

MANAGING PROCUREMENT EFFICIENCY IN STATE ENTERPRISES

A CASE OF NATIONAL ENTERPRISES CORPORATION

BY

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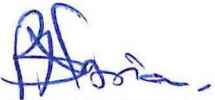
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**A RESEARCH DISSERTATION SUBMITTED TO THE SCHOOL OF MANAGEMENT
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KYAMBOGO UNIVERSITY**

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DECLARATION

I, BUHANDA BRIAN do hereby declare that this work has never been submitted to any institution of higher learning for the award of a degree or any other qualification before.

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APPROVAL

The contents of this report unless where referenced, are original and have never been presented to any university for the award of the degree of Master of Business Administration.

This thesis under the topic Managing Procurement Efficiency in State Enterprises, a Case of National Enterprises Corporation has been submitted to the School of Graduate Studies in partial fulfillment of the requirements for the Award of the Degree of Master of Business Administration of Kyambogo University with the approval of the following supervisors:

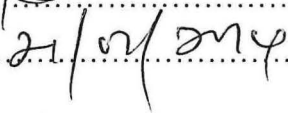
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DEDICATION

To
My Dear wife and Children

ACKNOWLEDGMENT

I acknowledge with sincere gratitude the guidance and support from my supervisors Dr. Peter Wanyama Obanda and Mr. Charles Kalinzi. I am very grateful for the discussions, comments and corrections which were of great assistance to my research work. Total appreciation goes to my classmates, colleagues at my workplace and my family especially my dear wife, for the courage and prayer.

May God bless you.

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LIST OF ABBREVIATIONS

| | |
|--------|--|
| CVI | Content Validity Index |
| DAC | Development Assistance Committee |
| GDP | Gross Domestic Product |
| GOU | Government of Uganda |
| GPA | Government Procurement Agreement |
| ICT | Information Communication Technology |
| LDCs | Low Developing Countries |
| NEC | National Enterprises Corporation |
| OECD | Organisation for Economic Co-Operation and Development |
| PDU | Procurement and Disposal Unit |
| PPDA | Public Procurement & Disposal of public Assets Act |
| PSRRC | Public Service Review and Reorganization Commission |
| SPSS | Statistical Package for Social Scientists |
| UNCTAD | United Nations Conference on Trade and development |
| USA | United States of America |
| WTO | World Trade Organisation |

ABSTRACT

The study was centered on managing factors that affect procurement efficiency in state owned enterprises using a case study of National Enterprise Corporation (NEC) with a scope limited to internal factors. The study was guided by the three objectives that is, to identify internal procurement process factors that can drive procurement efficiency at the same time meeting compliance levels, to examine the challenges of driving out efficiency amidst competition from private owned businesses and to evaluate management strategies that can be undertaken to enhance procurement efficiency.

A cross-sectional research design was used for the study since data was collected as single point in time and this enabled the researcher to collect detailed and in-depth data from NEC staff. The researcher used questionnaire and interview guide to collect data from the respondents and the sample size of 91 respondents was selected.

The findings of the study revealed that effective accountability; adherence to procurement ethics and regulations; skills and competence of staff have a direct bearing on procurement efficiency. That manipulation of contract awards, transparency problems renders procurement process inefficient. It was noted that inflexible procurement regulations and political interferences, competition, lack of transparency, social externalities, Information Communication Technology (ICT) problems, rapid changes in public procurement requirements and underutilization of assets compromise efficiency in procurement. It was noted that improvement in accountability, uphold the element of integrity, adherence to PPDA regulation and compliance, observing procurement ethics can improve procurement efficiency. It can therefore be concluded that internal procurement factors affect greatly procurement efficiency by 75.5%.

The study recommends that internal factors affecting procurement function should be improved to ensure efficiency. Management of NEC should request for accreditation of alternative public procurement and disposal system (PPDA Regulation 342) to mitigate delays in the procurement process as well as adopt ICT to facilitate e-procurement, procuring directly from manufactures, and develop collaborative buyer-seller relationships,

CHAPTER ONE

1.0 Introduction

This chapter presents the background of the study, the statement of the problem, purpose of the study, the objectives of the study, the research questions, scope of the study, significance of the study, justification and operational definition of terms. The study focused on the management of factors that affect procurement efficiency in state enterprises using a case study of National Enterprise Corporation.

1.1 General Background to the Study

Public procurement has, for long, been overshadowed with inefficiency, corruption and disregard of fundamental "value for money" considerations (Oliver, 2004). This has adversely impacted the rate and quality of progress in realizing the objectives of national development, especially in developing and transition countries.

Public procurement is inherently a politically sensitive activity, not least because it involves significant amounts of public money even within the context of a national economy. Pegnato (2003) estimated the US federal procurement figure at around US\$200 billion per annum; while Coggburn (2003) put the combined level for state and local governments at more than US\$1 trillion. Thai and Grimm (2000) estimated government's collective purchasing at around 20% of GDP while, for developing countries, Nicol (2003) put the figure at 15% of GDP. For Russia, federal procurement in 2004 was expected to amount to about 40% of the country's budget (Fradkov, 2004). The Organisation for Economic Co-Operation and Development (OECD) Development Assistance Committee (DAC) (2003) estimated the volume of global public sector

procurement at 8% (US\$3.2 trillion) of the worldwide GDP of US\$40 trillion. Aspirations to depoliticise public procurement face major hurdles: decisions about its appropriation can involve financial hardships and job losses for various regional or sectional constituencies, thereby inviting intense political interest. Further, even just a few low value performance failures can, it seems, be of greater political significance than pandemic inefficiency (Dilulio, 1994; Osborne & Gaebler, 1992).

Compounding the issues implied by its overtly political and business dimensions are widespread misunderstandings and even gross ignorance within the executive structures of governments as to what procurement actually entails (Coggburn, 2003; OECD/DAC, 2003). There is often little understanding of what skills are required and what risks are implied as well as what opportunities may be available (e.g. GAO, 2000). Failure of awareness and expertise at this level commonly represents a real risk to good governance, even creating the anomaly whereby public procurement may sometimes be characterized as transparent while not accountable (Isaac, 1997).

Internal procurement process factors have generally created adverse effects of procurement efficiency which has created a bad picture to perceive public procurement as an area of waste and corruption (Keaf, 2003). The District of Columbia, USA government wasted hundreds of thousands of dollars in revenue by selling used emergency vehicles for “bargain basement prices” in auctions run by untrained staffers (Nakamura, 2004). In a two and half-year period studied by the city’s Inspector General’s Office, the city sold 11 fire trucks for a total of \$3,125 while similar vehicles in make and model had been sold on the internet for a total of \$360,875. Corruptions and bribes are widespread in government contracts (International Transparency,

2010). In the United States, corruptions in government contracts have been regularly reported in newspapers; and the first week of September 2004 witnessed the reporting of a flurry of criminal prosecutions against state officials for violations of state procurement laws. Separate newspapers reported on bidding scandals from Illinois, Connecticut, Wisconsin, and Maryland (www.aba.org). Overcoming the negative perception and the objective reality, to a certain extent is one of the biggest challenges in public procurement.

1.1.2 Government Procurement in Developing Countries

The procurement function has not been given the recognition it deserves in developing countries, in most public entities, regardless of the effort by the partners like the World Bank, the International Trade Organisation, the United Nations Conference on Trade and Development, the World Trade Organisation and, others. This could be deliberate or sheer ignorance on the value the procurement function could contribute to any organization (Telgen, Zomer, & de Boer, 1997).

The need to evaluate factors that affect procurement efficiency in public entities, particularly in developing countries, has never been as sound as it is now. Delaying will worsen the already deteriorating performance, loss of professionals, and organisations will continue incurring unnecessary costs (DCD/DAC, 2003).

In most developing countries, the procurement function is transitioning from a clerical non-strategic unit to an effective socio-economic unit that is able to influence decisions and add value (Knight, Harland, Telgen, Thai, Callender, & Mcken, 2007; and Facolta di Economia, 2006).

Developing countries in one way or another have reformed their public procurement regulations. The reforms have not been limited to regulations only, included public procurement process, methods, procurement organisational structure, and the workforce (Van Weele, 2002). The reforms have been as a result of joint effort with various development partners like the World Bank, International Trade Centre, WTO, and UNCTAD varying from country to country. None the less, most developing countries are facing a problem of rapid changes in public procurement requirements. The changes are impacting pressure on how the procurement function performs its internal processes and procedures in order to achieve its objectives.

The ability to realize procurement goals in public procurement is generally influenced by internal force (Thai, 2006). Interactions between various elements, professionalism, staffing levels and budget resources, procurement organizational structure whether centralized or decentralized, procurement regulations, rules, and guidance, and internal control policies, all need attention and influence the performance of the procurement function (Thai and Grimm, 2000). In addition, public procurement is faced by the challenges imposed by a variety of environment factors (external factors) such as market, legal environment, political environment, organisational and socio-economic environmental factors.

In developing countries, public procurement practitioners have and will face always many challenges (Zeneca, 2001). Each country has its own economic, social, cultural and political environment, and each country's public procurement practitioners face different types of challenges, or the same types of challenges but at different levels from their counterparts in other countries.

In Uganda, many public procurement activities suffer from inflexible and bureaucratic systems of procurement which leads to unacceptable contract delays, increased procurement costs, the potential for manipulation of contract awards and lack of fair competition, all of which create the perception in the population at large, that public expenditure is slow, ineffective, expensive and often corrupt (Mukasa, 2011).

1.1.3 Background to National Enterprises Corporation

National Enterprise Corporation (NEC) was established soon after the NRA liberation war, with a view of redeploying and providing gainful employment to soldiers who were involved in the war and to produce goods and services for the army, with profits being used to improve the welfare of soldiers (NEC Works, 2013). In 1995, Parliament passed a new statute whose effect was to create a leaner and more focused business oriented NEC, producing goods and services for the Army's own consumption. National Enterprises Corporation is established by Chapter 312 of the National Enterprises Corporation Act of 1989. Part Two of this Act gives NEC a number of functions that include: Acquire, lease, hold and enjoy any property, and sell, let or otherwise dispose of the property; manage, develop, let, hire or buy, subscribe for or otherwise acquire, sell dispose of any sort, including stocks, shares, bonds, debentures and security of any interest; take over or acquire shareholdings in any company and establish subsidiary companies; engage in agriculture, agricultural produce and the processing, purchase and disposal of the same; establish and maintain factories and similar establishments for the production of textiles, hardware, electric materials, timber, woodworks and other factory products; engage in the business of transportation and motor assembling; engage in the production of chemicals, polymers, pharmaceuticals and other related products; build or purchase business premises in

furtherance of its functions; establish and maintain offices in Uganda and abroad ; and carry on research in relation to any of its functions or to national defence, and for those purpose may train, organize, develop and utilize personnel (NEC Works, 2013).

As a result of the legalization, NEC divested itself from a several non-performing ventures. To date NEC has five subsidiary companies to meet this objective. These subsidiaries are: Luwero Industries Ltd, NEC Farm Katonga Ltd, NEC Construction Works & Engineering Ltd, NEC Pharmaceuticals Ltd, and NEC Tractor Hire Limited.

NEC Construction Works and Engineering Limited (NEC Works) is a subsidiary where National Enterprises Corporation (NEC) owns 98% with 2% equally shared by the Permanent Secretary of Ministry of Defence and Ministry of Finance, Planning and Economic Development, It was incorporated on October 18, 1991 to handle construction and engineering works for the Armed forces, government departments and private sector (NEC Works, 2013).

NEC Works is unique in its functions compared with other established Corporations and Authorities like National Water and Sewage Corporation, which are established to extend services to the people (government) without a profit motive. NEC is a government enterprise operating in a non-restricted market which is not the case for other government bodies that have monopoly say National Water and Sewerage Corporation, Uganda Electricity Distribution, and other Authorities (NEC Works, 2013).

NEC Construction Works and Engineering Limited bids for construction projects form entities and organisations it's prequalified with. For every beginning of a financial year it's hard to project the nature and extent of construction projects the company is going to be involved in. The

company's projections are based on expected contacts to be won from its clients through request for quotation and open bidding. It's very hard to predict the month or period in a financial year when NEC Works is going to win a contract and this makes it hard for user departments as required by the PPDA Act to prepare multi-annual rolling work plans for procurement based on the approved budget to facilitate orderly execution of annual procurement activities (NEC Works, 2013).

PPDA Act requires the company to invite bidder using different methods of selection, this leads to the involvement of third party procurement providers.

NEC is the only government enterprise that runs some of its transactions with a profit making motive. To maximize profits amidst competition from the private sector and other environmental shifts such as political factors, technology, economic, legal factors among others, there is need to improve the procurement efficiency of NEC Works (NEC Works, 2013). Strict adherence to procurement rules and regulation makes procurement process costly since it has to use middle men. Further the regulations cause delays in contract delivery and renders underutilization of company's assets in the procurement process (NEC Works, 2013). The company has to invite suppliers of construction materials which attract high prices since they also have to make profits which in turn makes procurement process costly.

Further following the regulations leads to delay in contract delivery. According to PPDA regulations the process of preparing and inviting bidders, evaluate bids and award contracts requires a lot of time that does not enable NEC Works to execute such contracts in the required time schedule thus rendering the company inefficient in its procurement process. As reflected in the contract made between Post Bank and NEC Works on 22nd April 2013 to be completed on 30th April which time was not enough (NEC Works, 2013).

Because of inflexible and bureaucratic procurement process, there is a potential for manipulation of contract awards and lack of fair competition. According to PPDA Audit Report on National Enterprise Corporation (January,2010); it revealed a huge variance of Shs. 370 million between estimated procurement budget and total value of procurements reported to PPDA for the financial year 2008/2009; procurement of computers was awarded to one company; pre-qualification was last done in four years; bidding documents were never issued, five procurements were not evaluated; 15 procurements lacked local purchase orders; and there was no evidence as whether goods procured were received by user departments. It was against this background that the researcher undertook to investigate the factors that affect procurement efficiency using National Enterprise Corporation as a case study.

1.2 Statement of the Problem

Regardless of the effort by the governments of developing countries, like Uganda, to manage and improve procurement efficiency, the irregularities involved in the procurement process and inflexible PPDA regulation and guidelines renders procurement inefficient (Kakwezi and Nyeko, 2010).

The inflexible and bureaucratic procurement process leads to delay in contract delivery, renders underutilization of company's assets in the procurement process and makes procurement process costly since it has to use middle men (NEC Works, 2013). The company has to invite suppliers of construction materials which attract high prices since they also have to make profits which in turn makes procurement process costly. According to PPDA Regulations (2003) the process of preparing and inviting bidders, evaluate bids and award contracts requires a lot of time that does

not enable NEC Works to execute such contracts in the required time schedule thus rendering the company inefficient in its procurement process.

It is very hard to predict the month or period in a financial year when NEC is going to win a contract and this makes it hard for user departments as required by the PPDA Act (Part IV, Division II) to prepare multi-annual rolling work plans for procurement based on the approved budgets to facilitate orderly execution of annual procurement activities.

A case in point is a contract between Post Bank and NEC Works signed on the 22nd April 2013 to be completed on 30th April 2013 with a contract period of 8 days which time was not enough. It was in the interest of the researcher to identify internal factors that affect procurement efficiency in NEC.

1.3 General Objective

The general objective of the study was to examine the management of factors that affect procurement efficiency in state enterprises using a case study of National Enterprise Corporation.

1.4 Specific Objectives of the Study

The study was guided by the following specific objectives:

- i. To identify internal procurement process factors that can drive procurement efficiency at the same time meeting compliance levels.
- ii. To examine the challenges that drive out efficiency amidst competition from private owned businesses.
- iii. To evaluate management strategies that can be undertaken to enhance procurement efficiency.

1.5 Research Questions

- i. What are the procurement process factors that can drive procurement efficiency at the same time meeting compliance levels?
- ii. What are the challenges that drive out efficiency amidst competition from private owned businesses?
- iii. What management strategies that can be undertaken to enhance procurement efficiency?

1.6 Scope of the Study

The study was centered on managing factors that affect procurement efficiency in state owned enterprises using a case study of National Enterprise Corporation. The study specifically looked at internal factors affecting procurement efficiency, challenges that drive out efficiency amidst competition from private owned business and management strategies that can be undertaken to enhance procurement efficiency in profit making government enterprises as the independent variable. Procurement efficiency is the dependent variable and it was measured by looking at reliability, competitiveness, cost reduction and reduced delays in procurement process. The study was carried out at National Enterprises Corporation premises located on Plot 58 6th Street, Industrial Area, Kampala, Uganda and the study covered a period of four months running from July 2013 to October 2013.

1.7 Significance of the Study

It may assist the management and decision makers in public sector organisations to identify whether procurement process is done in line with Public Procurement & Disposal of public Assets Act 1, 2003 (PPDA).

The study may bridge the gap in the existing literature about internal and external factors that affect procurement efficiency and it will alert procurement officers that strict adherence to professionalism and ethics can minimize inefficiencies in the procurement process.

The findings may work as a guiding tool or strategy to be used by the Purchasing departments in setting up procurement regulations and laws and ensure such laws are adhered to stimulate efficiency in procurement.

1.8 Definitions of Terms

Procurement Efficiency

According to Marsh (2004), procurement efficiency covers; specification development, valued analysis, supplier market research, negotiation, buying activities, contract administration, inventory control such as receiving and store management. It advocates for the best purchasing practices such as obtaining the right quality, right quantity, right sourcing at the right price, at the right place and the right time (6Rs) all these focus on organization competitiveness.

Internal Procurement Factors That Affect Procurement Efficiency:

These are factors that are immediate to the organization and the organization has the capacity to control them such as compliance, accountability, employee skills.

Government Procurement

According to Public Procurement and Disposal of Public Assets Act, 2003 (PPDA) Procurement means acquisition by purchase, rental, lease, hire purchase, license, tenancy, franchise, or any type of works, services or supplies or any combination' up to the time a user consumes or utilises a service as per his requirement and in line with the procurement Act and regulations of the country.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The aim of this chapter puts together what others researchers and academicians have written about the topic that is addressed in this research work and to try and bring the researcher's own thoughts about what is found in current literature especially in relation to this topic. This chapter begins with the theoretical review, conceptual review and lastly the review of study objectives.

2.1.1 Procurement Efficiency

Procurement efficiency reflects that the organisation is doing things right (Morgan, 2011). Procurement efficiency encompasses the acquisition of goods and/or services at the best possible total cost of ownership, in the right quality and quantity, at the right time, in the right place and from the right source for the direct benefit or use of corporations, individuals, or even governments, generally via a contract, or it can be the same way selection for human resource. Simple purchasing may involve nothing more than repeat purchasing. Complex purchasing could involve finding long term partners and or even 'co-destiny' suppliers that might fundamentally commit one organization to another (Cooper, 2003).

The overriding objective of a state's public procurement system is to deliver efficiency and "value for money" in the use of public funds, whilst adhering to procurement rules, regulation and requirements and to national laws and policies. Dimongo (2004), asserts that procurement efficiency has become a catchword in the modern business times today. Organizations emphasize procurement efficiency in business purposely to reduce on the lead time, to reduce on duplication of efforts such as administration, quality checks and wastage reduction. Organizations which

have neglected the importance of procurement efficiency have ended up being swallowed up by the strong competitors. Firms if they are to stay in the business for long time should emphasize procurement efficiency because this does not only improve on the service delivery but also enable the firms to register operational success.

2.1.2 Government Procurement

Government procurement is one of the four economic activities of government (Thai, 2001). Ordinarily, government procurement includes “buying, purchasing, renting, leasing or otherwise acquiring any supplies, services or construction;” and “all functions that pertain to the obtaining of any supply, service or construction, including description of requirements, selection, and solicitation of sources, preparation and award of contract and all phases of contract administration” (American Bar Association, 2000). Although, government procurement is still young as an academic discipline, recent literature of public procurement suggests that public procurement practice has undergone major changes particularly in the area of legal reforms. For Low Developing Countries (LDCs), reforms in public procurement have been seen as one of the ways to integrate them into the emerging world economy (OECD Development Centre, 2002). In order to develop a uniform government procurement practice that can be compared across various public organization, it has become necessary to develop formal government procurement codes that contain formal procurement rules and regulations across a number of developed and developing countries. For the poor developing countries, government procurement regulations and procedures have been one of the reform areas (Thai, 2001; OECD, 2007) since early 2000. By 2003 for instance, all East African Countries, Uganda, Kenya, and Tanzania had enacted

government procurement codes as Acts of Parliament and have been implemented since (OECD Development Centre, 2003).

2.2 Theoretical Review of Government Procurement and Efficiency

The study employed systems theory as a guide to the study. The theory was developed by Ludwig Von B in the 1940's. His view was based on an interdisciplinary approach which attempts to fit together different aspects of the organization. His theory precisely dealt with the multifaceted nature in systems, and suggested a framework which one can use to investigate any group of objects that work together to produce some result.

Therefore the theory is very important to explain internal factors that affect procurement efficiency in government enterprises. The theory shows that in every setting there must be a proper system to ensure that there is smooth flow of tasks and in case of any eventually such as systems breakdown, error or mistake the whole functioning of the system can be crippled (Dacuscos, 2010). Explained in similar way, this theory indicates that there are factors more particularly internal factors that affect efficiency in the procurement process in government enterprises and thus it was of great importance to identify and examine such factors to address inefficiencies in the government procurement. It should be noted that procurement efficiency is central in cost savings and that it affects other departments because they rely on procurement to bring in materials at the right time, price, quality, quantity and from the right source which are used to produce goods for the end customer (Feigein, Kent and Mayer, 2009). If for example, important components do not arrive in time, production will be late, and the sales and marketing department may not live up to their promises to deliver to the customer as anticipated (Doyle,

2001). This therefore implies that the entire supply chain which encompasses the internal supply chains must be properly managed and coordinated as provision of goods and services to the final customer is wholly dependent on the efficiency and effectiveness of the entire supply chain.

2.3 Conceptual Framework

The conceptual framework was developed on the premise that there are internal procurement process factors which affect procurement efficiency in government owned enterprises.

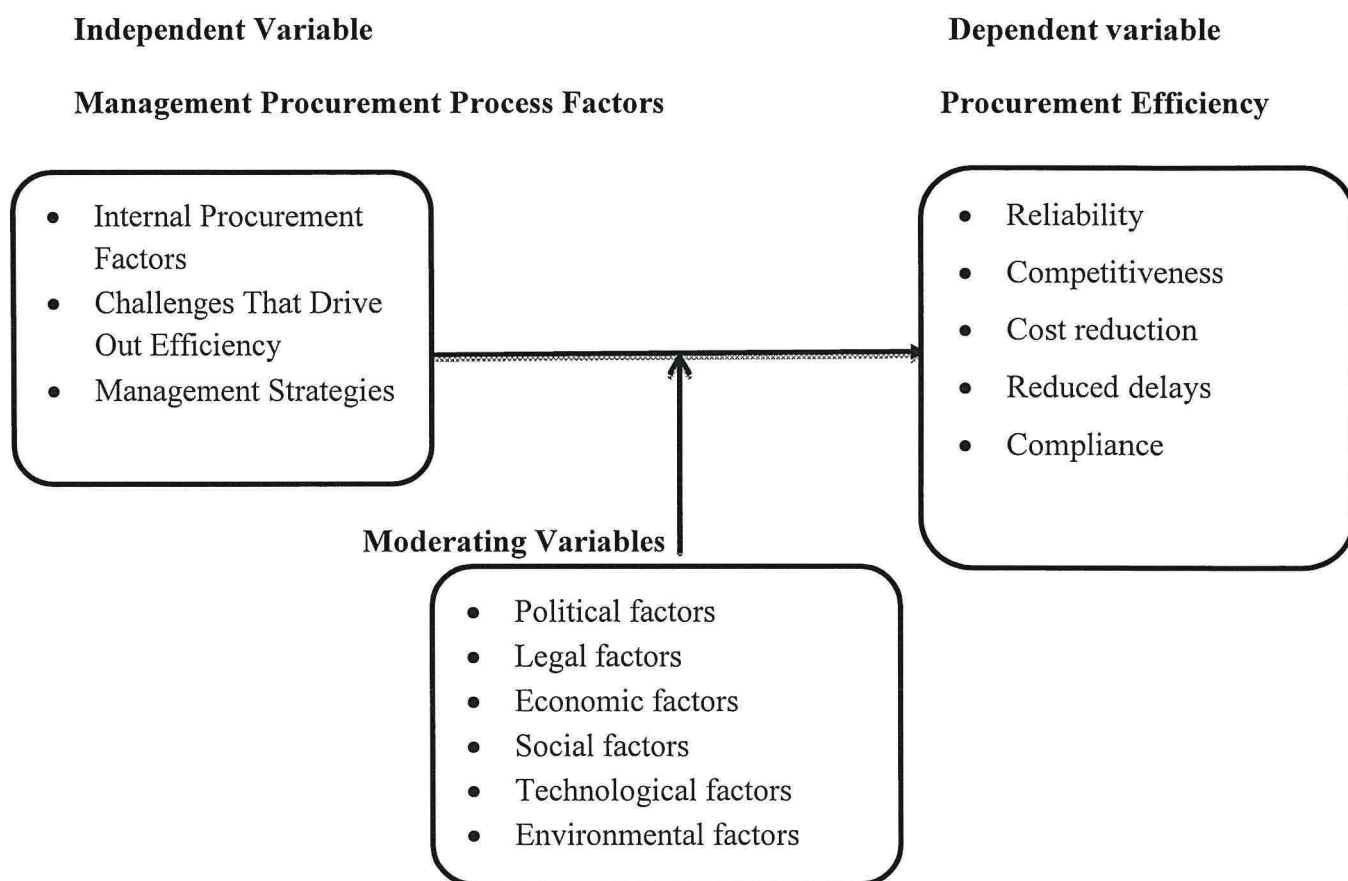


Figure 1: The Conceptual framework reflecting managing procurement efficiency in state enterprises (Source: Adopted from literature review and modified by the researcher)

As shown in figure 1 above, the conceptual framework is developed with a focus on managing of internal factors that affect procurement efficiency in state enterprises. Internal procurement factors such as accountability, training, professionalism, transparency, procurement ethics, ICT adoption and staff competence have a direct bearing on procurement efficiency as measured by reliability, competitiveness, cost reduction and reduced delays in procurement process. It should be remember that procurement efficiency affects other departments because they rely on procurement to bring in materials at the right time, price, quality, quantity and from the right source which are used to produce goods for the end customer. However, efficiency can be compromised by intervening factors such as political factors, legal factors, economic factors, social factors, technological factors and environmental factors. The study matched and integrated these external factors in the study since they hinder procurement efficiency in state enterprises.

2.4 Internal Procurement Factors that can drive Procurement Efficiency

This section focused on internal procurement factors that drive procurement efficiency at the same time meeting compliancy level.

2.4.1 Accountability

Accountability is government's obligation to demonstrate effectiveness in carrying out goals and producing the types of services that the public wants and needs (Segal and Summers 2002). Lack of accountability creates opportunities for corruption which adversely affects procurement efficiency. Brinkerhoff (2004) identifies three key components of accountability, including the measurement of goals and results, the justification or explanation of those results to internal or external monitors, and punishment or sanctions for non-performance or corrupt behavior.

Strategies to help to enhance procurement efficiency through accountability include information systems which measure how inputs are used to produce outputs; watchdog organizations, Contracts Committees or other civic organizations to demand explanation of results; performance incentives to reward good performance; and sanctions for poor performance (Oliver, 2004)

PPDA in liaison with other stakeholders enforced salary reduction to officials in Gulu District LG in year 2010/2011 for their aversive procurement decisions (PPDA Audit Report, 2011). By combining financial and service delivery, the reporting system drew attention to entities that had unusual indicators, and helped officials to explore root causes for performance differences, including possible corruption (Vian and Collins 2006). This situation has in turn improved procurement efficiency in government enterprises in Uganda.

Thai, (2001) developed a model depicting the scope of public procurement that consists of five elements: policy- making and management; authorizations and appropriations; procurement regulations; procurement function in operations (processes, methods, organizational structure, and procurement workforce; and feedback). Public procurement practitioners have always walked on a tight rope (Morgan, 2011). Their ability to accomplish procurement objectives and policies is influenced very much by internal forces including: Interactions between various elements of the public procurement systems, various officials and organizations in the three branches of government, and various actors and sub-agencies within a department or executive agency and actors and organizations external to sub-agencies(Nakamura, 2004); Types of goods, services and capital assets required for an agency's missions; Professionalism or quality of

procurement workforce; Staffing levels (e.g., ratio of procurement practitioners to contract actions) and budget resources; Procurement organizational structure such as the issue of centralization vs. decentralization; Procurement regulations, rules and guidance; and Internal controls and legislative oversight.

2.4.2 Internal Processes

Public procurement has, for long, been overshadowed with inefficiency, corruption and disregard of fundamental "value for money" considerations. This has adversely impacted the rate and quality of progress in realizing the objectives of national development, especially in developing and transition countries (Tan et al., 2009). Employees may neither engage in, nor give the appearance of engaging in, dishonest or unethical actions. Both are injurious to the public's perception of honest government. As a government employee, you might have access to procurement and other nonpublic information that could affect a contract bid or the award process (Wymer and Regan, 2005). Improper disclosure of such protected information could violate numerous laws, as well as ethics rules. It also could subject you to administrative actions, as well as civil or criminal penalties. Management in contracting authorities should ensure that there is an appropriate focus on good practice in purchasing and, where there is a significant procurement function that procedures are in place to ensure compliance with all relevant guidelines.

Officials involved in procurement must not make improper use of their position (Tan et al., 2009). Officials may have access to very confidential and/or market sensitive information which can affect adversely the procurement efficiency. It is unethical to use inside information provided

to the agency as part of a tender process, either for the material benefit of the official or for another person. Criminal sanctions apply to such behavior to mitigate their occurrence and thus improve procurement efficiency.

2.4.3 Ethics

According to Van Weele (2002) ethics are the moral principles or values that guide officials in all aspects of their work. Ethical behavior encompasses the concepts of honesty, integrity, probity, diligence, fairness, trust, respect and consistency. Ethical behavior includes avoiding conflicts of interest, and not making improper use of an individual's position. Ethical behavior is important in measuring procurement efficiency as it involves the expenditure of public money, and is subject to public scrutiny. Public officials should always behave ethically and fairly, including in their business undertakings as one way of enhancing procurement efficiency. Ethical behavior supports openness and accountability in a procurement process and gives suppliers confidence to participate in the Government marketplace (Van Weele, 2002). It should be noted that ethical behavior can also reduce the cost of managing risks associated with fraud, theft, corruption, and other improper behavior; and enhance confidence in public administration which is the central part in stimulating procurement efficiency.

An important and effective way to maintain ethics awareness in agencies is to provide training for employees (Amos and Weathington, 2008). Ethics training and seminars can be provided, along with training in more specific areas, such as procurement procedures, record keeping, records management, and accountability and administrative law. Regular reviews or audits of

procurement processes can be done to ensure probity is being considered and achieved to enhance procurement efficiency.

Providing procurement supplies, works and services is a complex process involving both the private and public sectors. Government entities often lack the management skills required to write technical specifications, supervise competitive bidding, and monitor and evaluate the contract performance which in turn cripples procurement efficiency (Miles and Breen, 2005). Financial malpractices also could occur at any stage of the process and influence decisions on the model of procurement (direct rather than competitive), on the type and volume of procured supplies, and on specifications and selection criteria ultimately compromising efficiency in procurement process.

2.4.4 Information Communication Technology (ICT) Adoption

Government officials and elected leaders have increasingly come to realize that public agencies must utilize ICT in order to enhance the procurement processes in the public sector. Faced with tight budgets and a retiring workforce, today's government agencies are operating in an environment defined by the need to 'do more with less'. Public authorities are expected to provide excellent service to their constituents in an effective and transparent manner, all the while working under constant resource constraints by adopting ICT (Hagén, and Zeed, 2005).

Zeneca (2001) concedes that procurement department in a well-established organization is looked at as a sole supplier of a wide variety of goods and services to the internal customers. It is mandatory that Purchasing department in any organization must have up to date information about the needs of the other departments in order to be efficient in its operations (Terry, 2005).

2.4.5 Employee Skills and Training

Aaronson (2004), contends that the effectiveness of the purchasing function depends on people capabilities. Without the right skill sets and competencies, purchasing departments will be unable to participate in the key activities of the organization and satisfy the needs of users. The quality of the employees has a great impact with the effectiveness of the decision, so assessments must also be done. This assessment can be accomplished by employing a matrix defining the position and the skills required, which can also be used to define training and development requirements, job descriptions, making hiring or promotion decisions, or developing appropriate training.

Bennett (1999) posed questions “How can we protect our organizations from rogue spending, flawed reciprocal business awards, conflicts of interest and a myriad of other issues? The answer to this, is have trained workers. Again have all suppliers been vetted through the same process, or have some been given preference because of whom they know? When evaluating a potential supplier, is there a process in place that ensures that all potential conflicts of your evaluation team are known? The answer to that is centered to having people with skill to do that. Guthrine (2005) further observes that there is a requirement to complete a full-disclosure form and get the potential supplier to do the same as well! Full disclosure ensures that everyone knows whether anything was provided to the evaluation members, such as fact-finding trips to meet with current clients or to a manufacturing facility, or whether an evaluation team member has any pre-existing relationships that could affect his or her impartiality (Van Weele, 2002). What inherently the full disclosure does is ensure that you are making decisions with complete information. It doesn't mean that you eliminate a supplier if any areas of concern are noted; it

just signifies that you have all information available to make an objective decision. It also ensures that your decisions are defensible (Campbell, 2002).

Basing on the view of various authors (Van Weele, 2002; Hagén, and Zeed, 2005; Miles and Breen, 2005; Vian and Collins 2006; Thai 2001) about internal procurement factors that can drive procurement efficiency, the study witnessed that little has been put to examine internal factors such as; accountability, ICT, procurement ethics, competent staff and compliance that can drive procurement efficiency in state enterprises and thus necessitated a thorough investigation to fill the knowledge gap.

2.5 Challenges Driving Out Procurement Efficiency in State Enterprises

This sections focuses on research objective two and addresses the challenges that drive out procurement efficiency in state enterprises in terms of political , legal, economic, environmental and technological aspects as shown below: -

2.5.1 Political Challenges

Public procurement practitioners have choices as they face various political pressures as well as sound economic decisions (Miles and Breen, 2005). For example, should they be concerned with maintaining future business competition by keeping some relatively weak companies in business or should they let these small weak firms go out of business and leave a few defense-specialized firms to compete for contracts? This issue is more common in developing countries where perfect competition hardly exists (Morgan, 2011). Large firms are more willing to make a small

profit margin or even to take business losses by offering best bids. After small and weak firms are out of business, they will enjoy an imperfect competitive market.

2.5.2 Legal Challenges

Guthrine (2005) asserts the legal environment refers to a broad legal framework that governs all business activities including research and development (regulations dealing with safety and health of new products), manufacturing (safety and health regulations at workplace and pollution control), finance (regulations dealing with disclosure of information), marketing (regulations dealing with deceptive advertising, disclosure of product characteristics), personnel (regulations dealing with equal opportunity for women and minorities), and contracts. Indeed, most aspects of contracts--public or private-- such as contract requirements, disputes, and breach of contract are governed under the same contract law (Campbell, 2002). In developing countries particularly Uganda where legal systems are not comprehensive, government contracts may need detailed provisions.

Many countries have moved to a regional and or global economy, public procurement practitioners face another challenge that is, how to comply with their government's procurement regulations and social and economic procurement goals without violating regional and/or international trade agreements (Hagén, and Zeed, 2005). For example, how to comply with national economic policies (in nurturing domestic firms), without dealing unfairly with foreign firms as provided in regional trade agreements and/or the World Trade Organization (WTO) agreements is not easy, which requires a careful study of trade agreements in order to take advantages of special provisions. The WTO Agreement on Government Procurement (GPA)

Article XVI provides: “Entities shall not, in the qualification and selection of suppliers, products or services, or in the evaluation of tenders and award of contracts, impose, seek or consider offsets.” Without careful examination of GPA provisions, procurement practitioners in developing countries may not use an exception: However, GPA Article XVI.2 “expressly allows for the use of offsets by developing countries” (Arrowsmith, 2003). Properly using ‘offsets’ is a major challenge for public procurement practitioners. Similarly, the World Trade Organization's general rule requiring that contracts be advertised for a period of no less than 40 days from the date of publication of the notice to the tender submission deadline. The 40-day requirement would hinder efficiency and speedy procurement. The 40-day standard period, however, may be reduced in certain cases to 24 days or 10 days, as set out in GPA Article XI.3.

A new law to regulate public procurement was introduced in Uganda in the year 2003. Prior to its introduction, public procurement was guided by disjointed government regulations and statutes and characterized by a multiplicity of tender boards and an array of procurement practices and procedures (Brinkerhoff, 2004). The new procurement law sought to bring coherence and uniformity in public procurement as well as improve efficiency, transparency and accountability and value for money in public procurement. It also sought to eliminate corruption and allow for fair competition among others (GOU, 2003). The new law therefore was not only intended to ensure that public procurement maximizes the public good but also that market forces are allowed to function properly during the process of procurement.

In developing countries, disregarding their politico-legal environment, a sound procurement system has accomplished two sets of requirements: management requirements and policy

requirements. The procurement management requirements normally include quality, timeliness, cost (more than just the price), minimizing business, financial and technical risks, maximizing competition, and maintaining integrity. The procurement policy requirements normally include economic goals (preferring domestic or local firms), environment protection or green procurement (promoting the use of recycled goods), social goals (assisting minority and woman-owned business concerns), and international trade agreements. It is very difficult for policy makers and public procurement practitioners to make an optimal decision, as there are always tradeoffs among these goals (Thai, 2001).

Many countries have used public procurement as a tool to achieve specific foreign policies. For example, in the 1980s, the Pakistani government bought 28 F-16 fighter jets, but the United States government withheld the contract because Pakistan was pursuing, against American wishes, the development of nuclear weapons. Public procurement practitioners in poor and weak countries are frequently facing the problem of having to deal with the foreign policy of other nations in their procurement decisions.

2.5.3 Environmental Challenges

Environment protection laws have been present in every country (developed and developing) and environmentalists have placed a great deal of pressure on public procurement practitioners. This type of pressure can be seen frequently and across countries (Campbell, 2002). In late 2001, the Vietnamese central government's State Appraisal Committee approved a controversial plan to build a new north-south highway through the country's oldest national park, a habitat for many rare and endangered plant and animal species. According to environmental groups, the plan to

run the highway through the Cuc Phuong park, which starts about 56 miles south of Hanoi, posed a serious threat to endangered species (Morgan, 2011). The Cuc Phuong Park is a global center for plant diversity and home to Delacour's Langur, a critically endangered primate, as well as the grey-headed fish eagle, tigers and elephants. The committee had examined two options: to upgrade an existing road running through the west of the park into a 17 miles stretch of highway, or to build a new road, skirting the park. The latter road would be 12 miles longer, cost nearly \$20 million more and require the relocation of more than 900 families instead of 80. The Vietnamese government, concerned with cost savings, decided to build the new road. The study attempts to explain the interaction of the public procurement law with established organisation structures as well as the procurement personnel in procurement entities and how that interaction may influence procurement operations, the quality of procurement outcomes and the achievement of the objectives of the law.

Historically, public entities of Uganda have been known for their poor performance and corruption, resulting from non-adherence to processes and procedures, poor resource utilization, poor personnel management and training, inadequate payment and benefits (Segal and Summers 2002). It is on this basis that the government of Uganda, in 1989, set up the Public Service Review and Reorganization Commission (PSRRC), under the Ministry of Public Service, to examine and propose recommendations on public service improvement (Ministry of Public Service, 2008). The ultimate goal was to improve the general service delivery to the public, create efficiency and effectiveness based on transparency in processes and procedures, performance evaluation systems and clear organizational goals and objectives (Vian and Collins 2006). The results of the commission led to the establishment of government agencies by law:

Public Procurement and Disposal of Public Assets Authority, Uganda Revenue Authority, National Environmental Management Authority, Civil Aviation Authority, National Agricultural Research Organization, Uganda Wildlife Authority, Inspector General of Government and many others.

Particularly, the PPDA Act (2003) in Uganda describes how public procurement may be conducted through the procurement cycle. The roles and responsibilities of public entities are limited to the procurement cycle. Regardless of the effort by the PPDA and the acknowledgement that the procurement department is capable of adding value to the organization still a large number of the internal customers act on their own and more frequently bypass the procuring department (Schiele & McCue, 2006).

The main reason for this is ignorance of how the public procurement operates (Telgen, Zomer, & de Boer, 1997). The purpose of the procurement cycle was to encourage competition among suppliers, professionalism, good business ethics and non-discrimination among others (PPDA, 2007).

2.5.4 Information and Technological Challenges

In addition, the procurement departments of public entities in Uganda are faced with the problem of not having enough information about the procurement procedure, its inputs, outputs, resource consumption and results and are therefore unable to determine their efficiency and effectiveness (Miles and Breen, 2005). This problem requires establishment of clear procurement procedures and performance standards. Performance when adopted will provide the decision-makers in the

procurement department with unbiased and objective information regarding the performance of the procurement function (Knudsen, 1999).

The rapid developments in technology (which have led to new procurement methods), public procurement cannot be perceived as mere a 'clerical routine,' as procurement practitioners are and should be involved in strategic procurement planning (Office of Management and Budget, 1997; Hinson & McCue, 2004). In recent years, public procurement practitioners have forcefully challenged the perceived clerical task of public procurement. According to a recent unscientific survey of 704 members at the National Institute of Governmental Purchasing, Inc., 83% of respondents contended that the major role of current purchasing is tactical (www.nigp.org). Thus, making public procurement a recognized profession is another challenge. Building a body of public procurement knowledge, one of attributes of a profession, is very critical.

However, for a public entity in a developing country to conduct procurement performance there are numerous challenges that are encountered: i) there are many ways of measuring that may be in use, ii) most measures are irrelevant iii) there is no way of standardizing the measurements and iv) conducting performance measurement is costly. The reasons for these challenges were given by Centre of Excellence London (2006): i) inaccurate information ii) lack of a link between procurement measures and corporate objectives iii) measurement of procurement performance is regarded as an overhead and not an integral part iv) people do not understand the benefit of measuring procurement performance and v) interference of other stakeholder and mainly the measures were developed in a different environment. Though management shows interest in managing and controlling the procurement function as efficiently and effectively as possible, the real problem is how to realize procurement goals that are influenced by internal

force and external force in the public sector. In view of the importance of the procurement function and the need to have coherent methods of performance of the procurement function, it was therefore necessary to investigate the measures that would enhance procurement efficiency and effectiveness of the purchasing function.

From the foregoing therefore, it should be concluded that although various authors put forward various challenges driving out efficiency amidst state enterprises little is put to ascertain how such challenges drive out efficiency thus necessitated a thorough investigation to fill the knowledge gap.

2.6 Strategies That Management Can Undertake For Procurement Process Improvement

The whole concept of procurement efficiency is to develop collaborative buyer-sellers relationship (Trevor, 2000). Supplier working together with the organization as a team can derive an edge over its competitors (competitive edge) through driving down total acquisition costs, improving quality, and adding value in terms of flexibility, reliability, and trustful relationships other than the adversarial or arms-length approach commonly practiced. The concept of having an efficient purchasing department requires the organization to manage the supplier effectively and efficiently, with a primary goal of continuous improvement (Morgan, 2011). Suppliers in this case are viewed as a resource that should be properly utilized. Suppliers are actually sources of cash, manpower, machinery and knowledge. Just as an organization takes care in managing, finance, human and technological resources care must be taken in addressing supplier management (Cooper, 2003).

Ferguson and James (2005) indicate that failure to attain procurement efficiency in organizations is centered on noncompliance with procurement guidelines and procedures. Many managers think that compliance is wastage of time but those who neglect the importance of compliance are failing below the experience curve and thus cannot register efficiency in the procurement process (Vian and Collins 2006). Manager should focus on compliance as the main route towards procurement efficiency. From this foregoing it should be argued that there is a significant relationship between compliance and procurement efficiency.

Sound public procurement policies and practices are among the essential elements of good governance (KIPPRA, 2006). Otieno (2004) notes the irregular procurement activities in public institutions provide the biggest loophole through which public resources are misappropriated. According to Thai (2001), the basic principles of good procurement practice include accountability, where effective mechanisms must be in place in order to enable procuring entities spend the limited resources carefully, knowing clearly that they are accountable to members of the public; competitive supply, which requires the procurement be carried out by competition unless there are convincing reasons for single sourcing; and consistency, which emphasizes the equal treatment of all bidders irrespective of race, nationality or political affiliation.

The process should also uphold integrity by ensuring that there are no malpractices; informed decision-making, which requires public bodies to base decisions on accurate information and ensure that requirements are being met. More still, the Procurement practice should be responsive to aspirations, expectations and needs of the target society. Finally, there is need for transparency to enhance openness and clarity on procurement policy and its delivery (World Bank, 2003).

Although various suggestions have been put forward by various about improving procurement efficiency, the study has witnessed more suggestions need to be examined in order to eliminate inefficiencies in public procurement.

2.7 Conclusion

Despite the view of various authors and writers about managing procurement efficiency in state enterprises, many state enterprises still have a long way to go in as far as improving procurement efficiency.

Research was surely needed to collect data that can be used to improve procurement efficiency amidst competition.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents the study design, study population, methods of data analysis, data collection instruments, sample size and selection, validity and reliability, procedures of data collection, data analysis and measurement variables.

3.2 Study Design

A cross-sectional design was adopted for the study because data was collected as single point in time and this enabled the researcher to collect detailed and in-depth data from NEC staff. Both quantitative and qualitative approaches were adopted in the study. This is because the quantitative approach allowed the researcher to gather data that could be quantified while the qualitative approach allowed the researcher to gather data that cannot be quantified (Mugenda & Mugenda, 1999). Combining numerical and textual information can help the researcher enrich the interpretation of findings of the study.

3.3 Area of Study

The study was carried out at National Enterprise Corporation located on Plot 58 6th Street, Industrial Area, Kampala, Uganda. The study was centered on the internal factors that affect procurement efficiency, challenges that drive out efficiency amidst competition from private owned business and management strategies that can be undertaken to enhance procurement efficiency in profit making government enterprises using a case study of National Enterprise Corporation. Internal factors affecting procurement efficiency, challenges that drive out

efficiency amidst competition from private owned business and management strategies that can be undertaken to enhance procurement efficiency in profit making government enterprises are the independent variable. Procurement efficiency is the dependent variable and it was measured by looking at reliability, competitiveness, cost reduction and reduced delays in procurement process.

3.4 Target Population

The population of the study was 106 staff covering all sections and departments. However more focus was put on the procurement function of NEC.

3.5 Sample Technique and Sampling Selection

The sample size of the study was calculated basing on the Krejcie & Morgan, (1970) table. From a population of 79 junior staff, 15 line managers, 8 middle managers and 4 top managers samples were calculated and selected as shown in table below: -

Table 3.1: The sample size determination as guided by Krejcie and Morgan (1970)

| Category | Population | Sample size | Sampling Technique |
|-----------------|------------|-------------|----------------------------|
| Junior staff | 79 | 65 | Stratified random sampling |
| Line managers | 15 | 14 | Purposive |
| Middle managers | 8 | 8 | Purposive |
| Top managers | 4 | 4 | Purposive |
| Total | 106 | 91 | |

Two sampling techniques were used to select the sample size of the study. Departmental heads were selected using purposive sampling technique. The purpose of using purposive sampling

technique was to access confidential information relating internal factors that affect procurement efficiency. This technique was used since managers have rich and deeper information and yet they are the center of ensuring procurement efficiency. Junior staff in various departments of NEC were selected using stratified sampling technique to form strata. This technique was used to make sample selection without any prejudice and to enable every employee in each department to have the same chance to be part of the study.

3.6 Research Instruments

Two types of data collection instruments were used in the study. These included questionnaires and interview guides, which are briefly explained in the following subsection.

3.6.1 Questionnaires

A questionnaire consists of a list of open-ended questions and or close-ended questions to facilitate the collection of primary data. Questionnaires can be used for the collection of both quantitative and qualitative data depending on the need of data type. Self-administered questionnaires (SAQs) were used to collect quantitative data from the NEC junior staff, line managers, middle managers and top managers. Structured questionnaires were preferred by the researcher because of their advantages like easy to administer on a large population which is largely literate, less costly in terms of money and time (Gay, 1996).

3.6.2 Interview Guides

Interview guides are a far more personal form of research instruments than questionnaires (Amin, 2005). An interview is a conversation between two or more people where questions are

asked by the interviewer to elicit facts or statements from the interviewee. Interview guides were used to collect qualitative data from departmental heads who were in position to provide in-depth information through probing during the face-to-face interview. The researcher presented questions to the departmental heads and their views were written down by the researcher. Data obtained during the interview was supplement with the data that was obtained using the questionnaire.

3.7 Measurement of Variables

Questionnaires were accompanied with an ordinal measurement, which categorizes and ranks the variables. Thus, a Likert scale was used to collect opinion data on the study variables using the five scales: 5 = strongly agree; 4 = agree; 3 = undecided; 2 = disagree; 1 = strongly disagree.

3.8 Data Quality Control

3.8.1 Validity

A validity test was carried out prior to the administration of the research instruments. This was done in order to find out whether the questions are capable of capturing the intended data. Experts in research reviewed the questions to see whether they were capable of capturing the intended response. A Content Validity Index (CVI) was calculated in order to establish the validity of the research instrument. The researcher used the following formula to establish validity of the research instruments as seen below.

$$\text{Content validity Index (CVI)} = \frac{\text{Relevant items by all judges as suitable}}{\text{Total number of items judged.}}$$

The results of CVI were .763 for internal procurement factors, .871 for challenges that drive out efficiency and .792 for the management strategies to improve efficiency. The results were greater than the recommended .70 (Amin, 2005), this implied that the questionnaire was valid for data collection.

3.8.2 Reliability

Reliability of the questionnaire instrument was assessed using Cronbach's coefficient alpha. The questionnaires were pre-tested to 10 respondents and the reliability results were computed using the Statistical Package for Social Scientists (SPSS). The following formula was used to calculate the Cronbach's coefficient alpha

$$\alpha = \frac{k}{k-1} \left[\frac{1 - \sum SDi^2}{\sum SDt^2} \right]$$

Where α = Coefficient Alpha

k = Number of Items

$\sum SDi^2$ = Sum Variance of Items

$\sum SDt^2$ = Sum Variance of Scale

The results of alpha values were .758 for internal procurement factors, .778 for challenges that drive out efficiency and .748 for the management strategies to improve efficiency. The results were greater than the recommended .70 (Amin, 2005), this implied that the instruments were valid for data collection.

3.9 Data Collection Procedure

Upon approval of the proposal from Kyambogo University, the researcher was given a letter of introduction to NEC's management. This served to secure permission in order to carry out the study in this organization. The researcher afterwards presented a letter of consent to the respondents, after which, questionnaires were distributed. The respondents were given time within which they should return the fully filled questionnaires. Dates were set for the interviews with the key informants. After the questionnaires had been filled, the researcher collected them, sorted them and coded them.

3.10 Data Analysis

3.10.1 Quantitative Data Analysis

Coded (quantitative) data was entered in a computer program known as a Statistical Package for Social Scientists (SPSS) for analysis (Sekaran, 2003). Descriptive statistics was used to determine the distribution of respondents on the questions under each of the variables. Inferential statistics were used to answer the research questions. Pearson's correlation coefficient and regression analysis were used to determine the extent to which internal procurement factors affects procurement efficiency. The findings of the study were presented in frequency tables.

3.10.2 Qualitative Data Analysis

This involved content analysis, which was used to edit qualitative data and reorganise it into meaningful shorter sentences. Qualitative data was categorized into themes and recurrent themes,

which emerged in relation to each guiding question from the interviews, were presented in form of quotation as illustrations.

3.11 Limitations

Sufficient literature on study variables was not easy to obtain. There were cases where there was outright refusal to avail information or demand for material compensation for data provided. The researcher overcame this by getting advice from the experienced supervisors on how and where to locate relevant literature. Of course some of the literature was bought.

The respondents shunned the interviews by citing the high and frequent number of times they have been interviewed and ‘with no benefits accruing’. Some of the staff cited the time ‘lost’ to interviews and discussions with researchers and thus loss of business. Persuasion was used to convince respondents to cooperate.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

4.0 Introduction

This chapter focuses on the presentation, analysis and interpretation of findings of the study. The study aimed at examining the internal factors that affect procurement efficiency in state enterprises using a case study of National Enterprise Corporation. This chapter covers the demographic data about the respondents, the internal procurement process factors that can drive procurement efficiency and compliance levels, the challenges that drive out efficiency amidst competition from private owned businesses and the management strategies that can be undertaken to enhance procurement efficiency.

4.1 Response rate

A total of 91 questionnaires were given out, but the researcher only obtained 89. This translated into a 97.8% response rate. The response rate was high because staff of NEC picked interest in the subject matter under investigation since there are a lot of inefficiency in the procurement function.

4.2 Demographic Characteristics

The study aimed at gathering information concerning the demographic characteristics of the respondents in order to link the findings with the study objective. For the purpose of this study,

the researcher focused on the; gender distribution of the respondents, age and the level of education. The results collected are shown in the following tables:-

Table 4.1: Gender of the respondents

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|-----------|---------|---------------|--------------------|
| Valid Male | 52 | 58.4 | 58.4 | 58.4 |
| Female | 37 | 41.6 | 41.6 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

The findings in table 4.1 shows that majority (58.4%) of the respondents who participated in the study were male, there were more male compared to their counter parts (female respondents) who were 41.6%. The implication of this finding is that the study was dominated by male respondents and thus reflected that the study had gender imbalances. Although this was a case, the ideas and opinions of the respondents were taken and thus considered very essential to accomplish this study.

After the analysis of the gender distribution of the study, the study sought to establish the age distribution of the respondents and the findings gathered are shown as follows:

Table 4.2: Age Distribution of the Respondents

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|-----------|---------|---------------|--------------------|
| Valid <20 | 7 | 7.9 | 7.9 | 7.9 |
| 21-30 | 22 | 24.7 | 24.7 | 32.6 |
| 31-40 | 33 | 37.1 | 37.1 | 69.7 |
| 41-50 | 9 | 10.1 | 10.1 | 79.8 |
| 50+ | 18 | 20.2 | 20.2 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

Table 4.2 above shows that 37.1% of the respondents were in the age group between 31-40 years, 24.7% were between 21-30 years, 20.2% were 50 years and above, 10.1% were between 41-50 years and the others (7.9%) were less than 20 years. The implication of this finding is that most of the employees of National Enterprise Corporation who participated in this study were mature people. A high percentage of those above 50 years is due to the fact that some of the employees of NEC are veterans who are well trained and still resourceful.

The study findings on education level gathered are presented as follows:

Table 4.3 Level of Education

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------------|-----------|---------|---------------|--------------------|
| Valid Masters | 7 | 7.9 | 7.9 | 7.9 |
| Bachelors | 50 | 56.2 | 56.2 | 64.0 |
| Diploma | 16 | 18.0 | 18.0 | 82.0 |
| Certificate | 16 | 18.0 | 18.0 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

The findings in table 4.3 above shows that, 56.2% of the respondents had bachelor's degree, 18.0% had certificates, 18.0% were diploma holders and thus 7.9% had masters degrees. The implications of this finding is that the respondents in the study were generally elites and thus were in position to express their ideas clearly on the internal factors that affect procurement efficiency since they actively participate in day-to-day company operations.

4.3 Internal procurement process factors that can drive procurement efficiency

The study aimed at identifying the internal procurement process factors that can drive procurement efficiency at the same time meeting compliance levels and the findings collected are presented in the descriptive statistics as shown in following tables: -

In finding out whether accountability enhances procurement efficiency in an organization, questions 1 and 2 of part B of the questionnaire were used as indices and the findings collected are shown as follow:

Table 4.4: Accountability creates opportunities for competitiveness and thus enhances procurement efficiency

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 1 | 1.1 | 1.1 | 1.1 |
| Disagree | 11 | 12.4 | 12.4 | 13.5 |
| Not sure | 6 | 6.7 | 6.7 | 20.2 |
| Agree | 59 | 66.3 | 66.3 | 86.5 |
| Strongly Agree | 12 | 13.5 | 13.5 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

The results in table 4.4 above shows that 79.8% (66.3% + 13.5%) of the respondents concurred that accountability creates opportunities for competitiveness and thus enhances procurement

efficiency. The implication of this finding is that accountability eliminates corruption, promotes transparency and openness in procurement transaction which leads to efficiency. On the other hand 13.5% (12.4% + 1.1%) of the respondents disagreed with the test statement and 4.5% were not sure whether accountability creates opportunities for competitiveness and thus enhances procurement efficiency. The implication of this finding is that respondents who disagreed and those who were not sure are the ones who do not participate in accountability of procurement directly.

In an interview held with one of line managers, said that;

Although we have a problem of bribery and corruption in public procurement, at NEC we always strive to promote accountability in every transaction we make and this is the reason why we are still strong in the business. We make people justify their actions by explaining how well they have accomplished their tasks. The staff must explain to the internal or external monitors, and punishment or sanctions for non-performance or corrupt behavior are given in order to improve our efficiency.

It should therefore be construed that to a greater extent accountability creates opportunities for competitiveness and thus enhances procurement efficiency.

The study found it useful to examine whether corruption and bribes in the government contracts is the leading cause of procurement inefficiency

Table 4.5: Corruption and bribes in the government contracts is the leading cause of procurement inefficiency

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly disagree | 0 | 0 | 0 | 0 |
| Disagree | 12 | 13.5 | 13.5 | 13.5 |
| Not sure | 5 | 5.6 | 5.6 | 19.1 |
| Agree | 55 | 61.8 | 61.8 | 80.9 |
| Strongly Agree | 17 | 19.1 | 19.1 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

The findings in table 4.5 above shows that 80.9% (61.8% + 19.1%) of the respondent concurred that corruption and bribes in the government contracts is the leading cause of procurement inefficiency. This means that by fighting corruption in government contracts, state owned enterprise can be able to register procurement efficiency. Nevertheless, 13.5% of the respondents discarded the view that corruption and bribes in the government contracts is the leading cause of procurement inefficiency. It was only 5.6% of the respondents who were not sure with the view.

The results from the interview held with one of the middle managers, it emerged that;

Corruption remains an impediment towards government contracts and a barrier towards procurement efficiency in government owned enterprises in Uganda. In Uganda corruption is exhibited in many forms including but not limited to abuse of office for private gain through bribery, financial leakages, conflict of interest, embezzlement, fraud, influence peddling, nepotism, theft of public funds or theft of public assets.

In short, to register procurement efficiency in government contracts, state enterprises must fight tendencies of corruption in the procurement process.

The study found it useful to ascertain whether strict adherence to procurement ethics, render procurement process efficient. The findings collected are shown in the next table:

Table 4.6: Strict adherence to procurement ethics renders the procurement process efficient

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 0 | | 0 | 0 |
| Disagree | 14 | 15.7 | 15.7 | 15.7 |
| Not sure | 3 | 3.4 | 3.4 | 19.1 |
| Agree | 43 | 48.3 | 48.3 | 67.4 |
| Strongly Agree | 29 | 32.6 | 32.6 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

The results in table 4.6 above indicate that 80.9% (48.3% + 32.6%) of the respondents were in agreement that strict adherence to procurement ethics renders the procurement process efficient. The implication of this finding is that compliance with procurement ethics is intended to enhance procurement efficiency. Many organizations must follow the procurement regulations and laws when procuring goods and services if they are to register efficiency. On contrary 15.7% of the respondents expressed a disagreement on test statement that strict adherence to procurement ethics renders the procurement process efficient. It was only 4.5% of the respondents who were not sure about the view. This implies that some of the respondents did not understand the question or had mixed views and ideas about the test statement. From the interview it was highlighted that;

NEC spends millions of shillings annually to procure goods and services that facilitate the Authority's operation. NEC's purchasing department seeks to procure the highest quality products and services at the lowest possible cost, in the most efficient manner. It

also seeks to ensure that NEC engages in best business practices and professional ethics with respect to procurement and vendor selections. Despite the considerable effort to identify opportunities for cost avoidance in procurement, standardization of goods and services in the procurement process, purchasing officers fail to comply with procurement regulations and laws which has adversely affected the procurement efficiency in NEC

From the foregoing therefore, it should be reasoned that strict adherence to procurement ethics moves hand in hand with procurement efficiency and thus the variables are inseparable.

The study also found it useful to identify whether procurement efficiency depends greatly on the skills and competence of staff acquired through training. The results collected are presented as follow:

Table 4.7: Procurement efficiency depends greatly on the skills and competence of staff acquired through training

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 0 | 0 | 0 | 0 |
| Disagree | 8 | 9.0 | 9.0 | 9.0 |
| Not sure | 6 | 6.7 | 6.7 | 15.7 |
| Agree | 53 | 59.6 | 59.6 | 75.3 |
| Strongly Agree | 22 | 24.7 | 24.7 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

The results of the study in table 4.7 suggest that 84.3% (59.6 % +24.7%) of the respondents agreed that procurement efficiency depends greatly on the skills and competence of staff acquired through training. The implication of this finding is that organizations should continue

to give professional training in purchasing a high priority over other issues because it plays a significant role in improving the effectiveness of purchasing function of an organization. Having skilled, competent and committed workforce in a procurement function impacts positively on the company's product cost, quality, delivery, flexibility and organizational performance. Although 9.0% disagreed and 6.7% of the responses provided by the same respondents were not sure which suggests that they possessed varied understanding as to whether procurement efficiency depends greatly on the skills and competence of staff acquired through training. One manager in an interview had this to say;

Professional training in procurement is intended to achieve lower supply chain total cost, increase profitability for all supply chain participants, increased product quality and near perfect on-time delivery at each point in the supply chain. However, most Purchasing departments in many organizations do not do enough to meet these goals due to lack of people with professional training.

It should be argued that procurement efficiency depends greatly on the skills and competence of staff acquired through training.

The study also found it important to examine whether manipulation of contract awards as a result of poor professionalism affects adversely the procurement efficiency. The findings gathered are presented in the next table as follows:

Table 4.8: Manipulation of contract awards as a results of poor professionalism affects adversely the procurement efficiency

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly disagree | 0 | 0 | 0 | 0 |
| Disagree | 12 | 13.5 | 13.5 | 13.5 |
| Not sure | 5 | 5.6 | 5.6 | 19.1 |
| Agree | 41 | 46.1 | 46.1 | 65.2 |
| Strongly Agree | 31 | 34.8 | 34.8 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

The results of the study in table 4.8 further indicated that 80.9% (46.1% + 34.8%) of the respondents were with a view that manipulation of contract awards as a result of poor professionalism affects adversely the procurement efficiency. However, even then the 13.5% of the respondents seemed to have disagreed with the view and 5.6% were not sure. This shows that respondents had varied responses regarding to whether manipulation of contract awards as a results of poor professionalism affects adversely the procurement efficiency. The findings from the interview held with one of the managers it emerged that;

Professionalism in procurement process is the bottom-up in many enterprises. Professionalism is governed by the actions from the top leadership on down. If bending the rules results in accolades because of increased short-term revenue or other perceived benefit, many in the business will rightly believe that professionalism don't matter, performance does that is, of course, until the story appears on the front page of the newspaper, which is when the organizational navel-gazing commences.

Basing on the above view it should be expected that manipulation of contract awards as a result of poor professionalism affects adversely the procurement efficiency.

After establishing whether manipulation of contract awards due to poor professionalism affects adversely the procurement efficiency, the study sought to establish whether there is a need to handle procurement process with high level of professionalism in order to reduce delays in procurement process. The findings gathered are presented as follows:

Table 4.9: There is a need to handle procurement process with high level of professionalism in order to reduce delays in procurement process

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 2 | 2.2 | 2.2 | 2.2 |
| Disagree | 6 | 6.7 | 6.7 | 9.0 |
| Not sure | 2 | 2.2 | 2.2 | 11.2 |
| Agree | 49 | 55.1 | 55.1 | 66.3 |
| Strongly Agree | 30 | 33.7 | 33.7 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

The findings of study in table 4.9 also indicate that 88.8% (55.1% +33.7%) of the respondents were in agreement that there is a need to handle procurement process with high level of professionalism in order to reduce delays in procurement process. It should be noted that delays in procurement process affect greatly smooth execution of task and thus requires people with high level of professionalism. However, 8.9% (2.2% + 6.7%) of the respondents disagreed and 2.2% were not sure. This reveals a significant variation in the opinions which could also relate to not clearly understanding the importance of professionalism in handling procurement tasks.

The study wanted to find out whether transparency problems like lack of fair competition in procurement process renders procurement process inefficient. The results gathered are presented in the next table;

Table 4.10: Transparency problems like lack of fair competition in procurement process renders procurement process inefficient

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | Strongly Disagree | 0 | 0 | 0 | 0 |
| | Disagree | 6 | 6.7 | 6.7 | 6.7 |
| | Not sure | 1 | 1.1 | 1.1 | 7.9 |
| | Agree | 41 | 46.1 | 46.1 | 53.9 |
| | Strongly Agree | 41 | 46.1 | 46.1 | 100.0 |
| | Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

Table 4.10 shows that majority of respondents 92.2% (46.1% + 46.1%) generally agree that transparency problems like lack of fair competition in procurement process renders procurement process inefficient. Even though there were variations in responses to this test as revealed by the percentage of respondents (6.7%) who disagreed with the view and 1.1% were not sure. The results from the interview indicated that;

Open and fair competition in trade and relations enables organisations to have reliable contacts and suppliers for better quality of goods and services, which helps the company in efficient production, and in turn, serve their customers better. With this kind of chain of reaction, NEC will continuously develop and improve its bidding process by ensuring that there is fair competition and that the process of tendering be transparent. When

there is no fair competition an organization can procure substandard goods and services and this hinders efficiency.

In short, it should be stated that transparency problems like lack of fair competition in procurement process renders procurement process inefficient.

The study further wanted to establish whether non adherence to procurement laws and regulations hinder greatly the procurement efficiency in government enterprises. The findings collected are shown as follow:

Table 4.11: Non adherence to procurement laws and regulations hinder greatly the procurement efficiency in government enterprises

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 0 | 0 | 0 | 0 |
| Disagree | 3 | 3.4 | 3.4 | 3.4 |
| Not sure | 5 | 5.6 | 5.6 | 9.0 |
| Agree | 66 | 74.2 | 74.2 | 83.1 |
| Strongly Agree | 15 | 16.9 | 16.9 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

The study indicated that majority of the respondents 91.1% (74.2% +16.9%) were in agreement that non adherence to procurement laws and regulations hinder greatly the procurement efficiency in government enterprises. However, 5.6% of the respondents were not sure which means they lack knowledge whether non adhere to procurement laws affect efficiency and 3.4% of the respondents disagreed with the statement. This suggests variations in responses by the various respondents. In an interview held with one of the departmental heads he said that,

Failure to attain procurement efficiency in organizations is centered on noncompliance with procurement laws, guidelines and procedures. Many managers think that compliance is wastage of time but those who neglect the importance of compliance are failing below the experience curve and thus cannot register efficiency in the procurement process. Managers should focus on compliance as the main route towards procurement efficiency.

From this foregoing it should be argued that there is a significant relationship between compliance and procurement efficiency.

It was also found out useful to test whether cost reduction and reliability depend generally on procurement compliance. The results obtained are presented and analyzed as follows:

Table 4.12: Cost reduction and reliability depend generally on procurement compliance

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 2 | 2.2 | 2.2 | 2.2 |
| Disagree | 9 | 10.1 | 10.1 | 12.4 |
| Not sure | 4 | 4.5 | 4.5 | 16.9 |
| Agree | 48 | 53.9 | 53.9 | 70.8 |
| Strongly Agree | 26 | 29.2 | 29.2 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

Table 4.12 shows that 83.1% (53.9% + 29.2%) of the respondents were in agreement that cost reduction and reliability depend generally on procurement compliance. This implies that compliance eliminates or minimizes wastage in the procurement process more especially the raw

material by purchasing good quality of materials or products needed by the organization. However, 12.3% (10.1% + 2.2%) of the respondents suggests varied responses as they disagreed with the statement regarding to whether cost reduction and reliability depend generally on procurement compliance. Further 4.5% of the respondents were not sure implying they did not either understand the question or were confused by the statement. The results from the interview indicated that;

When there are some compliance hindrances this affect adversely the procurement efficiency in an organization. Effective compliance will enable the organization to register more profits, less costs in the procurement process, effective product delivery in an acceptable and timely manner which are the ingredients of procurement efficiency.

From this assertion therefore, it should be believed that compliance and procurement efficiency move hand in hand and the two are inseparable

4.4 Challenges Driving Out Efficiency Amidst Competition From State Enterprise

The study focused on challenges driving out efficiency amidst competition from state enterprise and the findings generated are presented in the descriptive statistics as shown in following tables:

Table 4.13 Inflexible procurement regulations and guidelines are the root cause of inefficiency in public procurement

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 1 | 1.1 | 1.1 | 1.1 |
| Disagree | 19 | 21.3 | 21.3 | 22.5 |
| Not sure | 6 | 6.7 | 6.7 | 29.2 |
| Agree | 16 | 18.0 | 18.0 | 47.2 |
| Strongly Agree | 47 | 52.8 | 52.8 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

From the table 4.13 above, 70.8% (18% + 52.8%) of the respondents were in agreement that inflexible procurement regulations and guidelines are the root cause of inefficiency in public procurement. Nevertheless, 22.4% (21.3% + 1.1%) of the respondents disagreed and 6.7% were not sure about the view. This shows varied responses regarding whether inflexible procurement regulations and guidelines are the root cause of inefficiency in public procurement. This is in agreement with what the line managers that;

In trying to improve on the procurement efficiency, NEC usually incur unnecessary cost of about 30% which compromise its efficiency and if NEC is not careful it will end up in financial crisis. Inflexible regulation and guideline have led NEC to incur costs because of past experience, poor procurement planning, constant thinking, difficulties in creative

thinking, an attitude of why change something that seem satisfactory and an original thinking. That procurement efficiency can result from the business's unique network of relationships with suppliers, cost control and management and efficient procurement planning.

From the above view it should be reasoned that inflexible procurement regulations and guidelines are the root cause of inefficiency in public procurement.

Further the study sought to examine whether political interference can affect adversely procurement efficiency and the findings collected are presented as follows:

Table 4.14: Political interference can affect adversely procurement efficiency

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | Strongly Disagree | 1 | 1.1 | 1.1 | 1.1 |
| | Disagree | 6 | 6.7 | 6.7 | 7.9 |
| | Not sure | 5 | 5.6 | 5.6 | 13.5 |
| | Agree | 49 | 55.1 | 55.1 | 68.5 |
| | Strongly Agree | 28 | 31.5 | 31.5 | 100.0 |
| | Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

In table 4.14 above, 86.6% (55.1% + 31.5%) of the respondents provided their understanding in regard to whether political interference can affect adversely procurement efficiency. On the other hand, 7.8% (1.1% + 6.7%) disagreed and 5.6% were not sure. The results from the interview it was stated that public procurement is intrinsically a politically sensitive activity, this is because it involves significant amounts of public money. Politicians generally interfere with the process thereby causing inefficiencies in the procurement process.

The study aimed at establishing whether following PPDA regulations have led to underutilization of assets thereby compromising efficiency in procurement, the results gathered are shown in the next table:

Table 4.15: Following PPDA regulations have led to underutilization of assets thereby compromising efficiency in procurement

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 5 | 5.6 | 5.6 | 5.6 |
| Disagree | 8 | 9.0 | 9.0 | 14.6 |
| Not sure | 4 | 4.5 | 4.5 | 19.1 |
| Agree | 54 | 60.7 | 60.7 | 79.8 |
| Strongly Agree | 18 | 20.2 | 20.2 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

The results as reflected in table 4.15, 80.9% (60.7% + 20.2%) of the respondents agree with the statement, and 6.5% were not sure. However, 14.6% (5.6% + 9.0%) of the respondents disagreed with the statement. Consequently, this further reveals that the respondents had varied opinion about whether following PPDA regulations have led to underutilization of assets thereby compromising efficiency in procurement. It was further noted that the regulations causes delays in contract delivery since the company has to invite suppliers of construction materials which attract high prices since they also have to make profits which in turn makes procurement process costly. It was also noted that the process of preparing and inviting bidders, evaluate bids and award contracts requires a lot of time that does not enable NEC to execute such contracts in the required time schedule thus rendering the company inefficient in its procurement process.

The importance of efficiency was further tested with the statement which necessitated respondents view on whether the social externalities generally have negative effects on procurement efficiency. The responses gathered are presented as follow:

Table 4.16 Social externalities generally have negative effects on procurement efficiency

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|---------|---------------|--------------------|
| Valid Disagree | 18 | 20.2 | 20.2 | 20.2 |
| Not sure | 6 | 6.7 | 6.7 | 27.0 |
| Agree | 43 | 48.3 | 48.3 | 75.3 |
| Strongly Agree | 22 | 24.7 | 24.7 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

The analysis of results in table 4.16 reveal that 73% (48.3% + 24.7%) of the respondents were in agreement that social externalities generally have negative effects on procurement efficiency. However, 20.2% opposed the view. This reveals a significant variation in the opinions which could also relate to not clearly understanding whether social externalities generally have negative effects on procurement efficiency. In an interview with one manager it was revealed that the presence of social externalities have placed a great deal of pressure on public procurement practitioners. This type of pressure can be seen frequently in 2012 NEC appraisal committee approved a controversial plan to build a new Armory in the country's oldest national park, a habitat for many rare and endangered plant and animal species. This hindered the efficiency of procurement efficiency since there were social externalities

From the above view therefore, it should be noted that social externalities generally have negative effects on procurement efficiency.

The study sought to establish whether ICT adoption in state enterprises is still a major stumbling block towards realizing procurement efficiency. The findings obtained are shown as follows:

Table 4.17 ICT adoption in state enterprises is still a major stumbling block towards realizing procurement efficiency

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|---------|---------------|--------------------|
| Valid Disagree | 7 | 7.9 | 7.9 | 7.9 |
| Not sure | 2 | 2.2 | 2.2 | 10.1 |
| Agree | 48 | 53.9 | 53.9 | 64.0 |
| Strongly Agree | 32 | 36.0 | 36.0 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

From the results of the survey as reflected by table 4.17, 89.9% (53.9% + 36.0%) of the respondents agreed that ICT adoption in state enterprises is still a major stumbling block towards realizing procurement efficiency. The implication of this finding is that technological barriers represent obstacles to the adoption of e-procurement due to lack of high-speed connections and software incompatibility. This can have a profound effect on ability to search various business and contracting opportunities as well as download, in a timely manner, all available information about a potential procurement. Both cost and availability have a direct impact on a small firm's choice of access mode. However, 7.9% of the respondents opposed the view and 2.2% were not sure indicating variation in the responses generated by the respondents. From the foregoing

therefore, it should be logical to state that ICT adoption in state enterprises is still a major stumbling block towards realizing procurement efficiency.

In identifying whether economic factors like competition in the market place is still a big challenge in public procurement, the results collected are shown as follows:

Table 4.18 Economic factors like competition in the market place is still a big challenge in public procurement

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 0 | 0 | 0 | 0 |
| Disagree | 1 | 1.1 | 1.1 | 1.1 |
| Not sure | 2 | 2.2 | 2.2 | 3.4 |
| Agree | 55 | 61.8 | 61.8 | 65.2 |
| Strongly Agree | 31 | 34.8 | 34.8 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

Results of the survey as reflected in table 4.18 shows that 96.6% (61.8% + 34.8%) of the respondents concurred that economic factors like competition in the market place is still a big challenge in public procurement. Although 2.2% of the respondents seem not to agree with the statement and that 1.1% were not sure, the results from the interview held with one top managers had this to say;

We are not free to compete favorably with the private sector organizations. In many cases we follow the PPDA Act in all our operations which is not the case with private firms. There are numerous steps and stringent approval layers must pass through in the bidding process which causes delays and thus the ground is not leveled.

From the foregoing therefore, it should be maintained that economic factors like competition in the market place is still a big challenge in public procurement

In verifying whether lack of transparency in the procurement process is caused by violation of procurement rules and regulations and this cripples procurement efficiency, the finding generated as herein presented as follow:

Table 4.19: Lack of transparency in the procurement process is caused by violation of procurement rules and regulations and this cripples procurement efficiency

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | Strongly Disagree | 0 | 0 | 0 | 0 |
| | Disagree | 16 | 18.0 | 18.0 | 18.0 |
| | Not sure | 4 | 4.5 | 4.5 | 22.5 |
| | Agree | 38 | 42.7 | 42.7 | 65.2 |
| | Strongly Agree | 31 | 34.8 | 34.8 | 100.0 |
| | Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

Results of the study in table 4.19 indicate that 77.5% (42.7% +34.8%) of the respondents agreed with the statement that lack of transparency in the procurement process is caused by violation of procurement rules and regulations and this cripples procurement efficiency. The implication of this finding is that integrity and honesty are central in procurement efficiency and therefore, failure to observe this is the reason for violation of procurement rules and regulations and this cripples procurement efficiency. On the other hand 18% of the respondents disagreed with the statement and 4.5% were not sure implying that some respondents did not understand the test statement.

Further the study wanted to ascertain whether there is a lot of ignorance about how public procurement operates and the results collected are shown as follow:

Table 4.20: There are lot of ignorance about how public procurement operates

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 5 | 5.6 | 5.6 | 5.6 |
| Disagree | 8 | 9.0 | 9.0 | 14.6 |
| Not sure | 11 | 12.4 | 12.4 | 27.0 |
| Agree | 33 | 37.1 | 37.1 | 64.0 |
| Strongly Agree | 32 | 36.0 | 36.0 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

The results in table 4.20 above reveal that 73.1% (37.1% +36.0%) of the respondents agreed that there is a lot of ignorance about how public procurement operates. This implies that there is misunderstandings and even gross ignorance within the executive structures of governments as to what procurement actually entails. There is often little understanding of what skills are required and what risks are implied as well as what opportunities may be available. Failure of awareness and expertise at this level commonly represents a real risk to good governance, even creating the anomaly whereby public procurement may sometimes be characterized as transparent while not accountable. However 14.6% (5.6% + 9.0%) of the respondents disagreed and 12.4% were not sure showing varied responses as far as capturing ignorance of how public procurement operates is concerned. It should be argued that to a great extent there is a lot of ignorance about how public procurement operates.

The study wanted to ascertain whether lack of procurement information about procurement procedure, its input, output, and resource consumption is still a big challenge. The findings collected are shown as follow:

Table 4.21: Lack of procurement information about procurement procedure, its input, output, and resource consumption is still a big challenge

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 8 | 9.0 | 9.0 | 9.0 |
| Disagree | 26 | 29.2 | 29.2 | 38.2 |
| Not sure | 4 | 4.5 | 4.5 | 42.7 |
| Agree | 25 | 28.1 | 28.1 | 70.8 |
| Strongly Agree | 26 | 29.2 | 29.2 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

Table 4.21 reveals that 57.3% (28.1% + 29.2%) of the respondents seem to agree that lack of procurement information about procurement procedure, its input, output, and resource consumption is still a big challenge. The implication of this finding is that there improper disclosure of procurement information and this has impaired smooth execution of procurement tasks in government procurement. Nevertheless, 38.2% (29.2 +9.0%) of the respondents disagreed with the view and 4.5% were not sure indicating varied responses from respondents as far as procurement information and procedure are concerned. From the foregoing therefore it should be reasoned that the management in contracting authorities should ensure that there is an appropriate dissemination of information of procurement information and can lead to compliance with all relevant guidelines.

The study also wanted to confirm whether there are always rapid changes in public procurement requirements. The findings collected are presented as follows:

Table 4.22: There are always rapid changes in public procurement requirements

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 1 | 1.1 | 1.1 | 1.1 |
| Disagree | 6 | 6.7 | 6.7 | 7.9 |
| Not sure | 7 | 7.9 | 7.9 | 15.7 |
| Agree | 55 | 61.8 | 61.8 | 77.5 |
| Strongly Agree | 20 | 22.5 | 22.5 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

To results of the survey as reflected in table 4.22 shows that 84.3% (61.8% +22.5%) of the respondents were in agreement as to whether there are always rapid changes in public procurement requirements. Conversely, 7.8% (6.7% + 1.1%) of the respondents disagreed and 7.9% were not sure indicating that respondents lacked knowledge as to whether there are always rapid changes in public procurement requirements. From the above view it should be comprehensible to note that the changes are impacting pressure on how the procurement function performs its internal and external processes and procedures in order to achieve its objectives.

Further the study wanted to verify whether there is high level of discrimination among suppliers, professionals and business ethics and the results generated are shown as follow:

Table 4.23: There is high level of discrimination among suppliers, professionals and business ethics

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 0 | 0 | 0 | 0 |
| Disagree | 11 | 12.4 | 12.4 | 12.4 |
| Not sure | 7 | 7.9 | 7.9 | 20.2 |
| Agree | 54 | 60.7 | 60.7 | 80.9 |
| Strongly Agree | 17 | 19.1 | 19.1 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

The findings in table 4.23 shows that 79.8% (60.7% +19.1%) of the respondents were with a view that there is high level of discrimination among suppliers, professionals and business ethics. It was further discovered that all classified security sensitive government contracts with ministry of defence are made by NEC and there are not given to private sector companies there by discriminating suppliers and professional. Most of the work is done by UPDF staff and private people are not allowed to submit their bid documents. However, 12.4 of the respondents disagreed with the statement and 7.9% were not sure thereby giving varied responses as far as discrimination among suppliers, professionals and violation of business ethics are concerned. From the foregoing therefore, it should be noted that there is high level of discrimination among suppliers, professionals and business ethics.

4.5 Strategies That Management Can Undertake For Procurement Process

Improvement

The study aimed at identifying strategies that can be employed to improve procurement process in NEC and the findings generated are presented in the descriptive statistics as shown in following tables: -

Table 4.24: Improvement in accountability in government procurement has a direct bearing on procurement efficiency

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 5 | 5.6 | 5.6 | 5.6 |
| Disagree | 15 | 16.9 | 16.9 | 22.5 |
| Not sure | 3 | 3.4 | 3.4 | 25.8 |
| Agree | 45 | 50.6 | 50.6 | 76.4 |
| Strongly Agree | 21 | 23.6 | 23.6 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

The results in table 4.24 revealed that 74.2% (50.6% + 23.6%) of the respondents agreed that improvement in accountability in government procurement has a direct bearing on procurement efficiency. This means that basic principles of good procurement practice include accountability, where effective mechanisms must be in place in order to enable procuring entities spend the limited resources carefully, knowing clearly that they are accountable to members of the public; competitive supply, which requires the procurement be carried out by competition unless there are convincing reasons for single sourcing; and consistency, which emphasizes the equal treatment of all bidders irrespective of race, nationality or political affiliation. Nevertheless,

22.5% (5.6% + 16.9%) of the respondents had disagreeing responses to the test statement and 3.4% were not sure about the view. It should therefore, be noted that there is no way procurement efficiency can be registered unless there is effective accountability in the whole procurement process.

In ascertaining whether people performing procurement tasks must comply with organization procurement regulations and government procurement regulations in order to enhance efficiency in the procurement, the results collected are hereinafter presented as follow:

Table 4.25: People performing procurement tasks must comply with organization procurement regulations in order to enhance efficiency in the procurement

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 1 | 1.1 | 1.1 | 1.1 |
| Disagree | 7 | 7.9 | 7.9 | 9.0 |
| Not sure | 8 | 9.0 | 9.0 | 18.0 |
| Agree | 42 | 47.2 | 47.2 | 65.2 |
| Strongly Agree | 31 | 34.8 | 34.8 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

The results in table 4.25 suggest that 82% (47.2% +34.8%) of the respondents agreed with the test statement that people performing procurement tasks must comply with organization procurement regulations and government procurement regulations in order to enhance efficiency in the procurement. This implies that that there is a link between compliance and procurement efficiency in an organization. When there are some compliance hindrances this affect adversely the procurement efficiency in an organisation. However, in as much as respondents agreed with

the test statement, there were few variations in responses as reflected by the respondent who disagreed 9.0% (7.9% +1.1%) and those who were not sure (9.0%) over the same test from the respondents' point of view. The results from an interview held with one manager it had this to say,

How can we register efficiency in the procurement process without strict adherence to procurement rules and regulations? Obviously it is impossible. The path towards efficiency is strict adherence to procurement regulation because by observing such one means transparency, honesty, openness and effective accountability.

From the above view it should be logical to state that there is a link between compliance and procurement efficiency in an organization.

The study also found it necessary to identify whether there is a need to lessen stringent procurement regulations and guideline if procurement efficient is to be registered in NEC, the findings obtained are shown in the next table:

Table 4.26: There is a need to lessen stringent procurement regulations and guideline if procurement efficient is to be registered in NEC

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 1 | 1.1 | 1.1 | 1.1 |
| Disagree | 6 | 6.7 | 6.7 | 7.9 |
| Not sure | 4 | 4.5 | 4.5 | 12.4 |
| Agree | 55 | 61.8 | 61.8 | 74.2 |
| Strongly Agree | 23 | 25.8 | 25.8 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

From the survey, as reflected in table 4.26, it can be deduced that respondents agree 87.6% (61.8% +25.8%) that there is a need to lessen stringent procurement regulations and guideline if procurement efficient is to be registered in NEC, conversely some respondents 7.8%(1.1% +6.7%) disagreed and others (4.5%) were not sure thereby giving varied responses from the respondents who participated in the study. One manager in an interview said that,

The procurement activities of NEC have greatly suffered from inflexible and bureaucratic systems of procurement which leads to unacceptable contract delays, increased procurement costs, the potential for manipulation of contract awards and lack of fair competition, all of which create the perception in the population at large, that public expenditure is slow, ineffective, expensive and often corrupt.

It should therefore be argued that there is a need to lessen stringent procurement regulations and guideline if procurement efficient is to be registered in NEC.

In examining whether strict adherence to PPDA regulation promotes transparency in organisation's procurement process and thus promotes efficiency in the procurement process, the results generated are presented as follow:

Table 4.27: Strict adherence to PPDA regulation promotes transparency in organisation's procurement process and thus promotes efficiency in the procurement process

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 0 | 0 | 0 | 0 |
| Disagree | 6 | 6.7 | 6.7 | 6.7 |
| Not sure | 2 | 2.2 | 2.2 | 9.0 |
| Agree | 45 | 50.6 | 50.6 | 59.6 |
| Strongly Agree | 36 | 40.4 | 40.4 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

From the results of the survey as reflected in table 4.27 above, 91.0% (50.6% +40.4%) of the respondents agreed that strict adherence to PPDA regulation promotes transparency in organisation’s procurement process and thus promotes efficiency in the procurement process. It worth noting that in as much as the respondent agreed with the test statement, they were some few respondent (6.7%) who disagreed with the statement and others (2.2%) were not sure implying that there were small variations in the statement. One manager during the interview had this to say,

That central to the whole procurement efficiency is the compliance with the approved standards and guidelines of procurement. If at any point managers fail to follow what is stated in the procurement manual, this can prove fatal to the organization and thus compliance enhances procurement efficient.

In short, it should be reasoned that strict adherence to PPDA regulation promotes transparency in organisation’s procurement process and thus promotes efficiency in the procurement process

The study sought to find out whether people who exhibit ethical behaviours generally observe procurement regulations and laws and this enhances procurement efficiency. The results collected are presented as follows:

Table 4.28: People who exhibit ethical behaviours generally observe procurement regulations and laws and this enhances procurement efficiency

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 2 | 2.2 | 2.2 | 2.2 |
| Disagree | 3 | 3.4 | 3.4 | 5.6 |
| Not sure | 5 | 5.6 | 5.6 | 11.2 |
| Agree | 58 | 65.2 | 65.2 | 76.4 |
| Strongly Agree | 21 | 23.6 | 23.6 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

From table 4.28 above, 88.8% (65.2% +23.6%) of the respondents agreed with the statement that people who exhibit ethical behaviours generally observe procurement regulations and laws and this enhances procurement efficiency. This could also infer that public officials should always behave ethically and fairly, including in their business undertakings as one way of enhancing procurement efficiency. However, 5.6% (2.2% +3.4%) disagreed and 5.6% were not sure giving small varied responses. The results from the interview indicated that, ethical behavior is important in measuring procurement efficiency as it involves the expenditure of public money, and is subject to public scrutiny. Ethical behavior supports openness and accountability in a procurement process and gives suppliers confidence to participate in the Government marketplace. It should be noted that ethical behavior can also reduce the cost of managing risks associated with fraud, theft, corruption, and other improper behavior; and enhance confidence in public administration which is the central part in stimulating procurement efficiency. From the foregoing therefore, it should be stated that people who exhibit ethical behaviours generally observe procurement regulations and laws and this enhances procurement efficiency.

The study also wanted to confirm there is a need to develop collaborative buyer-seller relationship. The findings collected are presented as follows:

Table 4.29: There is a need to develop collaborative buyer-seller relationship

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 7 | 7.9 | 7.9 | 7.9 |
| Disagree | 17 | 19.1 | 19.1 | 27.0 |
| Not Sure | 0.0 | 0.0 | 0.0 | 27.0 |
| Agree | 42 | 47.2 | 47.2 | 74.2 |
| Strongly Agree | 23 | 25.8 | 25.8 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

The results of the survey as reflected in table 4.29 shows that 73% (47.2% +25.8%) of the respondents were in agreement that there is a need to develop collaborative buyer-seller relationships. Conversely, 27% (7.9% + 19.1%) of the respondents disagreed implying that collaborative buyer-seller relationship has no link with efficiency and compliance. From the above view it should be comprehensible to note that in collaborative buyer-sellers relationship, there is usually quick response, efficient customer response and continuous replenishment planning. This happens as a result of the buyer sharing vital information on sales data with the supplier which enhances accurate forecasts in terms of demand and supply thus stimulating efficient service delivery to customers and its competitiveness in the market place.

Further the study wanted to verify whether there is no way efficiency in procurement can be registered without strict adherence to procurement regulations and guidelines of PPDA and the results generated are shown as follow:

Table 4.30 There is no way efficiency in procurement can be registered without strict adherence to procurement regulations and guidelines of PPDA

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 1 | 1.1 | 1.1 | 1.1 |
| Disagree | 9 | 10.1 | 10.1 | 11.2 |
| Not sure | 3 | 3.4 | 3.4 | 14.6 |
| Agree | 47 | 52.8 | 52.8 | 67.4 |
| Strongly Agree | 29 | 32.6 | 32.6 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

The findings in table 4.30 shows that 85.4% (52.8% +32.6%) of the respondents were with a view that there is no way efficiency in procurement can be registered without strict adherence to procurement regulations and guidelines of PPDA. The implication of this finding is that following closely the laid down procedure, rules and regulations play a great role towards efficiency. However, 11.2% (1.1% + 10.1%) of the respondents disagreed with the statement and 3.4% were not sure thereby giving small varied responses as far as strict adherence to procurement regulations and guidelines of PPDA and efficiency are concerned. From the foregoing therefore, it should be noted that when procurement function comply with what is stated in procurement guideline the organization can mitigate greatly procurement delays, wastes and can be in position to eliminate backlogs in the execution of tasks since goods and services are always there when they want them.

The study also found it useful to examine whether the procurement process should uphold the element of integrity and the results generated are shown as follow:

Table 4.31: The procurement process should uphold the element of integrity

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly Disagree | 0 | 0 | 0 | 0 |
| Disagree | 4 | 4.5 | 4.5 | 4.5 |
| Not sure | 4 | 4.5 | 4.5 | 9.0 |
| Agree | 62 | 69.7 | 69.7 | 78.7 |
| Strongly Agree | 19 | 21.3 | 21.3 | 100.0 |
| Total | 89 | 100.0 | 100.0 | |

Source: Field data, 2013

The results in table 4.31 revealed that 91.0% (69.7% + 21.3%) of the respondents agreed that the procurement process should uphold the element of integrity. This means that in every procurement activity there should be trust and honest and ensure that the whole process ends perfectly. Nevertheless, 4.5% of the respondents had disagreeing responses to the test statement and 4.5% were not sure about the view.

4.6 The Extent to Which Internal Procurement Factors Affect Procurement Efficiency

Correlation coefficient and regression analysis were used to determine the extent to which internal procurement factors affect procurement efficiency in NEC and the findings are presented in the following tables as shown below.

Table 4.32: Correlation between internal procurement factors and procurement efficiency

| | Procurement efficiency | | | |
|------------------------------|-----------------------------|--|-------------------------------------|---------------------------|
| | Correlation coefficient (r) | Coefficient of determination (r ²) | Significance of the correlation (p) | Number of respondents (n) |
| Internal procurement factors | .869 | .755 | .000 | 89 |

Source: Field data, 2013

The quantity r , called the linear correlation coefficient, measures the strength and the direction of a linear relationship between two variables (internal procurement factors and procurement efficiency). Results in table 4.32 above show that there is a strong positive relationship between internal procurement factors and procurement efficiency ($r = .869$). The interpretation is that as values for internal factors increase there is also a great increment in procurement inefficiency.

The coefficient of determination, r^2 , was found out to be .755. ($0 < r^2 < 1$) this is useful because it gives the proportion of the variance (fluctuation) of internal factors that are predictable from procurement efficiency.

The coefficient of determination is the ratio of the explained variation to the total variation. Results in table 4.32 indicate that $r = 0.869$, and then $r^2 = 0.755$, which means that 75.5% of the total variation in internal procurement factors of the organization can be explained by the linear relationship between internal procurement factors and procurement efficiency and other 24.5% of the total variation in procurement efficiency remains unexplained.

It should be noted that improving internal procurement factors can stimulate procurement efficiency with evidence from above which indicates that internal procurement factors affect procurement efficiency by 75.5% and 24.5% is due to other factors outside this study.

However, it was important to establish the regression of internal procurement factors and procurement efficiency. The results collected are shown as follows;

Table 4.33: Regression of internal procurement factors and procurement efficiency

| Dependent variable: procurement efficiency | | |
|--|-------------|------|
| R | .818 | |
| r^2 | .669 | |
| Adjusted r^2 | .651 | |
| ANOVA | | |
| Fisher's Ratio (F) | Sig. (p) | |
| 18.3 | .000 | |
| | Coefficient | |
| | T | Sig. |
| internal procurement factors | 3.310 | .014 |

Source: Field data, 2013

Table 4.33 shows a moderate linear relationship between internal procurement factors and procurement efficiency ($r = .818$). In order to determine the extent to which internal procurement factors affect procurement efficiency, the regression coefficient was squared ($r^2 = .669$) and then adjusted (Adjusted $r^2 = .651$) and expressed as a percentage. Thus, it is shown that internal procurement factors affect procurement efficiency by 65.1%. These findings were subjected to an ANOVA test and found significant ($F = 18.3, p < .000$).

From the foregoing therefore it should be inferred that internal procurement factors that is; accountability, procurement ethics, training professionalism, transparency and ICT adoption affect procurement efficiency by 65.1% and the remainder (34.9%) is due to other factors.

CHAPTER FIVE
DISSCUSION, SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND
SUGGESTIONS

5.1 Introduction

This chapter presents the discussion of findings, summary of findings, conclusions, recommendations and suggestions. It is divided into five sections. The first section presents the discussion of findings; the second section covers the summary of findings according to the objectives. The third section presents conclusions and fourth section presents recommendations and the fifth section presents suggestion for further research.

5.2 Discussion of Findings

5.2.1 Internal Procurement Factors That Drive Procurement Efficiency

This section is in relation to the first research objective that looked at internal procurement factors where a number of questions were raised to the respondents ranging from 1 to 10.

The results in table 4.4, shows that 79.8% (66.3% + 13.5%) of the respondents concurred that accountability creates opportunities for competitiveness and thus enhances procurement efficiency. The implication of this finding is that accountability eliminates corruption, promotes transparency and openness in procurement transaction which leads to efficiency. This is line with Segal and Summers (2002) that accountability is government's obligation to demonstrate effectiveness in carrying out goals and producing the types of services that the public wants and needs. That lack of accountability creates opportunities for corruption which adversely affects procurement efficiency. From the foregoing therefore, the only way to register efficiency is to

promoted accountability through information systems which measure how inputs are used to produce outputs; watchdog organizations, Contracts Committees to demand explanation of results; performance incentives to reward good performance; and sanctions for poor performance.

The findings in table 4.5 shows that 80.9% (61.8% + 19.1%) of the respondent concurred that corruption and bribes in government contracts is the leading cause of procurement inefficiency. This means that by fighting corruption in government contracts, state owned enterprise can be able to register procurement efficiency. It was also noted that corruption remains an impediment towards government contracts and a barrier towards procurement efficiency in government owned enterprises in Uganda. This is in line with Oliver (2004), that public procurement has, for long, been overshadowed with inefficiency, corruption and disregard of fundamental "value for money" considerations. In short, to register procurement efficiency in government contracts, state owned enterprises must fight tendencies of corruption in the procurement process.

The results in table 4.6 indicate that 80.9% (48.3% + 32.6%) of the respondents were in agreement that strict adherence to procurement ethics renders the procurement process efficient. The implication of this finding is that compliance with procurement ethics is intended to enhance procurement efficiency. Many organizations must follow the procurement regulations and laws when procuring goods and services if they are to register efficiency. This is in agreement with Weele (2002) ethics are the moral principles or values that guide officials in all aspects of their work. Ethical behaviour encompasses the concepts of honesty, integrity, probity, diligence, fairness, trust, respect and consistency. Ethical behavior includes avoiding conflicts of interest,

and not making improper use of an individual's position. Ethical behavior is important in measuring procurement efficiency as it involves the expenditure of public money, and is subject to public scrutiny. From the foregoing therefore, it should be reasoned that strict adherence to procurement ethics moves hand in hand with procurement efficiency and thus the variables are inseparable.

The results of the study in table 4.7 suggest that 84.3% (59.6 % +24.7%) of the respondents agreed that procurement efficiency depends greatly on the skills and competence of staff acquired through training. The implication of this finding is that organizations should continue to give professional training in purchasing a high priority over other issues because it plays a significant role in improving the effectiveness of purchasing function of an organization. Having skilled, competent and committed workforce in a procurement function impacts positively on the company's product cost, quality, delivery, flexibility and organizational performance. This view was supported by Aaronson (2004), that the effectiveness of the purchasing function depends on people capabilities. Without the right skill sets and competencies, purchasing departments will be unable to participate in the key activities of the organization and satisfy the needs of users. It should be argued that procurement efficiency depends greatly on the skills and competence of staff acquired through training.

The findings of study in table 4.8 indicated that 80.9% (46.1% + 34.8%) of the respondents were with a view that manipulation of contract awards as a result of poor professionalism affects adversely the procurement efficiency. Further table 4.9 indicates that 88.8% (55.1% +33.7%) of the respondents were in agreement that there is a need to handle procurement process with high

level of professionalism in order to reduce delays in procurement process. This is in agreement with Guthrine (2005) that the quality of the employees has a great impact on efficiency. Handling procurement activities with care and high level professionalism leads to efficiency and compliance. It should be noted that delays in procurement process affect greatly smooth execution of task and thus requires people with high level of professionalism.

Table 4.10 shows that majority of respondents 92.2% (46.1% + 46.1%) generally agree that transparency problems like lack of fair competition in procurement process renders procurement process inefficient. It was also noted that open and fair competition in trade and relations enables organisations to have reliable contacts and suppliers for better quality of goods and services, which helps the company in efficient production, and in turn, serve their customers better. With this kind of chain of reaction, NEC will continuously develop and improve its bidding process by ensuring that there is fair competition and that the process of tendering be transparent. When there is no fair competition an organization can procure substandard goods and services and this hinders efficiency. This view was opposed by Morgan, (2011) lack of competition leads to efficiency. Large firms are more willing to make a small profit margin or even to take business losses by offering best bids. After small and weak firms are out of business, they will enjoy an imperfect competitive market. In short, although the author discarded the assertion, he did not reflect how lack of competition leads to efficiency. It should therefore be stated that transparency problems like lack of fair competition in procurement process renders procurement process inefficient.

Table 4.11 shows that 91.1% (74.2% +16.9%) of the respondents were in agreement that non adherence to procurement laws and regulations hinder greatly the procurement efficiency in

government enterprises. Ferguson and James (2005) concurred that failure to attain procurement efficiency in organizations is centered on noncompliance with procurement guidelines and procedures. Many managers think that compliance is wastage of time but those who neglect the importance of compliance are failing below the experience curve and thus cannot register efficiency in the procurement process. From this foregoing, it should be argued that there is a significant relationship between compliance and procurement efficiency.

Table 4.12 shows that 83.1% (53.9% + 29.2%) of the respondents were in agreement that cost reduction and reliability depend generally on procurement compliance. This implies that compliance eliminates or minimizes wastage in the procurement process more especially the raw material by purchasing good quality of materials or products needed by the organization. This is in agreement with Thai (2001), that the basic principles of good procurement practice is to ensure effective compliance with rules and regulations because this generally enables the organization to register more profits, less costs in the procurement process, effective product delivery in an acceptable and timely manner which are the ingredients of procurement efficiency. From this assertion therefore, it should be believed that compliance and procurement efficiency move hand in hand.

5.2.2 Challenges Driving Out Efficiency Amidst Competition From State Enterprise

The study focused on challenges driving out efficiency amidst competition from state enterprise and the findings shows

Table 4.13, shows that 70.8% (18% + 52.8%) of the respondents were in agreement that inflexible procurement regulations and guidelines are the root cause of inefficiency in public

procurement. This suggests varied responses regarding whether inflexible procurement regulations and guidelines are the root cause of inefficiency in public procurement. This is in agreement with NEC Works (2013) that following the regulations leads to delay in contract delivery. According to PPDA regulations the process of preparing and inviting bidders, evaluate bids and award contracts requires a lot of time that does not enable NEC to compete favourably. It was noted that NEC Works usually incur unnecessary cost of about 30% which compromise its efficiency and if NEC Works is not careful it will end up in financial crisis. Inflexible regulations and guidelines have led NEC Works to incur costs because they still have that original thinking and are not dynamic to follow the new innovations that bring about procurement efficiency. Tendencies like basing on past experience, poor procurement planning, constant thinking, difficulties in creative thinking, an attitude of why change something that seem satisfactory and an original thinking have created inflexibility in the organisation. That procurement efficiency can result from the business's unique network of relationships with suppliers, cost control and management and efficient procurement planning. From the above view it should be reasoned that inflexible procurement regulations and guidelines are the root cause of inefficiency in public procurement.

Table 4.14 shows, 86.6% (55.1% + 31.5%) of the respondents provided their understanding in regard to whether political interference can affect adversely procurement efficiency. It was further stated that public procurement is intrinsically a politically sensitive activity; this is because it involves significant amounts of public money. Politicians generally interfere with the process thereby causing inefficiencies in the procurement process. This is in agreement with Keaf, (2003), that political factors have generally created adverse effects of procurement

efficiency which has created a bad picture to perceive public procurement as an area of waste and corruption. In short, political interference can affect adversely procurement efficiency.

The results in table 4.15, shows that 80.9% (60.7% + 20.2%) of the respondents agreed with the statement, that following PPDA regulations have led to underutilization of assets thereby compromising efficiency in procurement. It was further noted that the regulations causes delays in contract delivery since the company has to invite suppliers of construction materials which attract high prices since they also have to make profits which in turn makes procurement process costly. This is in agreement with NEC Works (2013), that the process of preparing and inviting bidders, evaluate bids and award contracts requires a lot of time that does not enable NEC Works to execute such contracts in the required time schedule thus rendering the company inefficient in its procurement process.

Table 4.16 reveals that 73% (48.3% + 24.7%) of the respondents were in agreement that social externalities generally have negative effects on procurement efficiency. It was noted that the presence of social externalities have placed a great deal of pressure on public procurement practitioners. This type of pressure can be seen frequently in 2012 NEC Works appraisal committee approved a controversial plan to build a new Armory in the country's oldest national park, a habitat for many rare and endangered plant and animal species. This hindered the efficiency of procurement efficiency since there were social externalities (NEC Works, 2013). From the above view therefore, it should be note that social externalities generally have negative effects on procurement efficiency.

Table 4.17 indicates that 89.9% (53.9% + 36.0%) of the respondents agreed that ICT adoption in state enterprises is still a major stumbling block towards realizing procurement efficiency. The implication of this finding is that technological barriers represent obstacles to the adoption of e-procurement due to lack of high-speed connections and software incompatibility. Hagén, and Zeed (2005) adds that this can have a profound effect on ability to search various business and contracting opportunities as well as download, in a timely manner, all available information about a potential procurement. Both cost and availability have a direct impact on a small firm's choice of access mode. From the foregoing therefore, it should be logical to state that ICT adoption in state enterprises is still a major stumbling block towards realizing procurement efficiency.

Results in table 4.18 shows that 96.6% (61.8% + 34.8%) of the respondents concurred that economic factors like competition in the market place is still a big challenge in public procurement. This is in line with Arrowsmith, (2003) public procurement is challenged by competition from private sector. In many cases public enterprises have to follow the PPDA Act in all their operations which is not the case with private firms. From the foregoing therefore, it should be maintained that economic factors like competition in the market place is still a big challenge in public procurement

Results of the study in table 4.19 indicate that 77.5% (42.7% +34.8%) of the respondents agreed with the statement that lack of transparency in the procurement process is caused by violation of procurement rules and regulations and this cripples procurement efficiency. This is what Campbell (2002), says that integrity and honesty are central in procurement efficiency and

therefore, failure to observe this is the reason for violation of procurement rules and regulations and this cripples procurement efficiency.

The results in table 4.20 reveal that 73.1% (37.1% +36.0%) of the respondents agreed that there is a lot of ignorance about how public procurement operates. This implies that there is misunderstandings and even gross ignorance within the executive structures of governments as to what procurement actually entails. This is what Brinkerhoff (2004) said that there is often little understanding of what skills are required and what risks are implied as well as what opportunities may be available. Failure of awareness and expertise at this level commonly represents a real risk to good governance, even creating the anomaly whereby public procurement may sometimes be characterized as transparent while not accountable. It should be argued that to a great extent there is a lot of ignorance about how public procurement operates.

Table 4.21 reveals that 57.3% (28.1% + 29.2%) of the respondents seem to agree that lack of procurement information about procurement procedure, its input, output, and resource consumption is still a big challenge. The implication of this finding is that there improper disclosure of procurement information and this has impaired smooth execution of procurement tasks in government procurement. This is exactly what Dimongo (2004), asserts that there is low information dissemination in public procurement which renders the whole process inefficient. From the foregoing therefore it should be reasoned that the management in contracting authorities should ensure that there is an appropriate dissemination of information of procurement information and can lead to compliance with all relevant guidelines.

The results in table 4.22 shows that 84.3% (61.8% +22.5%) of the respondents were in agreement as to whether there are always rapid changes in public procurement requirements. This is agreement with Hagén, and Zeed (2005) that procurement practitioners face a challenge of how to comply with their government's procurement regulations and social and economic procurement goals without violating regional and/or international trade agreements. The main problem is frequent changes in rules and regulations. From the above view it should be comprehensible to note that the changes are impacting pressure on how the procurement function performs its internal and external processes and procedures in order to achieve its objectives.

The findings in table 4.23 shows that 79.8% (60.7% +19.1%) of the respondents were with a view that there is high level of discrimination among suppliers, professionals and business ethics. This is in line with NEC Works (2013), that all classified security sensitive government contracts with ministry of defence are made by NEC and there are not given to private sector companies there by discriminating suppliers and professional. Most of the work is done by UPDF staff and private people are not allowed to submit their bid documents. From the foregoing therefore, it should be noted that there is high level of discrimination among suppliers, professionals and business ethics.

5.2.3 Strategies That Management Can Undertake For Procurement Process Improvement

The study aimed at identifying strategies that can be employed to improve procurement process in NEC and the findings generated are as follows: -

The results in table 4.24 revealed that 74.2% (50.6% + 23.6%) of the respondents agreed that improvement in accountability in government procurement has a direct bearing on procurement efficiency. This is in line with Cooper (2003), that basic principles of good procurement practice include accountability, where effective mechanisms and must be in place in order to enable procuring entities spend the limited resources carefully, knowing clearly that they are accountable to members of the public; competitive supply, which requires the procurement be carried out by competition unless there are convincing reasons for single sourcing; and consistency, which emphasizes the equal treatment of all bidders irrespective of race, nationality or political affiliation. It should therefore, be noted that there is no way procurement efficiency can be registered unless there is effective accountability in the whole procurement process.

The results in table 4.25 suggest that 82% (47.2% +34.8%) of the respondents agreed with the test statement that people performing procurement tasks must comply with organization procurement regulations and government procurement regulations in order to enhance efficiency in the procurement. This is in agreement with Trevor (2000), that that there is a link between compliance and procurement efficiency in an organization. When there are some compliance hindrances this affect adversely the procurement efficiency in an organization. From the above view it should be logical to state that there is a link between compliance and procurement efficiency in an organization.

Table 4.26 shows that respondents agreed 87.6% (61.8% +25.8%) that there is a need to lessen stringent procurement regulations and guideline if procurement efficient is to be registered in NEC. This is in line with NEC Works (2013), procurement activities of NEC Works have greatly

suffered from inflexible and bureaucratic systems of procurement which leads to unacceptable contract delays, increased procurement costs, the potential for manipulation of contract awards and lack of fair competition, all of which create the perception in the population at large, that public expenditure is slow, ineffective, expensive and often corrupt. It should therefore be argued that there is a need to lessen stringent procurement regulations and guideline if procurement efficient is to be registered in NEC.

The results in table 4.27 reflect that, 91.0% (50.6% +40.4%) of the respondents agreed that strict adherence to PPDA regulation promotes transparency in organisation's procurement process and thus promotes efficiency in the procurement process (PPDA, Act, 2003). In short, it should be reasoned that strict adherence to PPDA regulation promotes transparency in organisation's procurement process and thus promotes efficiency in the procurement process

From table 4.28, out of the total respondents, 88.8% (65.2% +23.6%) agreed with statement that people who exhibit ethical behaviours, generally observe procurement regulations and laws enhances procurement efficiency. This could also infer that public officials should always behave ethically and fairly, in their business undertakings as one way of enhancing procurement efficiency. This is in agreement with Morgan (2011) that, ethical behavior is important in measuring procurement efficiency as it involves the expenditure of public money, and is subject to public scrutiny. Ethical behavior supports openness and accountability in a procurement process and gives suppliers confidence to participate in the Government marketplace. It should be noted that ethical behavior can also reduce the cost of managing risks associated with fraud, theft, corruption, and other improper behavior; and enhance confidence in public administration

which is the central part in stimulating procurement efficiency. From the foregoing therefore, it should be stated that people who exhibit ethical behaviours generally observe procurement regulations and laws and this enhances procurement efficiency.

Table 4.29 shows that 73% (47.2% +25.8%) of the respondents were in agreement that there is a need to develop collaborative buyer-seller relationships. From the above view it should be comprehensible to note that in collaborative buyer-sellers relationship, there is usually quick response, efficient customer response and continuous replenishment planning. This is in line with Trevor (2000), that the whole concept of procurement efficiency is to develop collaborative buyer-sellers relationship. Suppliers working together with the organization as a team can derive an edge over its competitors. This happens as a result of the buyer sharing vital information on sales data with the supplier which enhances accurate forecasts in terms of demand and supply thus stimulating efficient service delivery to customers and its competitiveness in the market place.

The findings in table 4.30 shows that 85.4% (52.8% +32.6%) of the respondents were with a view that there is no way efficiency in procurement can be registered without strict adherence to procurement regulations and guidelines of PPDA. This view was supported by Vian and Collins (2006) that following closely the laid down procedure, rules and regulations play a great role towards efficiency. From the foregoing therefore, it should be noted that when procurement function comply with procurement guideline, the organization can mitigate greatly procurement delays, wastes and thus be in position to eliminate backlogs in the execution of tasks since goods and services are always there when they are needed.

The results in table 4.31 revealed that 91.0% (69.7% + 21.3%) of the respondents agreed that the procurement process should uphold the element of integrity. This view was supported by Thai (2001), the basic principles of good procurement practice is to concentrate on integrity. This means that in every procurement activity there should be trust and honest and ensure that the whole process ends perfectly.

The results in table 4.32 show that internal procurement factors affect greatly procurement efficiency with a correlation coefficient of $r = .869$. The coefficient of determination ($r^2 = .755$, $p < .000$) indicate that internal procurement factors significantly affect procurement efficiency by 75.5% and 24.5% is due to other factors outside this study.

Table 4.33 shows a moderate linear relationship between internal procurement factors and procurement efficiency with a coefficient of regression of $r = .818$. In order to determine the extent to which internal procurement factors affect procurement efficiency, the regression coefficient was squared ($r^2 = .669$) and then adjusted (Adjusted $r^2 = .651$) and expressed as a percentage. Thus, it is shown that internal procurement factors affects procurement efficiency by 65.1%. These findings were subjected to an ANOVA test and found significant ($F = 18.3$, $p < .000$). Thus, this implies internal procurement factors significantly affect procurement efficiency by 65.1% and the remainder (34.9%) is due to other factors.

5.3 Summary of Major findings

5.3.1 Internal Procurement Factors That Drive Procurement Efficiency

It was found out that accountability creates opportunities for competitiveness and thus enhances procurement efficiency. That lack of accountability creates opportunities for corruption, bribes which adversely affects procurement efficiency. That strict adherence to procurement ethics, rule and regulations renders the procurement process efficient. That many organizations must follow the procurement regulations and laws when procuring goods and services if they are to register efficiency.

The study revealed that procurement efficiency depends greatly on the skills and competence of staff acquired through training. That having skilled, competent and committed workforce in a procurement function impacts positively on the company's product cost, quality, delivery, flexibility and organizational performance.

The study indicated that manipulation of contract awards as a result of poor professionalism affects adversely the procurement efficiency. That transparency problems like lack of fair competition in procurement process renders procurement process inefficient. It was also noted that open and fair competition in trade and relations enables organisations to have reliable contacts and suppliers for better quality of goods and services, which helps the company in efficient production, and in turn, serve their customers better.

The study indicated that cost reduction and reliability depend generally on procurement compliance. This implies that compliance eliminates or minimizes wastage in the procurement

process more especially acquisition of raw material by purchasing the good quality of materials or products needed by the organization.

5.3.2 Challenges Driving Out Efficiency Amidst Competition From State Enterprise

It was noted that inflexible procurement regulations and guidelines are the root cause of inefficiency in public procurement. That following the regulations leads to delay in contract delivery. The study also indicated that politicians generally interfere with the process thereby causing inefficiencies in the procurement process. That following PPDA regulations have led to underutilization of assets thereby compromising efficiency in procurement. It was further noted that the regulations causes delays in contract delivery since the company has to invite suppliers of construction materials which attract high prices since they also have to make profits which in turn makes procurement process costly.

It was found out that social externalities generally have negative effects on procurement efficiency. That ICT adoption in state enterprises is still a major stumbling block towards realizing procurement efficiency. That technological barriers represent obstacles to the adoption of e-procurement due to lack of high-speed connections and software incompatibility.

It was generally stated that economic factors like competition in the market place is still a big challenge in public procurement. And lack of transparency in the procurement process is caused by violation of procurement rules and regulations and this cripples procurement efficiency. However, very little is known about violation of the procurement rules and regulations.

That there is often little understanding of what skills are required and what risks are implied as well as what opportunities may be available. Failure of awareness and expertise at this level commonly represents a real risk to good governance, even creating the anomaly whereby public procurement may sometimes be characterized as transparent while not accountable.

It was noted that rapid changes in public procurement requirements, high level of discrimination among suppliers, professionals and business ethics and lack of procurement information about procurement procedure, its input, output, and resource consumption is still a big challenge.

5.3.3 Strategies That The Management Can Undertake For Procurement Process Improvement

It was noted that improvement in accountability in government procurement has a direct bearing on procurement efficiency.

That people performing procurement tasks must comply with organization procurement regulations and government procurement regulations in order to enhance efficiency in the procurement. That when there are some compliance hindrances this affect adversely the procurement efficiency in an organization.

The study indicated that there is a need to lessen stringent procurement regulations and guideline if procurement efficient is to be registered in NEC.

That strict adherence to PPDA regulation promotes transparency in organisation's procurement process and thus promotes efficiency in the procurement process. And that people who exhibit

ethical behaviours generally observe procurement regulations and laws and this enhances procurement efficiency.

The study revealed that there is a need to develop collaborative buyer-seller relationships. This is because the buyer is sharing vital information on sales data with the supplier which enhances accurate forecasts in terms of demand and supply thus stimulating efficient service delivery to customers and its competitiveness in the market place.

The study indicated that there is no way efficiency in procurement can be registered without strict adherence to procurement regulations and guidelines of PPDA. And that the procurement process should uphold the element of integrity.

The results of the study indicated that internal procurement factors affect greatly procurement efficiency ($r = .869$). The coefficient of determination indicate that internal procurement factors significantly affect procurement efficiency at ($r^2 = .755$, $p < .000$). Thus internal procurement factors affect procurement efficiency by 75.5% and 24.5% is due to other factors

It was noted there is a moderate linear relationship between internal procurement factors and procurement efficiency ($r = .818$). That internal procurement factors affects procurement efficiency by 65.1%. These findings were subjected to an ANOVA test and found significant ($F = 18.3$, $p < .000$). Thus, this implies internal procurement factors significantly affect procurement efficiency.

5.4 Conclusion

The study discovered that effective transparency problems like lack of fair competition in procurement process renders procurement process inefficient and this was agreed to by the majority of the respondents with a 92,2%. Non adherence to procurement laws and regulations hinder greatly procurement efficiency in state enterprises. The forgoing two factors are important to note as the greatest contributors of procurement inefficiency in state enterprises, however the findings a quick to recognise factors like levels of professionalism, accountability; strict adherence to procurement ethics, rule and regulations; skills and competence of staff acquired through training; creates opportunities for competitiveness and thus enhances procurement efficiency rendering the procurement process efficient. this was manifested by respondents being in agreement with more than 75% for all the factors

It was noted that economic factors like competition, ICT adoption in state enterprises and political interferences are the major three factors challenges of state enterprises, Lack of procurement information about procurement procedure insignificantly affects procurement efficiency and is a lesser challenge to state enterprises. It's worth concluding that inflexible procurement regulations and guidelines, lack of transparency, social externalities generally have negative effects on procurement efficiency. That following PPDA regulations have led to underutilization of assets thereby compromising efficiency in procurement. It was found out that and rapid changes in public procurement requirements, high level of discrimination among suppliers, professionals and business ethics are still a big challenge to NEC.

It was noted that upholding the element of integrity, strict adherence to PPDA regulation and observing procurement ethics are the major strategies that can be adopted to improve efficiency. Improvement in accountability, compliance with procurement regulation in government procurement, developing collaborative buyer-seller relationships and lessen stringent procurement regulations and guideline are equally perfect strategies to be adopted to improve procurement efficiency. It was therefore concluded that internal procurement factors affect greatly procurement efficiency by 75.5%.

5.5 Recommendations

Basing on the findings, the following recommendations were made: -

Procurement officers in the Procurement and Disposal Unit (PDU) of NEC should understand that efficiency in procurement is centered on transparency and adherence to procurement laws and regulations. Members of staff in PDU, Contract Committee and user departments should do their work with professionalism, should be accountable, strictly adherence to procurement ethics, rule and regulations, and acquire skills and competence through training to create opportunities for competitiveness. Factors such as accountability, integrity and ethical values should be the key values of all the personnel involved in the procurement process at NEC and this greatly will minimize the risk of loss due to fraud and theft.

Management of NEC should acknowledge that economic factors like competition, ICT adoption and political interferences are the major challenges towards procurement efficiency. Inflexible procurement regulations and guidelines, lack of transparency, social externalities negatively affect procurement efficiency. It's strongly recommended that the Managing Director as the

accounting Officer should request for accreditation of alternative public procurement and disposal system (PPDA Regulation 342) to mitigate delays in the procurement process so as they can execute contracts in time and compete favourably with the private sector. The board of directors of NEC need to take strong resolutions about the adoption of ICT and distance themselves from political interferences.

The management of NEC should adopt the creation of Information Technology Department which should focus on adoption of ICT to facilitate e-procurement. Members of the PDU, Contracts Committee and user departments should observe procurement ethics as a major strategy. Procuring directly from manufactures, and developing collaborative buyer-seller relationships, coupled with less stringent procurement regulations and guidelines are the other strategies that Management of NEC need to adopt to drive procurement efficiency.

5.6 Suggestions

This study was conducted in National Enterprise Corporation. The study focused on the internal factors that affect procurement efficiency in state owned enterprises. The researcher suggests that furthers studies should be done in the same organization or different public organizations to answer the research questions.

The suggested areas for further studies should be based on: -

- Compliance and procurement efficiency
- Supplier market research on procurement efficiency
- Contract administration on procurement efficiency

This is because they also contribute towards procurement efficiency in state enterprises.

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APPENDICES

Appendix 1:

Krejcie and Morgan Sample Table for Determining Sample Size from a Given Population

| N | S | N | S | N | S | N | S | N | S |
|----|----|-----|-----|-----|-----|------|-----|--------|-----|
| 10 | 10 | 100 | 80 | 280 | 162 | 800 | 260 | 2800 | 338 |
| 15 | 14 | 110 | 86 | 290 | 165 | 850 | 265 | 3000 | 341 |
| 20 | 19 | 120 | 92 | 300 | 169 | 900 | 269 | 3500 | 246 |
| 25 | 24 | 130 | 97 | 320 | 175 | 950 | 274 | 4000 | 351 |
| 30 | 28 | 140 | 103 | 340 | 181 | 1000 | 278 | 4500 | 351 |
| 35 | 32 | 150 | 108 | 360 | 186 | 1100 | 285 | 5000 | 357 |
| 40 | 36 | 160 | 113 | 380 | 181 | 1200 | 291 | 6000 | 361 |
| 45 | 40 | 180 | 118 | 400 | 196 | 1300 | 297 | 7000 | 364 |
| 50 | 44 | 190 | 123 | 420 | 201 | 1400 | 302 | 8000 | 367 |
| 55 | 48 | 200 | 127 | 440 | 205 | 1500 | 306 | 9000 | 368 |
| 60 | 52 | 210 | 132 | 460 | 210 | 1600 | 310 | 10000 | 373 |
| 65 | 56 | 220 | 136 | 480 | 214 | 1700 | 313 | 15000 | 375 |
| 70 | 59 | 230 | 140 | 500 | 217 | 1800 | 317 | 20000 | 377 |
| 75 | 63 | 240 | 144 | 550 | 225 | 1900 | 320 | 30000 | 379 |
| 80 | 66 | 250 | 148 | 600 | 234 | 2000 | 322 | 40000 | 380 |
| 85 | 70 | 260 | 152 | 650 | 242 | 2200 | 327 | 50000 | 381 |
| 90 | 73 | 270 | 155 | 700 | 248 | 2400 | 331 | 75000 | 382 |
| 95 | 76 | 270 | 159 | 750 | 256 | 2600 | 335 | 100000 | 384 |

Note: "N" is population size
 "S" is sample size.

APPENDIX 2: QUESTIONNAIRE FOR NEC STAFF

Dear Sir/Madam,

I am Brian Buhanda conducting a study on “**Managing Procurement Efficiency in State Enterprises using a case of National Enterprises Corporation**” as a partial fulfillment of the requirement for award of a Masters of Business Administration of Kyambogo University. The information given will be treated with maximum sincerity and for academic purposes only. Your contribution will be highly appreciated. Please spare some time to answer the following questions.

INSTRUCTIONS:

Please tick or fill in the blank space with what is most appropriate to you.

Part A: Bio Data

1. What is your gender? Male Female

2. In which age group do you fall? < 20 21-30 31- 40 41-50
51+

3. What is your level of Education attained so far?
 - a) Masters
 - b) Bachelors
 - c) Diploma
 - d) Certificate
 - e) Others

Using the 5 liker scale of ranking (SA- Strongly agree, A-Agree, N- Not sure, D-Disagree, SD- Strongly disagree) indicate what is most appropriate to you.

| Part B: Internal Procurement Factors that drive Procurement Efficiency | | SD | D | N | A | SA |
|---|--|-----------|----------|----------|----------|-----------|
| 1 | Accountability creates opportunities for competitiveness and thus enhances procurement efficiency | | | | | |
| 2 | Effective accountability in the procurement process stimulate procurement efficiency | | | | | |
| 3 | Corruption and bribes in the government contracts is the leading cause of procurement inefficiency | | | | | |
| 4 | Strict adherence to procurement ethics renders the procurement process efficient | | | | | |
| 5 | Procurement efficiency depends greatly on the skills and competence of staff acquired through training | | | | | |
| 6 | Manipulation of contract awards as a results of poor professionalism affects adversely the procurement efficiency | | | | | |
| 7 | There is a need to handle procurement process with high level of professionalism in order to reduce delays in procurement process | | | | | |
| 8 | Transparency problems like lack of fair competition in procurement process renders procurement process inefficient | | | | | |
| 9 | Non adherence to procurement laws and regulations in hinder greatly the procurement efficiency in government enterprises | | | | | |
| 10 | Cost reduction and reliability depend generally on procurement compliance | | | | | |
| Part C: Challenges driving out efficiency amidst competition from state enterprise | | | | | | |
| 11 | Inflexible procurement regulations and guidelines are the root cause of inefficiency in public procurement | | | | | |
| 12 | Political interference can affect adversely procurement efficiency | | | | | |
| 13 | Following PPDA regulations have led to underutilization of assets thereby compromising efficiency in procurement | | | | | |
| 14 | Social externalities generally have negative effects on procurement efficiency | | | | | |
| 15 | ICT adoption in state enterprises is still a major stumbling block towards realizing procurement efficiency | | | | | |
| 16 | Economic factors like competition in the market place is still a big challenge in public procurement | | | | | |
| 17 | Lack of transparency in the procurement process is caused by violation of procurement rules and regulations and this cripples procurement efficiency | | | | | |
| 18 | There are lot of ignorance about how public procurement operates | | | | | |
| 19 | Lack of procurement information about procurement procedure, its input, output, and resource consumption is still a big challenge | | | | | |
| 20 | There are always rapid changes in public procurement requirements | | | | | |
| 21 | There is high level of discrimination among suppliers, professionals and business ethics | | | | | |

| Part D: Strategies that the management can undertake for procurement process improvement | | | | | |
|---|--|--|--|--|--|
| 22 | Improvement in accountability in government procurement has a direct bearing on procurement efficiency | | | | |
| 23 | People performing procurement tasks must comply with organization procurement regulations and government procurement regulations in order to enhance efficiency in the procurement | | | | |
| 24 | There is a need to lessen stringent procurement regulations and guideline if procurement efficient is to be registered in NEC Works | | | | |
| 25 | Strict adherence to PPDA regulation promotes transparency in organisation's procurement process and thus promotes efficiency in the procurement process | | | | |
| 26 | People who exhibit ethical behaviours generally observe procurement regulations and laws and this enhances procurement efficiency | | | | |
| 27 | There is a need to develop collaborative buyer-seller relationship | | | | |
| 28 | There is no way efficiency in procurement can be registered without strict adherence to procurement regulations and guidelines of PPDA | | | | |
| 29 | The procurement process should uphold the element of integrity | | | | |

30. Please give suggestion for improving procurement efficiency in your organization

END

Thank you for your cooperation

APPENDIX 3: INTERVIEW GUIDE FOR DEPARTMENTAL HEADS

Dear Sir/Madam,

I am Brian Buhanda conducting a study on “**Managing Procurement in a State Enterprises using a case of National Enterprises Corporation**” as a partial fulfillment of the requirement for award of a Masters of Business Administration of Kyambogo University. The information given will be treated with maximum sincerity and for academic purposes only. Your contribution will be highly appreciated. Therefore, you are required to answer the following questions: -

1. Are you familiar with the procurement operations of NEC?
2. Are you aware of the factors that affect procurement efficiency in NEC?
3. If yes, what are the internal procurement factors that affect procurement efficiency?
4. How can such factors be streamlined to enhance procurement efficiency?
5. Are there challenges that drive out efficiency in public procurement?
6. If yes, what are the challenges that drive out efficiency in public procurement?
7. Do you think PLEST factors have any bearing on procurement efficiency?
8. If yes, how can PLEST factors affect procurement efficiency?
9. How can efficiency in procurement function be registered despite the presence of competition?
10. Do you think enforcement of accountability in public enterprises alerts the internal and external monitors about the efficiency in procurement?
11. What suggestions can you put forwards to enhance procurement efficiency in your organization?

END

Thank you for your cooperation