the stakeholders. Freeman, Harrison, Wicks, Parma and De Colle (2010) also found out that business

managers who abide by the business code of conduct and ethics are more likely to achieve sustained performance. Svensson and Baath (2008) also agreed that having an ethical code has a positive impact on the performance and ethical behavior of organizations.

4.14.3 Influence of Procedural Justice on Procurement Performance

Pearson Correlation was used in computing the correlation between procedural justice and procurement performance. The results indicated that there was a strong positive correlation between procedural justice and procurement performance ($r=0.722$, $p\text{-value}<0.05$). This was confirmed by multiple linear regression ($\beta=0.235$; $p\text{-value}<0.05$). The ANOVA results showed an F statistic of 34.923 and $p\text{-value}<0.05$, indicating that procedural justice influenced procurement performance in the Kenyan state corporations. The study also rejected the third null hypothesis (H_{03}) and therefore concluded that there is a significant positive relationship between procedural justice and procurement performance among state corporations in Kenya.

The findings of this study lend support to a research by Zhe and Ming (2010) which established that procedural justice is instrumental in directing corporations and it greatly influences performance. Their study concluded that procedural justice leads to less interparty differences, helps in meeting set goals, promotes cost reduction and improves efficiency. Luo (2008) also agreed that procedural justice has a significant positive influence on profitability and streamlining operations. The study particularly noted that profitability is greater with high levels of procedural justice. Noble and Jones (2006) also found out that procedural justice influences the generation and management of procurement contracts.

4.14.4 Influence of Supplier Diversity on Procurement Performance

To compute the correlation between supplier diversity and procurement performance, Pearson correlation was used. The results indicated that there was a strong and positive correlation between supplier diversity and procurement performance of state corporations in Kenya ($r=0.694$, $p\text{-value}<0.05$). The results of regression analysis showed that supplier diversity influenced procurement performance ($\beta=0.430$; $p\text{-value}<0.05$). The ANOVA results also indicated the significance of supplier diversity in influencing procurement performance with an F statistic of 39.996 and a $p\text{-value}<0.05$. The study also found that there was a significant relationship between supplier diversity and procurement performance among state corporations in Kenya by rejecting the fourth null hypothesis (H_{04}). The findings of the study were in agreement with the study by Pauw and Wolvaadt (2011) who established that presence of supplier diversity widens market opportunities and it's a key pillar in procurement. Health Research and Educational Trust (2015) also found out that ethics in supplier diversification affected innovations, cost reductions and compliance with government regulations. Muturi and Kiage (2015) also found out that supplier diversity brought about equity in procurement and therefore improving a firm's performance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the study results in line with the objectives. It also draws conclusions and presents the recommendations made from the study findings. The chapter also highlights the areas for further research.

5.2 Summary of Findings

The main objective of the study was to find out the influence of sourcing ethics on procurement performance among the state corporations in Kenya. The specific objectives were: to determine the influence of supplier selection ethics on procurement performance in Kenyan state corporations; to determine the influence of ethical policies and codes on procurement performance among state corporations in Kenya; to establish the influence of procedural justice on procurement performance among state corporations in Kenya; to establish the influence of supplier diversity on procurement performance among Kenyan state corporations; to examine the moderating effect organizational size on the relationship between sourcing ethics and procurement performance of state corporations in Kenya.

5.2.1 Supplier Selection Ethics

The first objective of the study sought to examine the influence of supplier selection ethics on procurement performance. The indicators of supplier selection ethics considered were ethical supplier evaluation and supplier ethical assessment. Descriptive and inferential statistics methods were used to arrive at the results. Most of the respondents agreed that supplier selection ethics influenced procurement performance as depicted in the results. The findings shown in the correlation matrix indicated that there

was a significant positive relationship between supplier selection ethics and procurement performance.

The inferential statistics were also used to give findings and deductions. The dimensions of supplier selection ethics were found to be statistically significant in explaining procurement performance in state corporations. The regression results indicated that a change in supplier selection ethics caused a significant change in procurement performance. The first null hypothesis (H_{01}) was rejected and this indicated that there was a significant relationship between ethical policies and codes and procurement performance among the state corporations in Kenya. The results showed that procurement performance in the state corporations highly depended on objectivity in supplier selection, objective assessment of suppliers' health and safety practices as well as giving priority to those suppliers who met specifications. The responses to the opinion statements showed that most respondents agreed that supplier selection ethics affected procurement performance of the Kenyan state corporations. The respondents also pointed out that they use prequalification and post-qualification in order to select the right and ethical sources of supply.

5.2.2 Ethical Policies and Codes

The second objective of the study sought to determine the influence of ethical policies and codes on procurement performance in the Kenyan state corporations. The indicators of ethical policies and codes considered were ethical policy statements and ethical code of conduct. The descriptive results showed that majority of the respondents agreed that ethical policies and codes significantly influenced procurement performance. The statistical results also showed that there was a strong positive correlation between ethical policies and codes and procurement performance. The regression results indicated that an increase in ethical policies and codes led to an increase in procurement performance. The inferential statistics provided enough evidence to justify the rejection of the second null hypothesis (H_{02}) and therefore indicating that there was a relationship between

ethical policies and codes and procurement performance among the Kenyan State corporations.

The responses to the opinion statements on ethical policies and codes showed that ethical policies and codes prevent misuse of power, prevent inappropriate influence on the procurement procedures and that overall, ethical policies and codes significantly influence procurement performance in the Kenyan state corporations. Most of the respondents explained that their management had gone an extra mile to establish corruption prevention committees and supplier audit committees to ensure that the guidelines on ethical sourcing are fully adhered to.

5.2.3 Procedural Justice

The third objective of the study sought to establish the influence of procedural justice on procurement performance. The indicators that were considered for procedural justice were the elements of procedural justice and supplier treatment with most of the indicators having high mean scores from the respondents. The correlation analysis results showed that the relationship between procedural justice and procurement performance was positive and significant. A unit increase in procedural justice led to increase in procurement performance as indicated by the regression results. From the inferential statistics, there was enough evidence to justify the rejection of the third null hypothesis (H_{03}) indicating that procedural justice significantly influenced the procurement performance among the Kenyan state corporations.

The responses to the different opinion statements showed that through procedural justice, disputes with the suppliers are solved without bias, suppliers are dealt with objectively and without favoritism and that all suppliers are paid on time as agreed. On Aggregate, the responses showed that procedural justice had a significant influence on procurement performance. The respondents also explained that timely provision of information sought by suppliers largely boosts the confidence that the suppliers have for

the organization. They also sighted challenges such as lack of information technology infrastructure and leaking of confidential information by some of their employees.

5.2.4 Supplier Diversity

The fourth objective of the study was to establish the influence of supplier diversity on procurement performance. The indicators that were considered for supplier diversity were preference schemes and inclusion of minorities. The descriptive results of the study showed that majority of the respondents agreed to the fact that supplier diversity significantly influenced procurement performance. The inferential statistics results indicated that there was a significant positive relationship between supplier diversity and procurement performance. Similarly, regression analysis results indicated that supplier diversity significantly influenced procurement performance. The findings of the study therefore concluded that supplier diversity significantly contributed to explaining procurement performance. Based on the inferential statistics results, the fourth null hypothesis (H_{04}) of the study was rejected, indicating that there was a significant relationship between supplier diversity and procurement performance of Kenyan state corporations.

The responses to the opinion statements on supplier diversity showed that state corporations in Kenya were committed to embracing supplier diversity in order to improve their procurement performance. The respondents also explained that they perform supplier sensitization especially for the minority owned businesses and also carry out thorough market surveys to establish new sources of supply. The challenges cited by many Kenyan state corporations in enhancing supplier diversity were that most of the minority owned businesses lack enough capital and ignorance on the public procurement law leading to non-compliance.

5.2.5 Moderating Effect of Organizational Size

Based on the research findings the study shows that sourcing ethics had a positive and significant influence on the procurement performance of state corporations in Kenya. However, when organizational size was introduced as a moderating variable, the model became insignificant. This meant that organizational size does not significantly moderate the relationship between sourcing ethics and procurement performance of Kenyan state corporations.

5.3 Conclusions

5.3.1 Supplier Selection Ethics

The correlation results indicated that there was a significant positive correlation between supplier selection ethics and procurement performance and the regression results showed that a change in supplier selection ethics results to a significant change in procurement performance. The ANOVA results showed that change in procurement performance was as a result of supplier selection ethics. The first null hypothesis of the study was also rejected and it was therefore concluded that supplier selection ethics had a positive significant influence on procurement performance of state corporations.

From the findings of the study, it was established that all the dimensions of supplier selection ethics were positively rated as being key influencers of procurement performance among the Kenyan state corporations. Having mechanisms to ensure objectivity in supplier evaluation had the greatest effect on supplier selection ethics. The levels of agreement for dimensions such as avoidance of collusion, selecting ethical suppliers and giving priority to suppliers who met the organizations' specifications led to the conclusion that such ethical practices led to an improvement in procurement performance of the state corporations.

Cumulatively, there was a low rating for those respondents who disagreed to the statements that their organizations did regular assessment of use of child or forced labour by the suppliers, suppliers' workers' conditions, suppliers' regards for workers' rights and assessment of suppliers' health and safety practices. It was therefore concluded that most of the state corporations spend time to ensure that such ethical practices are adhered to by the suppliers. The responses from the respondents also led to the conclusion that using prequalified suppliers who have been vetted and thereafter doing a post-qualification (due diligence) helps in improving the procurement performance of the state corporations

5.3.2 Ethical Policies and Codes

From the research findings it was also concluded that ethical policies and codes had an effect on the procurement performance of Kenyan state corporations. The correlation results indicated that there was a positive and significant correlation between ethical policies and codes and procurement performance. A unit change in ethical policies and codes led to a significant change in procurement performance, and significant change in procurement performance was as a result of ethical policies and codes. This conclusion was also based on the fact that the respondents agreed to most of the dimensions on ethical policies and codes being helpful in enhancing procurement performance. The second null hypothesis of the study was also rejected and thus leading to the conclusion that there is a positive and significant relationship between ethical policies and codes and procurement performance among the Kenyan state corporations.

Cumulatively, Most of the respondents agreed to the fact ethical guidelines enacted in their firms prevent misuse of power by procurement officials and therefore improving procurement performance. Only a few respondents disagreed to the statements that their organizations had policies on confidentiality of information, established codes of ethics to prevent collusion and code of conduct to prevent inappropriate influence on procurement process. It was therefore concluded that many of the state corporations

ensured that they had ethical policies and codes in place so as to improve their procurement performance.

From the responses, the study also concluded that coming up with supplier appraisal audit policies, putting in place corruption prevention committees and adopting the ethical guidelines given by PPRA and KISM helps a great deal in improving the state corporations' procurement performance. The study also concluded that use of information technology helps in preventing unethical procurement practices. The responses also led to the conclusion that having a responsible attitude towards different stakeholders in the community is essential in enhancing procurement performance of the Kenyan state corporations.

5.3.3 Procedural Justice

On the basis of the results, it was concluded that procedural justice positively and significantly influenced procurement performance of the state corporations. This is because the correlation results indicated that there was a significant positive correlation between procedural justice and procurement performance. The regression results showed that a unit change in procedural justice resulted to a significant change in procurement performance while the ANOVA results showed that a good percentage of the change in procurement performance was as a result of procedural justice. This conclusion was also based on the rejection of the third null hypothesis of the study.

The study concluded that having adequate procedures for resolving disputes in an unbiased manner greatly improves procurement performance. Cumulatively, Most of the respondents agreed that unbiased dispute resolution with their suppliers had positively influenced their procurement performance. A few respondents disagreed with the statement that in their firms there is transparency in the criteria used in inviting suppliers to offer, transparency in opening of suppliers' bids, objectivity in dealing with suppliers and meeting of payment deadlines. This led to the conclusion that practicing of such ethical practices leads to improved procurement performance. From the responses, it was

also concluded that debriefing of suppliers and creating effective procurement procedures leads to an improvement in procurement performance.

5.3.4 Supplier Diversity

The findings of the study also led to the conclusions that supplier diversity played a significant role in explaining the procurement performance among state corporations in Kenya. This was evident from the correlation results which indicated that the relationship between supplier diversity and procurement performance was positive and significant. The regression analysis results also showed that supplier diversity significantly influenced procurement performance while the ANOVA results indicated that a great percentage of the change in procurement performance was due to supplier diversity. This conclusion was also due to the fact that the fourth null hypothesis was rejected.

The responses to the various dimensions (levels of agreement) on supplier diversity were also clear enough to conclude that supplier diversity had a significant influence on state corporations' procurement performance. Cumulatively, most of the respondents agreed that their firms were committed to strengthening strategic partnerships with minority owned businesses. A few of the respondents cumulatively disagreed to the statements that their firms create awareness on the preference schemes, their firms' shortlists of suppliers have a broad mix of suppliers and that the firms have in place a preferential policy as per the public procurement regulations. This led to the conclusion that many state corporations practiced supplier diversity in their procurement processes. From the responses it was also concluded that the supplier sensitization forums by relevant bodies such as KISM and PPRA as well as conducting market surveys to identify new or alternative sources of supply affects supplier diversity hence the procurement performance of state corporations.

5.3.5 Moderating Effect of Organizational Size

The study concluded that organizational size has no significant moderating effect on the relationship between sourcing ethics and procurement performance of state corporations in Kenya. The study however established that organizational size as a predictor can influence procurement performance of the state corporations. This therefore led to the conclusion that irrespective of the size of any Kenyan state corporation sourcing ethics would still have a significant influence on its procurement performance.

5.3.6 Procurement Performance

From both the descriptive and inferential statistics it was concluded that sourcing ethics significantly and positively influenced procurement performance of the Kenyan state corporations. The research hypotheses were tested and it was established that the four study variables (supplier selection ethics, ethical policies and codes, procedural justice and supplier diversity) significantly influenced procurement performance of the Kenyan state corporations. Many of the dimensions regarding procurement performance change as a result of sourcing ethics received high levels of agreement from the respondents. Cumulatively, Most of the respondents agreed that they were now able to obtain better payment terms from suppliers because of sourcing ethics practices. However, some of the respondents disagreed that their procurement function makes all relevant information and resources easily accessible to both internal and external customers. Only a few respondents disagreed that because of sourcing ethics practices, their procurement units could avail information and resources to customers, procure exact quantities from customers and reduce their procurement administrative costs. This therefore led to the conclusion that such improvements in procurement performance in most of the Kenyan state corporations were as a result of ethical sourcing practices. From the responses, it was also concluded that conducting periodic supplier appraisals, measuring the success of e-procurement implementation and holding regular meetings with the vendors led to great improvement in procurement performance of the state corporations.

5.4 Recommendations

5.4.1 Supplier Selection Ethics

Since supplier selection ethics positively affects procurement performance, it was recommended that the state corporations should always ensure that the selection of suppliers is done in an ethical manner with an aim of optimizing procurement performance. Organizations that had their respondents disagreeing to the statements on assessing use of child and forced labour, suppliers' workers' conditions, regard for workers' rights as well as health and safety practices should strive to ensure that such practices are well practiced in their firms so as to source from only ethical sources of supply.

The study specifically recommended that the supplier prequalification process should be strictly supervised to ensure selection of the best suited suppliers who will drive the procurement performance of the state corporations. From the conclusions made, the study also recommended that all the state corporations should adopt technology in their supplier selection process so as to promote efficiency and transparency in the procurement process. Post-qualification of suppliers is also highly encouraged in all state corporations to ensure that the selected suppliers have the required technical and financial capacities.

The state corporations should come up with policies which would enable them to continuously improve their procurement performance through supplier selection ethics. It is recommended that the state corporations should establish a communication policy during the supplier selection process which would ensure that all communications between suppliers and the firm is written or through an acceptable electronic media and that all potential suppliers will be getting the same information for effective competition. From the conclusions, it was also recommended that conducting due diligence,

benchmarking and supplier development should be part of the Kenyan state corporations' procurement policy.

5.4.2 Ethical Policies and Codes

Since ethical codes and policies significantly influenced the procurement performance of Kenyan state corporations, the study recommended that the management of state corporations should put measures in place to ensure that all the drawn ethical policies and codes are adhered to by all the procurement staff as well as by the suppliers that they deal with. The state corporations should therefore firmly deal with conflicts of interest in procurement, ensure fair dealings with the suppliers, treat suppliers' information with utmost confidentiality and adhere strictly to all their ethical policy statements, so as to improve their procurement performance. Since the establishment of corruption prevention committees is not entrenched in our public procurement law, the study also recommended that the management of all the state corporations should establish corruption prevention committees that will be mandated with ensuring that all corruption, fraudulent, coercive and collusive practices are prevented and firmly dealt with. The study also strongly recommended that the procurement staff should at large be encouraged to develop a responsive attitude towards all the community stakeholders including the suppliers and external customers since they all play a vital role in the firms' procurement processes. The study also recommended that the firms that explained that they do not have codes of conduct on confidentiality of information, prevention of collusion, and prevention of inappropriate influence on the procurement process should put in place such policies and codes since they can go a long way in improving their procurement performance.

The study recommended that all the state corporations should establish supplier appraisal audit policies because this will help them ensure that they will deal with qualified and competent suppliers. It was also recommended that all the state corporations should adopt the ethical policies and guidelines that have been established

by the Public Procurement and Regulatory Authority (PPRA) as well as the Kenya Institute of Supplies Management (KISM) since they are all aimed at ensuring that all the public institutions conduct their procurement processes in line with the Public Procurement and Asset Disposal Act (PPADA), 2015. The state corporations should also establish policies on ethical use of information technology since this will be a major boost to ensure that there is transparency and accountability in the procurement processes.

5.4.3 Procedural Justice

Because of the positive and significant relationship between procedural justice and procurement performance, the study recommended that all the Kenyan state corporations should strive to adopt and consistently practice procedural justice in a bid to continuously improve their procurement performance. Specifically, it was recommended that there should be a good and comprehensive dispute resolution mechanism which should be regularly reviewed depending on prevailing circumstances so that every party will feel fairly treated in case of a misunderstanding. The study also strongly recommended that the procurement processes in the state corporations should be regularly evaluated for fairness although any review done should always ensure that the public procurement procedures are within the public procurement law. Supplier debriefing should also be encouraged by the state corporations and this goes a long way in boosting the confidence the bidders have with the procuring entities, hence improving procurement performance.

For those firms that had problems with transparency in inviting suppliers to offer, opening of suppliers' bids and meeting payment deadlines, it was recommended that their management should strive hard to ensure that the procurement process is as transparent as possible, pay suppliers in time to motivate them and learn from best practices. The dispute resolution processes to be followed by the state corporations should be well documented, clearly explaining the escalation procedures to be followed

by all parties involved. This will help in avoiding uncertainties on what is to be done in case of a dispute. For international procurement transactions, it was recommended that the procuring entities adopt the dispute arbitration procedures given by the International Chambers of Commerce (ICC) or those of the United Nations Commission on International Trade Law (UNCITRAL). As a matter of policy, the state corporations should document the debriefing procedures to be used in their procurement process, and clearly communicate to the suppliers how to request for a debriefing and how to raise procurement related complaints.

5.4.4 Supplier Diversity

Since supplier diversity significantly and positively influenced procurement performance, it was recommended that all the state corporations should work tirelessly to incorporate supplier diversity in their procurement process so as to improve their procurement performance and closely monitor its implementation for better procurement performance. To bring the minority owned businesses on board, the state corporations in Kenya should create awareness of the government's preference schemes. Enhancing supplier diversity through supplier diversity programmes, and committing to strengthening strategic partnerships with minority owned businesses were perceived to play a big role in enhancing procurement performance and therefore the state corporations should ensure that this is achieved.

The state corporations should always budget for the sensitization forums on the procurement opportunities available for the disadvantaged groups. This will help in ensuring that they always plan for them and do the sensitization regularly and in good time. The state corporations should work closely with the PPRA and KISM to document these sensitization forums to ensure that they are conducted within the public procurement law.

5.4.5 Procurement Performance

Since procurement performance is significantly influenced by sourcing ethics, the study recommended that the state corporations should put measures in place to ensure that supplier selection ethics, ethical policies and codes, procedural justice and supplier diversity are effectively geared towards attaining specific procurement performance objectives. Customer service delivery and operational cost reduction should be the main focus of the procurement functions in the state corporations and the procurement managers should guide their employees on how to achieve this through ethical sourcing. The procurement managers of the state corporations should also devise ways of making procurement information available to both internal and external customers probably through the use of information technology since this will ensure real time sharing of information for effective decision making.

The study also recommended that measures should be put in place to ensure that only exact quantities of materials are procured and in a way that minimizes their overall cost of procurement. Effective use of e-procurement technologies should be highly encouraged to achieve this. To improve the procurement performance more, the study recommended that the procurement managers should be holding regular supplier appraisals and meetings so as to know the areas of improvement on the part of the suppliers. Specific e-procurement implementation key performance indicators should also be defined and closely monitored since this will lead to improvement in procurement performance.

5.5 Contributions of the Research

A thorough analysis of literature on sourcing ethics and procurement performance in the Kenyan public sector revealed that the previous studies had not adequately covered all the aspects of sourcing ethics and how they affected procurement performance of the state corporations. This therefore is a clear indication of the research gap that existed before this study and that the study made significant contribution to the body of

knowledge in addressing the research gap. This study has explained how sourcing ethics can be used in improving procurement performance, specifically in the Kenyan state corporations. A new dimension of knowledge to sourcing ethics and procurement performance has been adequately provided by the study. The findings provide the procurement managers of the Kenyan state corporations with a framework for ensuring that there is transparency and that all decisions are made ethically when sourcing so as to improve their procurement performance. The study will therefore be of great help to both intellectuals and practitioners as a basis for further studies and effective decision making. The findings of the study will add to the literature and therefore narrow the knowledge and practice gap in supplier selection ethics, ethical policies and codes, procedural justice, supplier diversity and procurement performance in the Kenyan state corporations.

5.6 Areas for Further Research

Although there were meaningful results emanating from this study, there are other very important areas that were suggested for further research, majorly arising from the research data and from the responses obtained from the procurement managers of the state corporations. First, there are other factors that affect procurement performance other than ethical sourcing, but they featured very strongly in enhancing ethical sourcing in one way or another. These include e-procurement, bench marking, supplier evaluation and supplier development. Further research should be conducted to determine how such factors influence ethical sourcing and how they affect the procurement performance of the state corporations.

Secondly, there are areas that received low ratings from the respondents, indicating that some of the state corporations either were not aware of their strategic importance or they ignored them. Notably, a further study should be conducted to determine and explain the effect of assessing forced labour, child labour and suppliers' workers' condition in enhancing supplier selection ethics. Some respondents indicated that their organizations

do not regularly assess child labour, forced labour and suppliers' work conditions. A further study on these aspects would go a long way in enlightening the state corporations on how to improve on supplier selection ethics hence procurement performance.

Lastly, many respondents felt that the state corporations should be conducting a post-qualification before the final award of contracts to suppliers and contractors. A further study on the effect on post-qualification on procurement performance is therefore highly recommended so that the managers of the state corporation can understand the strategic importance of conducting due diligence to confirm the financial and technical capacities of the suppliers before engaging them in the organizations.

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APPENDICES

Appendix 1: Letter of Introduction

Dear Sir/Madam

REF: QUESTIONNAIRE

I am a Ph.D student at the Jomo Kenyatta University of Agriculture and Technology and currently doing a study on **Influence of Sourcing Ethics on Procurement Performance of State Corporations in Kenya**. A questionnaire has been developed addressing various ethical sourcing issues and procurement performance. Your organization has been selected to participate in this study and consequently, you have been identified as a respondent through the key informant approach. On the basis of your knowledge and work experience, please respond to the questions in the spaces provided. On request, the researcher will share the findings of this study with your organization to enable decision making and formulation of policies in future.

I wish to assure you that the information that you will provide will be used for academic purpose only and will be treated with utmost confidentiality.

Thank you in advance for your assistance.

Kitheka Samson

Email: sskitheka@gmail.com

Tel: +254720371830

Appendix 2: Questionnaire

My name is Kitheka Samson Samuel, a PhD student at the Jomo Kenyatta University of Agriculture and Technology. This questionnaire has been developed to facilitate a research aimed at studying **The Influence of Sourcing Ethics on Procurement Performance of State Corporations in Kenya**. Your Organization has been identified as a critical player in this field and your input in this study would be most valuable. On request, the researcher will share the findings of this study with your organization to enable decision making and formulation of policies in future. Any information that you will provide will be used for academic purposes only and will be treated with utmost confidentiality.

SECTION A- INTRODUCTION

Q1. What is the category/classification of your organization?

Commercial State Corporation [] Executive agency [] Independent Regulatory Agency [] Research/Education/Training Institution []

Q2. For how long has your organization been in operation?

Less than 5 years [] 5-10years [] 11-15years [] 16-20 years []

over 20 years []

Q3. What is the current number of the employees in your procurement unit?

5-10 [] 11-15 [] 16-20 [] Above 20 []

Q4. What is the nature of your organization's management structure?

Centralized [] Decentralized []

SECTION B: SOURCING ETHICS AND PROCUREMENT PERFORMANCE

I. SUPPLIER SELECTION ETHICS

S/No	In a scale of 1-5 where 1=Strongly Disagree; 2=Disagree; 3=Sometimes Agree; 4=Agree and 5=Strongly Agree, please indicate your level of agreement or disagreement with the following statements relating to supplier selection ethics	[1]	[2]	[3]	[4]	[5]
Q5	The organization ensures objectivity in supplier evaluation.					
Q6	In supplier evaluation, priority is given to those suppliers who can effectively meet the organization's (buyer's) specifications and code of conduct					
Q7	The organization selects only those suppliers who do not collude to fix or hike market prices.					
Q8	The organization assesses if the suppliers use forced labour					
Q9	The organization assesses if the suppliers use child labour					
Q10	The organization assesses suppliers' working conditions as a criteria in supplier selection					
Q11	The organization assesses suppliers' regard for workers' rights (e.g. right to form unions, right to collective bargaining agreement)					
Q12	The firm conducts assessment of suppliers' health and safety practices to ensure an ethical source of its supplies.					

Q13. What other ethical supplier selection practices are used in your organization in order to ensure that there is optimal procurement performance?

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Q14. What other supplier selection practices would you recommend to your organization so as to improve the overall procurement performance?

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II. ETHICAL POLICIES AND CODES

S/N	In a scale of 1-5 where 1=Strongly Disagree; 2=Disagree; 3=Sometimes Agree; 4=Agree and 5=Strongly Agree, please indicate your level of agreement or disagreement with the following statements relating to ethical policies and codes.	[1]	[2]	[3]	[4]	[5]
Q15	Staff in your organization declare any conflict of interest in procurement process					
Q16	Staff in your organization do not deal with supplier firms in which they have beneficial shareholding					
Q17	The procurement function strictly implements its policy on gifts and hospitality offered to the buyers by the suppliers.					
Q18	The organization has and implements a policy on the confidentiality of information provided by suppliers to ensure an ethical and fair procurement process.					
Q19	The organization verifies the accuracy of information given and received from the suppliers					
Q20	The organization’s procurement code of ethics ensures that there is no internal or external collusion during the procurement process.					
Q21	The organization’s suppliers and buyers do not participate in any form of procurement fraud					
Q22	The organization’s ethical guidelines prevent its procurement personnel from using their positions for personal gain at the detriment of the organization or suppliers.					
Q23	Because of the organization’s code of conduct procurement staff and do not exert inappropriate influence in any procurement procedure.					

Q24. Other than the ones mentioned above, what other ethical policies and codes exist in your procurement function?

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Q25. What other ethical policies and codes would you recommend to your organization so as to improve its procurement performance?

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III. PROCEDURAL JUSTICE

S/N o.	In a scale of 1-5 where 1=Strongly Disagree; 2=Disagree; 3=Sometimes Agree; 4=Agree and 5=Strongly Agree, please indicate your level of agreement or disagreement with the following statements relating to procedural justice	[1]	[2]	[3]	[4]	[5]
Q26	There is transparency as to the criteria used when inviting suppliers to offer/bid.					
Q27	Opening of suppliers' bids is transparently done in the presence of suppliers/suppliers' representatives					
Q28	The bid evaluation process is very clear and made known to the suppliers early enough during procurement/bidding process					
Q29	When evaluating suppliers, the organization promotes equity in the treatment of suppliers through non-discrimination (e.g. on basis of gender, religion, ethnic background) when selecting suppliers.					
Q30	The organization consistently applies the same standards to all suppliers during qualification screening and contract award					

Q31	To boost Suppliers' confidence with the firm's procurement procedures, suppliers are dealt with objectively and without any favoritism during bidding and evaluation processes.					
Q32	All the steps in the firm's procurement process are evaluated for fairness in determining each and every process outcome.					
Q33	The firm gives all potential suppliers equal opportunity through encouraging open and fair competition in the supplier selection process					
Q34	Purchasers, users and procurement function meet payment deadlines as per the procurement law.					
Q35	In the event of disputes with suppliers, the firm resolves matters in an unbiased manner.					

Q36. How else does your organization ensure that there is justice in the procurement process?

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Q37. What are the challenges that your organization faces in ensuring that there is fairness and impartiality in the procurement process?

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IV. SUPPLIER DIVERSITY

S/N	In a scale of 1-5 where 1=strongly disagree; 2=disagree; 3=Sometimes Agree; 4=agree and 5=strongly agree, please indicate your level of agreement or disagreement with the following statements relating to supplier diversity.	[1]	[2]	[3]	[4]	[5]
Q38	The organization creates awareness of the preference (supplier diversity) schemes initiated by the government for public benefit					
Q39	The firm's shortlist of supplier reaches out to a broad mix of bidders that reflect diversity in the community/public					
Q40	The organization uses a preferential policy in line with the government's supplier diversity policy					
Q41	The firm establishes small business/supplier diversity programme in order to reach a wide range of suppliers.					
Q42	The organization mentors minority owned businesses					
Q43	The organization's top management shows commitment in developing and implementing supplier diversity programmes					
Q44	The organization promotes competition in the firm's supply chain in an ongoing manner among its diverse suppliers.					
Q45	The organization sets goals to measure progress in supplier diversity programmes					
Q46	The firm shows positive progress in broadening the supply base					
Q47	The organization is committed to strengthening strategic partnerships with minority owned businesses					

Q48. What other strategies does your organization use in diversifying its supplier base?

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Q49. What challenges does your organization experience in implementing the procurement preference scheme by the government (Access to Government Procurement Opportunities (AGPO)).

V. PROCUREMENT PERFORMANCE

S/N	In a scale of 1-5 where 1=Strongly Disagree; 2=Disagree; 3=Sometimes Agree; 4=Agree and 5=Strongly Agree, please indicate your level of agreement or disagreement with the following statements relating to procurement performance.	[1]	[2]	[3]	[4]	[5]
Q50	The procurement function responds promptly to all customer enquiries on procurement related matters and solving any problem with the first call					
Q51	The procurement function clearly explains its actions and advice to ensure they are well founded, relevant and timely.					
Q52	The Procurement function makes all relevant information and resources easily accessible to both internal and external customers.					
Q53	The procurement function acquires the exact quantities ordered for from the suppliers					
Q54	The procurement function procures from approved suppliers to avoid substandard purchases and reduce the cost of impulse buying.					
Q55	The department reduces the procurement administrative costs through better supplier management					
Q56	The department obtains better payment					

	terms (discounts and allowable credit period) from the suppliers					
Q57	There is better measurement, tracking and reporting incurred costs and realized benefits in the procurement functions.					

Q58. What other procurement performance measures does your organization have?

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Q59. What other ethical strategies would you recommend to your management to employ so as to improve procurement performance?

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SECTION C: ADDITIONAL INFORMATION

Q60. What other factors on sourcing ethics apart from supplier selection ethics, ethical policies and codes, procedural justice and supplier diversity do you think influence your procurement performance?

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Q61. What are the challenges that your organization faces in ensuring that ethical practices are adhered to during the procurement process?

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Q62. How often does your organization conduct sourcing ethics trainings for the procurement personnel?

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Appendix 3: List of State Corporations in Kenya

A. PURELY COMMERCIAL STATE CORPORATIONS

1. Agro-Chemical and Food Company
2. Kenya Meat Commission
3. Muhoroni Sugar Company Ltd
4. Nyayo Tea Zones Development Corporations
5. South Nyanza Sugar Company Ltd
6. Chemilil Sugar Company Ltd
7. Nzoia Sugar Company Ltd
8. Simlaw Seeds Kenya
9. Simlaw Seeds Tanzania
10. Simlaw Seeds Uganda
11. Kenya National Trading Corporation
12. Kenya Safari Lodges and Hotels Ltd.(Mombasa Beach Hotel, Ngulia Lodge, Voi)
13. Golf Hotel Kakamega
14. Kabarnet Hotel Ltd
15. Mt. Elgon Lodge
16. Sunset Hotel Kisumu
17. Jomo Kenyatta Foundation
18. Jomo Kenyatta Enterprises Ltd.
19. Kenya Literature Bureau(KLB)
20. Rivatex (East Africa Ltd)
21. School Equipment Production Unit
22. University of Nairobi Enterprises Unit
23. University of Nairobi Press (UoNP)
24. Development Bank of Kenya Ltd.
25. Kenya Wine Agencies Ltd(KWAL)
26. KWA Holdings
27. New Kenya Co-operatives Cremaries
28. Yatta Vineyards Ltd
29. National Housing Corporation
30. Research Development Unit Company Ltd.
31. Consolidated Bank of Kenya
32. Kenya National Assurance Co.(2001) Ltd
33. Kenya Reinsurance Corporation Ltd
34. Kenya National Shipping Line

B. COMMERCIAL STATE CORPORATIONS WITH STRATEGIC FUNCTIONS

1. Kenya Animal Genetics Resource Centre
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2. Kenya Seed Company (KSC)
 3. Kenya Veterinary Vaccine Production Institute
 4. National Cereals and Produce Board (NCPB)
 5. Kenyatta International Convention Centre
 6. Geothermal Development Company (GDC)
 7. Kenya Electricity Generating Company (KENGEN)
 8. Kenya Electricity Transmission Company (KETRACO)
 9. Kenya Pipeline Company (KPC)
 10. Kenya Power and Lighting Company (KPLC)
 11. National Oil Corporation of Kenya
 12. National Water Conservation and Pipeline Corporation
 13. Numerical Machining Complex
 14. Kenya Broadcasting Corporation (KBC)
 15. Postal Corporation of Kenya
 16. Kenya Post Office Savings Bank
 17. Kenya Airports Authority (KAA)
 18. Kenya Ports Authority (KPA)
 19. Kenya Railways Corporation (KRC)
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C. EXECUTIVE AGENCIES

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- 1 Bomas of Kenya
 - 2 Water Services Trust Fund
 - 3 Leather Development Council
 - 4 Agricultural Development Authority
 - 5 Anti-Female Genital Mutilation Board
 - 6 Constituency Development Fund
 - 7 Drought Management Authority
 - 8 Exports Processing Zones Authority (EPZA)
 - 9 Financial Reporting Centre
 - 10 Higher Education Loans Board
 - 11 Information and Communications Technology Authority
 - 12 Investor Compensation Fund Board
 - 13 Kenya Academy of Sports
 - 14 Kenya Accountants and Secretaries National Examination Board (KASNEB)
 - 15 Kenya Deposit Protection Authority
 - 16 Kenya Ferry Services Ltd (KFS)
 - 17 Kenya Film Development Service
 - 18 Kenya Institute of Curriculum Development (KICD)
 - 19 Kenya Law Reform Commission
 - 20 Kenya Medical Supplies Agency (KEMSA)
 - 21 Kenya National Bureau of Statistics
 - 22 Kenya National Examination Council (KNEC)
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23	Kenya National Highways Authority (KeNHA)
24	Kenya National Innovation Agency
25	Kenya Ordnance Factories Corporation
26	Kenya Roads Board
27	Kenya Trade Network Agency
28	Kenyatta National Hospital (KNH)
29	LAPSSET Corridor Development Authority
30	Local Authorities Provident Fund
31	Moi Teaching and Referral Hospital
32	Nairobi Centre for International Arbitration
33	National Aids Control Council
34	National Cancer Institute of Kenya
35	National Coordinating Agency for Population and Development
36	National Council for Law Reporting
37	National Council for Persons with Disabilities
38	National Hospital Insurance Fund (NHIF)
39	National Industrial Training Authority (NITA)
40	National Irrigation Board
41	National Museums of Kenya
42	National Quality Control Laboratories
43	National Social Security Fund (NSSF)
44	National Youth Council
45	Nuclear Electricity Board
46	Policy Holders Compensation Fund
47	Sports Kenya
48	The Kenya Cultural Centre
49	Tourism Fund
50	Unclaimed Financial Assets Authority
51	Water Resources Management Authority (WARMA)
52	National Campaign Against Drug Abuse Authority (NACADA)

D. STATE AGENCIES-INDEPENDENT REGULATORY AGENCIES

1	Agricultural, Fisheries and Food Authority
2	Commission for University Education (CUE)
3	Communications Authority of Kenya
4	Competition Authority
5	Council for Legal Authority
6	Energy Regulatory Commission (ERC)
7	Kenya Bureau of Standards (KEBS)
8	Kenya Civil Aviation Authority (KCAA)
9	Kenya Film Regulatory Authority
10	Kenya Maritime Authority (KMA)
11	Kenya National Accreditation Service

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- 12 National Commission for Science, Technology and Innovations (NACOSTI)
 - 13 National Construction Authority (NCA)
 - 14 National Environment Management Authority (NEMA)
 - 15 National Land Transport and Safety Authority
 - 16 Public Benefits Organizations Regulatory Authority
 - 17 Public Procurement Regulatory Authority (PPRA)
 - 18 Technical and Vocational Education and Training Authority (TVETA)
 - 19 Tourism Regulatory Authority
 - 20 Water Services Regulatory Board
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E. STATE AGENCIES- RESEARCH INSTITUTIONS, PUBLIC UNIVERSITIES, TERTIARY EDUCATION AND TRAINING INSTITUTIONS

- 1 Bukura Agricultural College
 - 2 Chuka University
 - 3 Cooperative University of Kenya
 - 4 Dedan Kimathi University of Technology
 - 5 Egerton University
 - 6 University of Embu
 - 7 Garissa University
 - 8 Jaramogi Oginga Odinga University of Science and Technology
 - 9 Jomo Kenyatta University of Agriculture and Technology
 - 10 Karatina University
 - 11 Kenya Agricultural and Livestock Research Organization
 - 12 Kenya Forestry Research Institute
 - 13 Kenya Industrial Research and Development Institute
 - 14 Kenya Institute of Mass Communication
 - 15 Kenya Institute of Public Policy Research and Analysis (KIPPRA)
 - 16 Kenya Marine and Fisheries Research Institute
 - 17 Kenya Medical Research Institute
 - 18 Kenya Medical Training Institute
 - 19 Multimedia University of Kenya
 - 20 Kenya School of Government
 - 21 Kenya School of Law
 - 22 Kenya Utalii College
 - 23 Kenya Water Institute
 - 24 Kenyatta University
 - 25 Kibabii University
 - 26 Kirinyaga University
 - 27 Kisii University
 - 28 Laikipia University
 - 29 Maasai Mara University
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30	Machakos University
31	Maseno University
32	Masinde Muliro University of Science and Technology
33	Meru University of Science and Technology
34	Moi University
35	Murang'a University of Technology
36	National Crime Research Centre
37	Pwani University
38	Rongo University
39	South Eastern Kenya University
40	Taita Taveta University
41	Technical University of Mombasa
42	The Technical University of Kenya
43	University of Eldoret
44	University of Kabianga
45	University of Nairobi

Source: (GoK, 2013)