

**PROCUREMENT PLANNING, STAKEHOLDER INVOLVEMENT AND  
PROCUREMENT PERFORMANCE: A CASE OF NATIONAL  
WATER AND SEWERAGE CORPORATION**

**BY**

**MOSES OSUJO**

**18/U/19366/GMBA/PD**

**A DISSERTATION SUBMITTED TO THE DIRECTORATE OF RESEARCH  
AND GRADUATE TRAINING IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE AWARD OF THE DEGREE  
OF MASTER OF BUSINESS ADMINISTRATION  
OF KYAMBOGO UNIVERSITY**

**MAY, 2023**

## DECLARATION

I Moses Osujo, hereby declare that this research dissertation titled *'Procurement Planning, Stakeholder Involvement and Procurement Performance: A case of National Water and Sewerage Corporation'* is my own work, and it has not been presented to a university or other institution of higher learning for any kind of academic honour.

Signature \_\_\_\_\_ Date \_\_\_\_\_

Moses Osujo

**18/U/19366/GMBA/PD**

**APPROVAL**

This research dissertation titled ‘*Procurement planning, Stakeholder involvement and Procurement performance: A case of National Water and Sewerage Corporation*’ by Moses Osujo has been prepared in accordance with the research guidelines of Kyambogo University is currently ready for submission to the research committee of the university for further consideration.

**Signed.....Date.....**

**Dr. Matthew Kalubanga**

**Principal Supervisor**

**Signed..... Date.....**

**Dr. Dan Ayebale**

**Co-Supervisor**

## **DEDICATION**

This thesis is intended to act as an inspiration to every member of my clan. I further dedicate this dissertation to my work mates for the robust support they have rendered in making this effort successful. May the All-Powerful God lengthen their time on this earth.

## **ACKNOWLEDGEMENT**

It cannot go unacknowledged that a number of people and institutions have helped along the way to generating this thesis. To God be the glory for his generosity in making this possible.

To my supervisors, Dr. Mathew Kalubanga and Dr. Dan Ayebale, I genuinely wish to convey my sincere thankfulness and gratitude for their insightful and well-informed guidance as well as support rendered to me throughout the research process.

Also, I would want to express my gratitude to my family for their unwavering support throughout the entire procedure. May the omnipotent God richly bless them for their wonderful actions!

Lastly, I would like to appreciate the entire GMBA class for the support they extended to me while I was undertaking the course, and for the academic aid they offered to me throughout the highs and lows of my academic path.

## TABLE OF CONTENTS

<b>DECLARATION.....</b>	<b>i</b>
<b>APPROVAL .....</b>	<b>ii</b>
<b>DEDICATION.....</b>	<b>iii</b>
<b>ACKNOWLEDGEMENT.....</b>	<b>iv</b>
<b>TABLE OF CONTENTS .....</b>	<b>v</b>
<b>LIST OF TABLES .....</b>	<b>x</b>
<b>LIST OF FIGURES .....</b>	<b>xi</b>
<b>LIST OF APPENDICES .....</b>	<b>xii</b>
<b>LIST OF ABBREVIATION.....</b>	<b>xiii</b>
<b>ABSTRACT .....</b>	<b>xiv</b>
<b>CHAPTER ONE: INTRODUCTION .....</b>	<b>1</b>
1.0 Introduction.....	1
1.1 Background to the study .....	1
1.2 Statement of the problem.....	4
1.3 Purpose of the study.....	5
1.4 Research objectives.....	5
1.5 Research Questions .....	6
1.6 Scope of the study .....	6
1.6.1 Subject scope .....	6
1.6.2 Geographical scope .....	6
1.6.3 Time scope .....	7
1.7 Significance of the study.....	7
1.8 Conceptual Framework.....	7
1.9 Chapter Summary .....	8

<b>CHAPTER TWO: LITERATURE REVIEW</b> .....	<b>10</b>
2.1 Introduction.....	10
2.2 Operational definitions of the research variables.....	10
2.2.1 Procurement planning .....	10
2.2.2 Stakeholder involvement .....	12
2.2.3 Procurement performance .....	14
2.3 Stakeholder Theory .....	15
2.4 Research Hypotheses .....	17
2.4.1 Procurement planning and procurement performance .....	17
2.4.2 Stakeholder Involvement and Procurement Performance.....	21
2.4.3 Procurement Planning and Stakeholder Involvement.....	27
2.4.4 The mediation effect of stakeholder involvement in the relationship between procurement Planning and Procurement Performance.....	30
2.5 Chapter Summary .....	32
 <b>CHAPTER THREE: RESEARCH METHODOLOGY</b> .....	 <b>33</b>
3.0 Introduction.....	33
3.1 Research design .....	33
3.2 Target study population .....	33
3.3 Sample size determination .....	34
3.4 Unit of Analysis and Unit of Inquiry .....	35
3.5 Sampling technique.....	35
3.6 Data collection instrument .....	36
3.6.1 Questionnaire instrument.....	36
3.7 Measurement of variables .....	37
3.8 Data collection procedure .....	38

3.9 Validity and Reliability.....	38
3.9.1 Validity .....	38
3.9.2 Reliability.....	43
3.10 Data analysis .....	43
3.10.1 Descriptive statistics .....	44
3.10.2 Correlation analysis .....	44
3.10.3 Regression analysis.....	44
3.10.4 Process Macro.....	44
3.11 Ethical considerations .....	45
3.12 Chapter Summary .....	45
<b>CHAPTER FOUR: PRESENTATION, ANALYSIS AND INTERPRETATION OF RESULTS .....</b>	<b>46</b>
4.1 Introduction.....	46
4.2 Response rate .....	46
4.3 Demographic Characteristics of Respondents .....	47
4.4 Descriptive analysis .....	48
4.4.1 Procurement planning .....	49
4.4.2 Stakeholder involvement .....	51
4.4.3 Procurement performance.....	54
4.5 Inferential Analysis.....	57
4.5.1 Correlation Analysis .....	57
4.5.2 Regression Results .....	59
4.5.3 Mediation Analysis .....	61
4.6 Hypothesis Tests .....	63
Confidence Interval.....	64



4.7 Chapter Summary .....	<b>65</b>
<b>CHAPTER FIVE: SUMMARY, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>66</b>
5.1 Introduction.....	<b>66</b>
5.2 Summary of Findings.....	<b>66</b>
5.2.1 Relationship between procurement planning and procurement performance of NWSC in Uganda .....	<b>66</b>
5.2.2 Relationship between stakeholder involvement and procurement performance of NWSC in Uganda.....	<b>67</b>
5.2.3 Relationship between procurement planning and stakeholder involvement at NWSC in Uganda.....	<b>67</b>
5.2.4 Effect of Procurement Planning and Stakeholder Involvement on Procurement Performance of NWSC in Uganda.....	<b>67</b>
5.2.5 Mediation Effect of Stakeholder Involvement in the Relationship between Procurement Planning and Procurement Performance.....	<b>68</b>
5.3 Discussion of findings.....	<b>68</b>
5.3.1 Relationship between procurement planning and procurement performance of NWSC in Uganda.....	<b>68</b>
5.3.2 Relationship between stakeholder involvement and procurement performance of NWSC in Uganda .....	<b>70</b>
5.3.3 Relationship between procurement planning and stakeholder involvement at NWSC in Uganda .....	<b>71</b>
5.3.4 Effect of procurement planning on Procurement performance.....	<b>72</b>
5.3.5 Effect of Stakeholder Involvement on Procurement Performance .....	<b>73</b>

5.3.6 Mediating effect of stakeholder involvement in the relationship between procurement Planning and Procurement Performance.....	74
5.4 Conclusion .....	75
5.5 Limitations of the study .....	76
5.6 Recommendations.....	77
5.7 Chapter summary.....	78
<b>REFERENCES.....</b>	<b>79</b>
<b>LIST OF APPENDICES .....</b>	<b>92</b>
<b>APPENDIX I: QUESTIONNAIRE .....</b>	<b>92</b>

## LIST OF TABLES

Table 3.1: Study Target population and sample size and sampling technique .....	34
Table 3.2: Summary of the questionnaire instrument .....	37
Table 3.3: Content Validity.....	39
Table 3.4: Convergent Validity.....	40
Table 3. 5: Fornell - Larcker Criterion Analysis for Checking Discriminant Validity.....	42
Table 3. 6: Reliability Statistics .....	43
Table 4.1: Response rate .....	46
Table 4. 2: Background Information.....	47
Table 4.3: Level of procurement planning.....	49
Table 4. 4: Level of Stakeholder Involvement.....	52
Table 4. 5: Procurement Performance Assessment.....	55
Table 4. 6: Correlation .....	58
Table 4. 7: Regression Model Summary.....	59
Table 4.8: ANOVA model summary .....	60
Table 4.9: Regression Coefficients Portraying the Effect of Procurement Planning and Stakeholder Involvement on Procurement Performance .....	60
Table 4. 10: Mediation Analysis .....	62
Table 4. 11: Hypothesis Tests Summary .....	64

## LIST OF FIGURES

Figure 1. 1: The Conceptual Framework portraying the indirect effect of procurement planning on procurement performance through stakeholder involvement .....	8
Figure 2.1: Procurement planning process.....	12

## LIST OF APPENDICES

Appendix I: Questionnaire.....	92
--------------------------------	----

## **LIST OF ABBREVIATION**

<b>AFS:</b>	Annual Financial Statement
<b>AOG:</b>	Auditor General
<b>CVI:</b>	Content Validity Index
<b>NWSC:</b>	NWSC
<b>NSSF:</b>	National Social Security Fund
<b>PPDA:</b>	Public Procurement and Disposal Asset Authority

## ABSTRACT

This study investigated how procurement planning and stakeholder involvement relate with procurement performance in Uganda, considering of case of National Water and Sewerage Corporation (NWSC). The four specific objectives that directed the study were, to examine the relationship between procurement planning and procurement performance of NWSC in Uganda, to examine the relationship between stakeholder involvement and procurement performance of NWSC in Uganda, to examine the relationship between procurement planning and stakeholder involvement at NWSC in Uganda, and to assess the mediating effect of stakeholder involvement in the relationship between procurement planning and procurement performance of NWSC in Uganda.

The study employed a cross-sectional quantitative survey design to obtain information from different stakeholders at National Water and Sewage Corporation. A sample size of 162 participants was considered in this research, selected purposively and simple randomly. Using closed ended questionnaires, data was gathered from primary sources. Statistical Package for Social Scientists SPSS Ver. 26 was a software used to decipher data into visual representations, and findings were portrayed in tables.

The study findings revealed that procurement planning significantly related with procurement performance ( $r = .413$   $p < 0.01$ ). The study also revealed that stakeholder involvement significantly related with procurement performance ( $r = .527$   $p < 0.01$ ). The findings also showed that procurement planning significantly related with stakeholder involvement ( $r = .521$   $p < 0.01$ ). The study further revealed that stakeholder involvement partially mediated the relationship between procurement planning and procurement performance. Therefore, procurement planning, and stakeholder involvement significantly influence procurement performance through effectiveness, efficiency, and economy. With study limitations posed by a research approach which was purely quantitative and a research design which was cross-sectional, the study recommends that a research approach which is qualitative, and a case study design employing semi structured research tools be adopted respectively in a similar study so as to uncover a target audience's behaviour and opinions using in-depth analysis.

## **CHAPTER ONE: INTRODUCTION**

### **1.0 Introduction**

This chapter entails the background to the study, statement of the problem, purpose of the study, research hypotheses, scope of the study, significance of the study, and the conceptual frame work.

### **1.1 Background to the study**

Public and private entities depend on procurement of services, goods, and works to effectively meet their organizational needs. This places the procurement function at a strategic position since the entire responsibility of fulfilling the organizational needs is shouldered by the procurement departments (Nzimande & Padayachee, 2017). Therefore, promoting efficiency, effectiveness and economy as proxies of procurement performance is now becoming an ongoing concern for many public entities (Patrucco, Luzzini & Ronchi, 2016). The reason is that applying the principals of efficiency, effectiveness and economy in public procurement is associated with enhanced product quality, and minimization of procurement lead-times (Mutoro, Makokha & Namisonge, 2018; Kamotho, 2014; Amaratunga & Baldry, 2002).

Despite the importance of using efficiency, effectiveness and economy in measuring procurement performance (Kamotho, 2014), using these three measures holds a great challenge because it is very difficult for procurement entities to balance efficiency, effectiveness and economy in a single procurement (Kakwezi & Nyeko, 2019). This implies that organizations could be effective but inefficient or uneconomical. This presents a great dilemma leading to the current criticism regarding performance of public procurement. For instance, public procurement has been overly criticised as a waste, inefficient, and a source of leakage for public funds, as well as the major cause of institutional loss (VaillanCourt, 2017).



Public procurement has also continued to attract criticisms due to poor performance resulting from high costs of procurement and misallocation of public resources (Hui et al., 2011; Agaba, 2007). Accordingly, Muhwezi, Musiime and Onyutha (2020) and Kakwezi and Nyeko (2019) indicate that public procuring entities in Uganda are often known for procurement of poor-quality goods, increasing costs of procurements, and delayed acquisitions of goods and services. Equally, in NWSC, the Auditor General's Report (AOG, 2017), and the NWSC Annual Financial Statement Report (AFS, 2018) unmasked procurement inefficiencies and ineffectiveness in terms of late deliveries/completion and increasing costs of procurement that jeopardizes procurement performance. This is contrary to the procurement mandate of cost reduction (GPS, 2016). The persistence of poor procurement performance is attributed to inadequate procurement planning (Kakwezi & Nyeko, 2019; Dzuke & Naude, 2017; Nzimande & Padayachee 2017). For example, without proper procurement planning, public institutions frequently struggle to decide what and how to buy, where and when to buy, when to buy, and for what purpose (Nzimande & Padayachee, 2017).

While, there has been substantial research efforts to describe the connection between procurement planning in organizations and procurement performance, examining the underlying mechanism through which procurement planning influences procurement performance has not received sufficient attention, hence there is need for more empirical analysis to investigate these aspects further (Namukasa (2017). This study draws on insights from the stakeholder theory to suggest stakeholder involvement in procurement planning activities as a crucial factor in describing the link between procurement planning and procurement performance. Stakeholder theory as propounded by Freeman (1984) underscores that within procuring organizations, there is always a nexus of interactions, between groups, individuals or organizations/institutional actors who can directly/indirectly influence or be impacted by the procurement decisions of an entity. In support, Holma et al (2020) recounts

that stakeholder involvement reflects the integration of groups, individuals, or organizations with power and interest, and whose direct/indirect involvement can positively/negatively impact on the procurement decisions (Holma et al., 2020).

Despite the fact that in some circumstances procurement planning has been found to positively influence procurement performance (Changalima et al., 2020; Chepkesis & Keitany, 2018), in other instances organizations planning their procurement have ended up with questionable procurement performance results (Odero & Ayub, 2017). A possible explanation of this being that these organizations do not perform their procurement planning activities/process effectively (Dzuke & Naude, 2017; Basheka, 2008). In the views of Asimwe and Mayanja (2022) basing on their study on procurement planning in a public institution, they left a call open for technical teams and user departments to exchange work plans and procurement plans to give the procurement departments enough time to carry out and complete procurement procedures in pursuit of higher performance goals. This study therefore serves to validate the implication of the involvement of vast stakeholders in procurement planning in the drive to inform attainment of procurement performance in public organizations.

In this study, it is hypothesized that procurement planning supports the discovery and establishment of realistic product expectations, such as, product quality, cost, and fulfilment time (Albarune & Habib, 2015). The impact of procurement planning is further observed in terms of quick delivery, quality products, affordability, and flexibility, all of which have an impact on the company's ability to compete and achieve its corporate objectives (Kibet and Njeru, 2014). Procurement planning is also required to prepare for purchases in order to create a purchasing strategy for securing each corporate project requirement and operational demand that will be included in the procurement plan (Islamic Development Bank, 2019).

Accordingly, stakeholder involvements' contribution towards the relationship between procurement planning and procurement performance also becomes an indispensable aspect. This study therefore adapted stakeholder involvement as a moderating variable. The reason is that previous scholars have suggested that stakeholder involvement significantly influences procurement performance. For example, In Kenya, Gatobu (2020), and Nzovila et al. (2019) say that involving both internal and external stakeholders in procurement planning and specification development significantly improves product quality, price and lead-time. In Uganda, Asimwe and Mayanja (2022) having conducted a study on procurement planning in a public institution called for involvement of technical teams and user departments in generating work plans and procurement plans to give the procurement departments enough time to carry out and complete procurement procedures in pursuit of higher performance goals. These observations offer ground to emerging researchers to conduct a study particularly in the Ugandan setting to confirm the association between procurement planning and procurement performance through stakeholder involvement. This contributes to the scope of knowledge by addressing gaps left in literature on procurement management.

## **1.2 Statement of the problem**

Since organizations rely on the purchase of services, goods, and works to successfully meet their organizational needs, procurement performance has been and will continue to be a major priority in public procurement (Mutoro et al., 2017; Kamocho, 2014). NWSC in an attempt to attain improved procurement performance has invested in procurement planning and stakeholder involvement (Muhwezi et al., 2020). However, despite the aforesaid step, procurement performance is still low. This is observed in terms of delayed works, high procurement costs, and low-quality of goods and services (Sabano, 2021; Mucenzi et al., 2020). The Annual Financial Statement Report (AFS, 2018) further highlights that NWSC has experienced high project costs, long project schedules, and has often failed to attain project

needs. Sabano (2021) expounds that due to shoddy works and low quality materials, NWSC has been engaged in extra spending to compensate service users. This calls for a drastic change in procurement planning and stakeholder involvement strategies to ensure that NWSC gains efficiency, effectiveness and value for money. A literature search on the variables in the context of NWSC yielded mixed results, with several studies highlighting how procurement planning determines procurement performance (Changalima et al., 2020; Chepkesis & Keitany, 2018; Bienhaus & Haddud, 2018; Basheka, 2008), while others only looked at how stakeholder involvement affected procurement performance (Gatobu, 2020; Nzovila et al., 2019). The need to determine how procurement planning relates with procurement performance through stakeholder involvement at NWSC created a gap which this study serves to fill.

### **1.3 Purpose of the study**

To determine how procurement planning and stakeholder involvement relate with procurement performance considering NWSC in Uganda.

### **1.4 Research objectives**

- i.** To examine the relationship between procurement planning and procurement performance of NWSC in Uganda.
- ii.** To examine the relationship between stakeholder involvement and procurement performance of NWSC in Uganda.
- iii.** To examine the relationship between procurement planning and stakeholder involvement at NWSC in Uganda.
- iv.** To assess the mediating effect of stakeholder involvement in the relationship between procurement planning and procurement performance of NWSC in Uganda.

## **1.5 Research Questions**

**RQ<sub>1</sub>:** What is the relationship between Procurement planning and Procurement performance?

**RQ<sub>2</sub>:** What is the relationship between Stakeholder involvement and Procurement performance?

**RQ<sub>3</sub>:** What is the relationship between Procurement planning and Stakeholder involvement?

**RQ<sub>4</sub>:** What is the mediating effect of Stakeholder involvement on the relationship between Procurement planning and Procurement performance?

## **1.6 Scope of the study**

This section presented the study scope by dividing it into three categories. That is, time scope geographical scope, and content scope.

### **1.6.1 Subject scope**

The study examined the relationship between procurement planning and stakeholder involvement on procurement performance in NWSC. The study focused on procurement planning and stakeholder involvement as higher-order constructs. Whereas, procurement performance was studied as lower-order construct with its sub-constructs of economy, effectiveness, and efficiency.

### **1.6.2 Geographical scope**

This research was conducted at NWSC, and was confined at the organization's head office located at Plot 3, Nakasero, Kampala. The head office was chosen because most of the corporation's procurements, including those of the Areas are executed. In addition, focusing the study at the head office provided ease for the researcher to collect generalizable data.

### **1.6.3 Time scope**

The study concentrated on the procurement performance obtained by NWSC as of 2022. Therefore, information pertaining to procurement performance in terms of efficiency, effectiveness and economy was collected once with the aid of questionnaires (Salkind, 2010).

### **1.7 Significance of the study**

The following procurement actors could find the study useful.

Policy Makers; This study may provide opportunities to policy makers like PPDA in making informed policies regarding procurement planning and public procurement performance by using the research findings as a base for improving on the performance of public procurement.

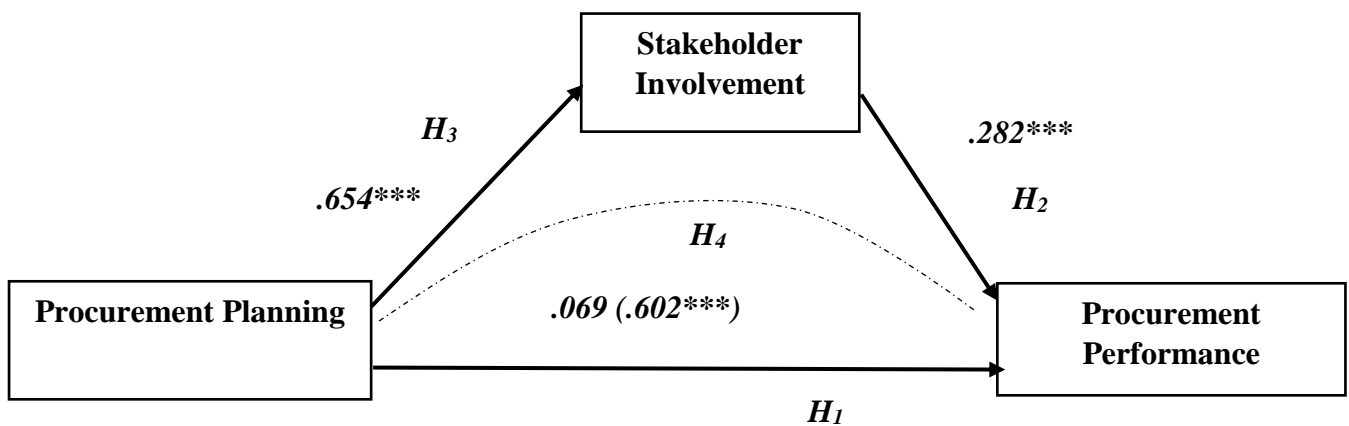
To the Academicians, the study could help other researchers who may wish to conduct more research concerning the impact of procurement planning, stakeholder involvement and performance of the procurement function in other sectors to add on the existing theory in the procurement management. The study finding may also benefit academicians by serving as a reference and a good basis for future research undertakings in regard to stakeholder involvement and procurement performance in other sectors.

To practice; the study findings could help the management of NWSC in creating regulations and policies for streamlining the responsibilities of stakeholders in public procurement. It is important to make sure that those stakeholders follow and put into practice sound procurement procedures and strategies in order to improve procurement performance.

### **1.8 Conceptual Framework**

Figure 1, is the conceptual framework. As per the conceptual framework, this study predicts that procurement planning influences procurement performance both directly and indirectly through stakeholder involvement. Stakeholder involvement is a mediator in the relationship

between procurement planning and procurement performance. This view is informed by stakeholder theory (Freeman, 1984), which suggest that public procurement has a myriad of stakeholders with varying interests that should be properly identified and managed when making procurement decisions. The present study advances this view by recognizing the relevance or significance of the various stakeholders of an organization and the need for these stakeholders' involvement in developing and implementing effective procurement plans that drive procurement performance.



**Figure 1. 1:** The Conceptual Framework portraying the indirect effect of procurement planning on procurement performance through stakeholder involvement

*Note: \*\*\*P < 0.01*

### 1.9 Chapter Summary

Chapter 1 begins with an introduction to the background of the study, followed by the statement of the problem. It then describes the purpose of the study, study objectives, research questions, scope of the study, the significance of the study, and the conceptual framework illustrating how procurement planning directly and indirectly influences procurement performance through stakeholder involvement. This chapter is followed by a review of empirical literature.

The findings indicated planning enhances value for money, enhance quality, encourages proper utilization of resources, planning enables quick decision making and encourages innovations as it is a problem-solving technique and saves time. Therefore



## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter presents the operational definitions of the research variables, including procurement planning, stakeholder involvement and procurement performance. The chapter further illustrates how stakeholder theory as the major theoretical underpinning of this study related procurement planning and stakeholder involvement with procurement performance in the realm of public entities. In addition, this chapter presents the review of relevant literature regarding the association of procurement planning and procurement performance; stakeholder involvement and procurement performance, procurement planning with stakeholder involvement; and the overall mediating role of stakeholder involvement on procurement planning and procurement performance while integrating the literature gaps.

### **2.2 Operational definitions of the research variables**

#### **2.2.1 Procurement planning**

The concept of procurement planning has attracted varied definitions in the procurement management literature. For example, Nzimande and Padayachee (2017) describe procurement planning as a sequence that explains and answers the questions of what, when, how and which materials/services need to be procured at a given time. Procurement planning is also described as the procedure for choosing which organizational requirements may be fulfilled by buying products and services outside the organization (Rendon & Rendon, 2016). Procurement planning can also be defined according to Lynch (2018) as the process of determining what to procure, when and from what source. Choosing whether to produce or procure, what to purchase, how to purchase, what quantity to acquire, and how often to purchase are all part of this process (Rendon & Rendon, 2016). In literature, procurement planning has been measured differently by different scholars, and these measures are largely dependent upon the context of the study. For example, Salim and Kitheka (2019) measured procurement planning in the

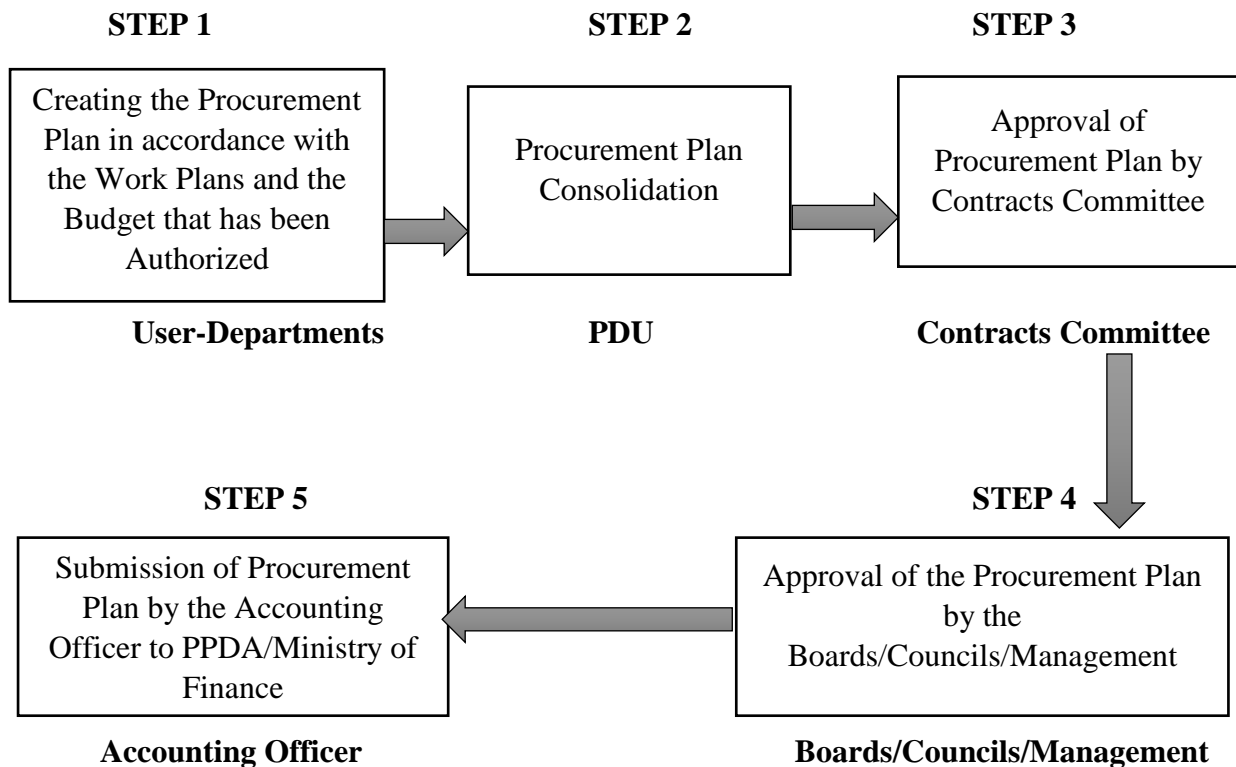
context of state-owned corporations using needs identification, needs specification, procurement method, budget and cost estimation. Willy and Njeru (2014) measures procurement planning still in the state corporations using procurement portfolio management, adherence to procurement plan and logistics management. Chagalima et al. (2020) measures procurement planning in the setting of local governments using the constructs of user-department involvement, budget adequacy, and adherence to the laws and guidelines. Anane and Kwarteng (2019) defines procurement planning using transparency, procurement procedures and procurement policies. Hamza et al. (2017) studied Procurement planning using the dimensions of needs identification, participatory planning, procurement plan adherence, and timely procurement.

Basheka (2008) conceptualises procurement planning in the context of local governments into procurement planning process, procurement planning practices, procurement planning user-department involvement, and procurement planning value. These four constructs of procurement planning were derived by Basheka (2008) from the Public Procurement and Disposal of Public Asset Act (PPDA Act, 2003) and its subsequent Regulation of (2006). Therefore, this study focuses on the activities conducted during the procurement planning process that includes among others resource scheduling and allocation, initiation of procurement, development of procurement requirements/specification, selection of the procurement method, and consolidation of procurement as provided by the PPDA Act 2003 (as amended) and the governing Regulations. In this study, procurement planning was measured with 14 Items adopted from Basheka (2008).

### **Procurement planning process**

The term "procurement planning process" refers to the series of phases and associated activities that begin when the user-departments identify their procurement needs as described in (Section 58 of the PPDA Act 2003 (as amended)).

These procurement planning steps are five in number and they are intertwined. These steps are regarded as either inputs or outputs towards the achievement of procurement objectives. These five include; the consolidation of the procurement plans, acceptance of the procurement plan by the contracts committee, and preparation of the procurement plan in accordance with the approved work plan and budget as seen in Figure 2 on the next page.



**Figure 2.1: Procurement planning process**

**Source:** PPDA Act (2003- Revised 2014 & 2021)

### 2.2.2 Stakeholder involvement

These days’ stakeholder involvement is a critical concept in public procurement. Stakeholder involvement means the integration of groups, individual, or organizations with influence and interest in procurement/organizational decision making (Holma et al., 2020). Or, stakeholder involvement relates to the procedures through which an organization gets to interact with their stakeholder’s groups (Demirkesen & Reinhardt, 2021). The main purpose of involving stakeholders in public procurement is to reduce chance of stakeholder resistance to the

organizational decisions (Klijn et al., 2020; Demirkesen & Reinhardt, 2021). This is because Public institutions operate in an environment with many stakeholders having varying interests and influence over procurement decisions. These stakeholders are categorized as either internal or external stakeholders (Holma et al., 2020). The internal/primary stakeholders are those groups/individuals who have a direct participation in the procurement decisions, and they may impact or be impacted by the decisions made about the purchase. However, the company cannot continue operating without their continued participation (Branco & Rodrigues, 2007). These internal stakeholders include; the contracts committee, the accounting professional, the user-departments, the evaluation committee, the legal professionals, the accountant, the budgeting team, top management, the procurement entity, the procurement unit, auditors among others mention but a few (Dacha & Juma, 2018; Marius, 2017; Changalima, 2020). Whereas, External/secondary stakeholders are groups or individuals that impact or are impacted by the procurement decisions, but they are not directly engaged in procurement transaction of the procuring entity (Branco & Rodrigues, 2007). These external stakeholders may include; the suppliers/contractors/vendors, PPDA, end-customers/clients, government agencies, NGOs, and the media (CIPS, 2020). These stakeholders need to be properly identified and managed, although stakeholder management is not easy because stakeholders have varying interests, and therefore procurement practitioners need to balance by serving the interests of the stakeholders, while coordinating these initiatives with the strategic goals of the purchasing institution (Holma et al., 2020).

Stakeholder involvement in procurement planning has been studied using consultations, decision making, knowledge sharing, communication, feedback (Yee et al., 2010; Luyet et al., 2012). Therefore, in this research, stakeholder involvement in public procurement is conceived in terms of decision making, consultation and task participation (Morgan, 2015; Gaspar et al., 2014; Luyet et al., 2012; Yee, 2010). The stakeholders included in this study were the

Accounting Officer, Procurement Professionals, Inventory Staff, Contracts Committee Members, Evaluation Committee Members, Legal Team, Internal Auditors, Heads of User-Departments, Economists, Engineers, Environmentalist and Sociologists.

### **2.2.3 Procurement performance**

Measuring procurement performance in most organization is dependent on how well-established the procurement department is. For instance, entities where the procurement is perceived as a clerical activity tend to focus more on the efficiency measure of procurement performance, while in organizations where procurement department is regard as a strategic function tend to focus on both the efficiency and effectiveness measure of procurement performance (Kumar et al., 2005).

Procurement performance is defined as the degree to which the procurement function of an organization is in position to actualize its intended goals using a minimum organizational resource (Kumar et al., 2005). Procurement performance has been measured using different dimensions by different scholars. This is because it is difficult to measure procurement performance in individual areas, and this has made authors to use their own opinions when measuring procurement performance since there is no coherent method for measuring procurement performance (Kumar et al., 2005).

For instance, Flynn (2018) in Europe measures procurement performance using value for money by focusing on six indicators that include; number of bidders, demand aggregation, open advertising, kind of award criteria, information reporting and the speed of decision making. Patrucco et al. (2016) measures procurement performance using cost, product quality, timely delivery, sustainability, compliance, accuracy, innovation, and internal customer satisfaction. Komatina et al. (2019) used purchasing ratio, profit centre, budgetary control, vender rating, purchasing audit, and cost accounting to measure procurement performance.

Moretto and Ronchi (2017) conceptualizes procurement performance by suggesting six indicators of cost, time, quality, flexibility, innovation and sustainability.

Farmer and Weele (2000) as cited in Kumar et al. (2005) suggest four dimensions to measure procurement performance, that is; price/cost, product/quality, logistics/timely delivery. They later categorised these four measures in the two categories of “effectiveness” and “efficiency” that are commonly used in procurement literature. Other scholars like; Kakwezi and Nyeko (2019) in Uganda suggest that being effective, and efficient are rightful indicators of procurement performance. Saad et al. (2016) have also measured procurement performance using effectiveness and efficiency. Caniato et al. (2014) proposes efficiency and effectiveness as measures of procurement performance.

Therefore, reflecting on the available literature on the definition of procurement performance, this study adopts “effectiveness”, “efficiency”, and “economy” as the three major dimensions to measure procurement performance (Value for Money Model (VFM, 1997). “Effectiveness” is concerned with degree at which the procurement goals have been accomplished by focusing on the results; “Efficiency” is related to improving productivity/the relationship between inputs and outputs/ doing thing right (Kakwezi & Nyeko, 2019; Kalubanga et al., 2013), while “economy” means minimising the whole lifecycle cost of every procurement activity (Kalubanga et al., 2013). These three measures of efficiency, effectiveness and economy were of choice because in public entities, the most commonly used measure of procurement performance is efficiency, effectiveness and economy since public organizations operate on budget constraints.

### **2.3 Stakeholder Theory**

This study was anchored on stakeholder theory (Freeman 1984). Stakeholder theory was considered appropriate due to the fact that, procurement institutions are perceived as a system

having a myriad of groups, individuals or organizations/institutional actors who can directly/indirectly affect or be affected by the procurement decisions of an entity (Holma et al., 2020).

Stakeholder theory was introduced by Freeman (1984) in his seminal work in the strategic management literature. The central idea of stakeholder theory was grounded on the notion that a company's success depends on how effectively it manages its connections with key stakeholder groups, including shareholders, communities, management, customers/clients, suppliers, employees, and financiers, among others that might influence the accomplishment of the organization's goals. (Freeman, 1984). For instance, procurement in public entities requires involvement of key stakeholders like; top management, user-departments, evaluation committee, contract committee, end-users, PPDA, accounting officers, politician, solicitor general in complex procurements/situations with far-reaching impacts may warrant a high level of proactive stakeholder involvement to avoid future problems that may impact on procurement performance (Donaldson & Preston, 1995). Conversely, it is typically inappropriate for stakeholders to participate in problem-solving rather than minor decisions or emergencies.

According to Patton's (2008) development of the stakeholder theory, there is no predetermined order of importance for one set of interests and advantages over another, and all individuals or groups with genuine interests who participate in organizational choices do so in order to gain benefits. In their research on the involvement of stakeholders and the effectiveness/character of the processes of procurement, Dacha, Juma, and Marius (2018) and Marius (2017) stressed the significance of the connection between the procurement stakeholders and procurement performance utilizing stakeholder theory. Particularly, procurement managers and practitioners should be aware that the involvement of numerous stakeholders can significantly have an implication on the performance of procurement (Holma et al., 2020).

The participation of key procurement stakeholders will always depend on the relationship that is being fostered by the top management of the organization including the procurement managers and the junior workers acting on the behalf of the organization. Therefore, if an organization promotes within its procurement process the participation of stakeholders, then their inclusion when making decisions ultimately leads to stakeholders having a positive perception of the bought goods and services as opposed to things that are being forced onto them (Dacha et al., 2018). Stakeholder theory consequently aids in understanding the connection between stakeholder involvement, procurement planning, and performance of procurement function within the realm of public sector procurement by improving efficiency, economy and effectiveness.

## **2.4 Research Hypotheses**

### **2.4.1 Procurement planning and procurement performance**

The available literature suggests that planning for procurement activities is the key antecedent of procurement performance. For example, Chepkesis and Keitany (2018) studied procurement planning and supplier performance, and found that procurement planning process is associated with enhanced value for money, time saving, improved product quality and efficient utilization of resource in Kenya. Nzimande and Padayachee (2017) in their study on evaluating the current procurement planning process in south Africa, it was posited that although procurement planning under normal circumstances is associated with availing services and goods in quantities that are accurate, and at the right time, ineffective procurement planning makes organizations to always experience great limitations when making purchasing choices, such as, what to buy, places to buy and how to buy. They further added that failing to implement procurement plans causes wasteful expenditure, and unauthorized irregularities that undermines procurement performance and overall service delivery.



In a study conducted in Wakiso district by Assimwe (2022) regarding the influence of procurement planning on performance of Local governments in Uganda, a sample size of 48 respondents, including representatives from the Contracts committee, NGO forum, Procurement Departmental Units, Suppliers and vendors, District council members, respective Heads of departments, and District chairperson, were chosen to be a representative sample for the study. The study took a cross-sectional approach on a population of 55 respondents. Results obtained from a response rate of 93.7% demonstrated a positive association between local government performance and procurement planning. In order to give the PDU enough time to execute and complete the procurement process on time to improve performance targets, the study advised user departments and technical teams to communicate work plans and procurement plans.

Ogwang and Wawelu (2017) used the Game theory and resource-based theory as the foundation for their research conducted on the impact of procurement planning on the performance of Kisumu Water and Sewerage Company (KIWASCO). The study population, made up of the 128 middle level managers, procurement officers, division heads, and supervisors working at KIWASCO, was studied using a survey research design. The aforementioned demographic was sampled using a stratified random sampling approach to provide a sample of 57 respondents. The study discovered a significant correlation between organizational performance and all aspects of procurement planning, including procurement needs and transparency in procurement. The study also discovered that the sole factor that significantly affected KIWASCO's success was openness procurement during the execution of procurement activities.

A study on the impact of procurement practices on the execution of public construction projects through stakeholder involvement was done in Sironko (Wofuma, 2021), the study used 132

public constructions as a representative sample in a cross-sectional quantitative research design. A closed-ended structured questionnaire was utilized in the study to collect data. All of the studied variables were positively associated, as per the results of the correlation analysis. The findings of the regression analysis also showed that the performance of building projects was considerably impacted by procurement planning. The report advised that as a key strategy for boosting the performance of public building projects, stakeholder engagement be adopted by all public procuring agencies.

Namukasa (2017) established that procurement planning is a critical activity that contributes to the realization of procurement objectives because procurement planning encompasses the concept of categorizing and combining requirements, which includes figuring out when to make purchases with the intention of getting the most value. Aimable et al. (2019) conducted a study in Rwanda to investigate how value for money was attributed to procurement planning. The study discovered that choosing the best procurement strategies greatly impacted the selected district's value for money in Rwanda. Bienhaus and Haddud (2018) added that improper identification of needs is a primary aspect affecting the performance in terms of quality during purchase planning.

In another study by Zwikael (2009), it was established that procurement planning processes of activity definition and plan development significantly influence the cost, time and quality indicators of procurement performance but, managers don't put in enough time and effort to carry out the purchase planning procedures. Basheka (2008) looked at local government procurement systems in developing nations' planning and responsibility for purchases. The study found that procurement planning process of needs recognition, procurement plan consolidation, and procurement method selection significantly influence the efficient and effective performance of local governments in Uganda.

Salim and Kitheka (2019) investigated state-owned corporations' performance arising from procurement planning and established that identification of procurement needs significantly affected procurement performance in Kenya. Okello and Kihara (2019) studied government ministries' performance by looking at the role of the procurement lifecycle in Kenya. The investigation found a positive significant correlation between government ministry performance and procurement planning. The reason was that a setting a strategy for procurement plan, developing clear product and service specifications, and scheduling supplies helps in reducing costs and promoting efficient budget allocation. Whereas, Odero and Ayub (2017) conducted a study in western Kenya to investigate the influence of procurement practices used in sugar manufacturing entities in public institutions on procurement performance. Findings from the investigation highlighted that procurement planning had an insignificant and positive relationship with procurement performance. The implication was that approving procurement budgets, conducting needs assessment, following the procurement process, availing funds and conducting market analysis does not significantly impact on the efficiency and effectiveness of public procurement.

A study by Willy and Njeru (2014) investigated how agricultural development organizations in Nairobi, Kenya, planned and executed their purchases, and they discovered a favorable correlation between the two because good procurement plans results into the attainment of procurement goal and objectives in an efficient and effective manner. Danis and Kilonzo (2014) on procurement planning for resource allocation and procurement performance among financial institutions found that planning for resource allocation significantly affect procurement performance since resource balancing and allocation of adequate non-monetary and monetary resources influences the efficiency and effectiveness of procurement. Kiage (2013) investigated procurement planning and Kenya's Energy Ministry's procurement efficiency and asserted that resource allocation increases procurement performance because

appropriate confirmation and allocation of resources helps in making the procurement function more effective.

Although, the available literature agrees that procurement planning statistically influences procurement performance (Chepkesis & Keitany, 2018; Basheka, 2008; Nzimande and Padayachee, 2017), a study by Bienhaus and Haddud (2018), and Zwikael (2009) were done on construction projects and not procurement performance though it shared some measures with procurement performance. The studies of Nzimande and Padayachee (2017), and Basheka were conducted in the local government setting and not within the ministerial level. Research by Hamza et al. (2017) and Danis and Kilonzo (2014) were conducted in a manufacturing company, and banking sector respectively. Only 2–5 percent of public procurement funds, according to research conducted in Europe and other developing nations, are set aside for modernizing procurement planning procedures to assure quality performance (Doppelt, 2017). The impact of public sector procurement planning and performance is another factor that has received less attention in Uganda, except Basheka (2008) who studied procurement planning practices, but focused on accountability of local governments.

Consequently, based on the literature reviewed above, this study developed the first hypothesis ( $H_1$ ), which stated that;

*$H_1$ : There is a significant direct relationship between procurement planning and procurement performance.*

#### **2.4.2 Stakeholder Involvement and Procurement Performance**

With regard to public procurement, stakeholders are groups/persons/individuals or organizations who can be affected or those parties that can affect the procurement actions/decisions of the organization either positively/negatively (Wayne Gould, 2012). These stakeholders are vast in nature, and they vary according to the organization but at a general

organizational level, they include; among others, the executive board, investors, management, analysts, customers, workers, suppliers, and the general public. In the procurement organization, the key stakeholders may include; the PDDA, accounting officer, User-departments, contracts committee, evaluation committee, politicians, technical teams, solicitor general's office, MoFPED, among others mention but a few. These procurement stakeholders have varying interests in public procurement and therefore, need to be involved in any public procurement.

The implication is that stakeholder involvement is a critical determinant of procurement performance. For instance, research done by Aduda et al. (2020) regarding the influence of stakeholder participation on the procurement effectiveness of pre-schools learning and teaching materials in Kenya discovered that the approach of stakeholder collaboration significantly and positively impacted procurement effectiveness. The study also established that an approach of stakeholder participation had a weak significant and positive influence on effectiveness of the procurement function. However, the study found an insignificant relationship between stakeholder's consultative approaches with procurement effectiveness. The positive relationships exist because stakeholder participation increases collaborative planning, responsibility sharing, decision-making, bargaining for efficient procurement costs, and ushering a positive engagement in strategic buyer-supplier alliance that leads to enhanced procurement effectiveness (Aduda et al., 2020). The study further claimed that stakeholders may be a valuable resource for sharing information, ideas, and support in creating a procurement request as well as procurement implementation (Aduda et al., 2020).

A study on the impact of procurement practices on the execution of public construction projects through stakeholder involvement was done in Sironko (Wofuma, 2021), the study used 132 public constructions as a representative sample in a cross-sectional quantitative research

design. A closed-ended structured questionnaire was utilized in the study to collect data. All of the studied variables had a positive link, according to the results of the correlation analysis. The findings of the regression analysis also showed that the performance of building projects was considerably impacted by stakeholder participation. The report advised that as a key strategy for boosting the performance of public building projects, stakeholder engagement be adopted by all public procuring agencies.

In a study by Gatobu (2020) on the influence of procurement process on Kenya's public institutions' performance. It was suggested that the user departments' active participation and cooperation with the organization's procurement function is crucial to public procurement effectiveness and efficacy. The reason is that involving the user-departments as key internal stakeholders in procurement planning and specification development facilitates the establishment of a robust link among the procurement stakeholders to ensure that the most critical elements/function in the procurement process are accomplished in a responsive and timely manner (Gatobu, 2020).

According to Ataseven and Nair (2017), a meta-analysis of the literature on integration of supply chain and performance linkages revealed that stakeholder inclusion or involvement directly impacts the firm's financial performance. Therefore, it was emphasized that from the standpoint of the procurement department, it is crucial to mutually include/integrate external and internal stakeholders within the processes of procurement since internal stakeholder engagement offers ground for the organisation to operate collectively in unison while external stakeholder involvement emphasizes the significance of carrying out procurement activities/practices together with customers and suppliers. Stakeholder management, according to Tamakloe and Agbenyega (2017), is crucial for fostering efficient and effective public procurement.

Moreover, a recent study made in Tanzania by Changalima et al. (2020) regarding the influence of procurement planning on efficiency of public procurement, it was discovered that user departments' participation in procurement planning as one of the most significant institutional actors offer a significant contribution in enhancing the efficiency of public procurement within the local government setting. The evidence for this claim was backed up and expanded upon by CIPS (2020) which ascertained that promoting a positive engagement with procurement stakeholders improves the quality of the conclusion of the procurement process because, after communication has taken place, stakeholders can offer support, vital information that is occasionally concealed from the general public, and crucial information. Organizations were warned that while identifying and involving stakeholders is crucial, issues could occur if those stakeholders are not accurately identified and included in the procurement process (CIPS, 2020).

Nzovila et al. (2019) investigated performance of Kenyan universities' supply chains and end-user involvement and established that End-user involvement in procurement planning and specification development significantly improves quality, price and lead-time supply chain performance. In a study by Komakech and Machyo (2015) on public procurement reforms in secondary Schools in Uganda suggested that in any public procurement process and particularly procurement planning, user-departments are the internal key stakeholders of procurement and are the ones to initiate procurement by identifying their procurement needs, fills and submits the purchasing requisition to procurement department specifying the items to be procured. They therefore argued that sufficient involvement of user-departments facilitates a grasp of the procurement operations as well as a clear understanding of the complex relationships regarding materials and want information is require thus improving procurement performance. Walker et al. (2013) equally asserted that for the procurement process and

particularly procurement planning to be successful, there should be maximum support from the key stakeholders especially the user-departments and the entire top management.

In Uganda, Basheka (2009) examined local governance in the perspective of procurement planning. With the aid of a factor analysis approach, he claimed that improving public procurement performance calls for careful attention from all stakeholders in the field. The reason is that public procurement has a sizable budget allotted to it, and if this budget is managed efficiently and effectively, then service delivery will be enriched and it also offers accountability to people who pay taxes. Basheka (2008) also looked at systems of local government procurement by assessing their accountability and procurement planning. The study discovered that both procurement planning and user-department involvement significantly impacted the efficient and effective operation of state-owned organizations. The idea is that user-departments are key in facilitating orderly execution of procurement activities through recognizing their procurement needs, initiating the procurement requirements, preparing procurement work plans, seeking technical assistance on procurement planning, and submission of procurement requirements to the PDU. He therefore, concluded that since public procurement is a specific segment that requires close consideration from every stakeholder in the supply chain to enhance performance even though public procurement has a large budget, and if this expenditure is managed effectively and efficiently, then there will be better delivery of services and it is one way to be able to take responsibility to the tax payers.

Arrowsmith (2003) studied public procurement; the continuing revolution, and supported the argument the association of procurement planning and stakeholder involvement by suggesting that public procurement is a partnership involving a myriad of stakeholders (public and commercial sectors), and that the procurement system might not work if simply one of the stakeholders is interconnected and effective during public procurement. This implies that



stakeholder's involvement is crucial in propelling procurement performance. However, Klijn et al. (2020), Komakech and Machyo (2015), and Sarah et al. (2015) argued that lack of stakeholder involvement especially the user-department and the heads of unit in procurement planning is responsible for poor procurement performance because inadequate stakeholder involvement leads to more resistance to organizational decisions.

Despite the available literature associating stakeholder involvement with procurement performance, most research undertakings (e.g. Holma et al., 2020; Chungalima et al., 2020; Dacha & Juma, 2018) have merely relied on the influence of user-department on procurement efficiency, yet user-departments constitutes a small part of the internal stakeholders, and ignored other stakeholders like the top management, evaluation committee, contracts committee, technical teams, finance and PPDA that can equally influence procurement performance since public procurement has a myriad of both internal and external stakeholders whose interests must also be integrated in public procurement. Regarding stakeholder involvement, a study by Johnsen (2016) departs from other scholars who support the idea of stakeholder involvement in procurement within public entities (e.g. Aduda et al., 2020; Nzovila et al., 2019) by arguing that in public procurement process, involving many stakeholders complicates the specification development, thus jeopardising procurement performance.

Other studies have relied on organizational performance (Gatobu, 2020; Chungalima et al., 2020), and others are limited to service delivery (Basheka 2008; Komakech & Machyo 2015) and supply chain performance (Nzovilz et al., 2019) although these variables share the measures with procurement performance, there results can only be considered with caution. Therefore, there was need to bridge the available breaches within the procurement management literature through further examination of stakeholder involvement's influence on procurement performance.

Hence, the second hypothesis, which stated that;

*H<sub>2</sub>: Stakeholder involvement has a significant direct relationship with procurement performance.*

### **2.4.3 Procurement Planning and Stakeholder Involvement**

In the context of procurement, stakeholder involvement is fundamental when conducting public procurement, but their level of involvement is highly dependent upon procurement planning. For example, Dacha and Juma (2018) in Kenya investigated stakeholder involvement on the performance of the acquisition process and made the argument that the supply chain of an institution is directly concerned about making procurement actions on behalf of the consumers and that proper product should be focused on meeting the end user's requirements. This backs up Gordon's (2009) claim that since there are so many parties involved in organizational activities, efforts must be made to give assurance of all party's complete satisfaction when involved within the processes of procurement. To do this, it is important to focus not only on the end users, user departments, or customers of the products, but also on other parties involved, such as the distributors whose products are used by the end users, user departments, or customers (Gordon, 2009).

Glomsås et al. (2021) in their research on involvement of ageing service users in welfare technologies in public homes revealed that there is a requirement for end-user involvement by the procuring entity when it is to acquire products or services that truly suit service user demands. Onchiri and Kwasire (2016) posits that during procurement planning, the procurement department is also directly involved in internal consultations and advising user-department/procurement stakeholders on the procurement activities, and cross-functional communication about product procurement decisions and actual product purchase. According to Care (2011) involving stakeholders in service selection may increase procurement users'

satisfaction as well as work quality, health responsiveness, and user friendliness when they are involved in procurement decisions.

In the pre-tender/procurement planning stage of public procurement, Holma et al. (2020) explored service specification: A triadic approach of purposeful involvement in Finland. The study stressed that procurement unit is concerned with working on modalities for stakeholder involvement in procurement planning/pre-tender phase, and how the co-development of services/products is to be implemented. The study further added that given the fact that stakeholders that participate in procurement planning occasionally may not be aware of the expectations for their roles and contributions in the process of procurement, it is imperative to spell out the proper role for the stakeholders and define the techniques or modes of collaborative activities. In order to avoid confusion, the procurement unit (PU) must define the contributions and responsibilities of each stakeholder before beginning the real co-execution of public procurement (Holma et al., 2020).

Haensel et al. (2018) examined an integrated strategy for the selection and assessment of business services from the viewpoint of the buyer, and found that involving/integrating stakeholders like internal customers or user-departments and service providers in procurement is positively related to service outcomes. The reason behind it is elaborated by works of Holma et al. (2020), who argued that involving stakeholders in procurement planning phase is crucial for building meaningful stakeholder participation that meets both the needs of the final client and the long-term strategic goals of the business. Determining cooperative roles and procedures that are appropriate for the current procurement circumstance requires genuine stakeholder input.

Basheka (2008; 2009) studied procurement planning and local governance in Uganda. The findings revealed that involving and consulting key procurement stakeholders is a critical factor

for local governments because procurement is a section requiring proper consideration from each stakeholder to enhance performance given a huge budget allocated to procurement, the scholar also argued that there is improved service delivery if the procurement money is managed responsibly. He further added that government activities like; procurement planning requires stakeholder participation to succeed because stakeholder involvement/participation promotes accountability in public procurement by ensuring that public resources are being utilized for the common interest (Basheka, 2009).

Arrowsmith (2003) studied public procurement; the continuing revolution, and supported the argument the association of procurement planning and stakeholder involvement by suggesting that public procurement is a partnership involving a myriad of stakeholders (private and public sector), and that the public purchasing system may not function well if just one of the parties is involved and active during the process. This implies that stakeholder's involvement is crucial in propelling procurement performance.

Despite the available literature pointing out that stakeholder involvement and Public procurement are positively correlated, there is lack of empirical studies regarding the actual relationship between procurement planning and stakeholder involvement. For instance, a study by Dacha and Juma (2018) used stakeholder participation as the independent variable and regressed it against procurement efficiency in Kenya. A study by Glomsås et al. (2021) was limited to service user-involvement in the health sector in developed countries but not procurement planning. In addition, a study by Basheka (2009) over dwelled on governance accountability in local government in Uganda and not how procurement planning directly influence stakeholder involvement. Schiavo-Campo and Sundaram (2000) argued that stakeholder participation in public entities is often narrowly conceived as merely receiving

feedback from recipients of public programs, but the idea has since been expanded to incorporate stakeholder involvement in the up-stream activities/procurement planning.

Therefore, in that regard a third hypothesis was developed, which stated that;

*H<sub>3</sub>: There is a significant direct relationship between Procurement planning and stakeholder involvement.*

#### **2.4.4 The mediation effect of stakeholder involvement in the relationship between procurement Planning and Procurement Performance**

The available literature regarding the direct association of procurement planning and procurement performance seem to suggest that there is a positive significant relationship between procurement planning and procurement performance (Changalima et al., 2020; Chepkesis & Keitany, 2018; Bienhaus & Haddud, 2018; Basheka, 2008).

For example, Changalima et al. (2020) posited that effective procurement planning highly determines the effectiveness of public procurement. Chepkesis and Keitany (2018) indicated that procurement planning is associated with enhanced value for money, time saving, improved product quality and efficient utilization of resource. Nzimande and Padayachee (2017) noted that firms frequently encounter difficulties making purchasing decisions. The scholars noted that firms face difficulties on when, where, and how to purchase in the absence of efficient procurement planning because it represents an important tool in the organization's budgeting activities. Zwikael (2009) suggested that procurement planning in terms of activity definition and plan development significantly influences the cost, time and quality indicators of procurement performance but managers underinvest in the processes of procurement planning. Bienhaus and Haddud, (2018) added that improper identification of needs during procurement planning is a primary factor affecting high-quality performance. Basheka (2008) conducted yet another study on municipal governments in developing nations' procurement strategy and

accountability and established that procurement planning processes of needs recognition, procurement plan consolidation, and procurement method selection significantly influence the efficient and effective performance of local governments in Uganda.

However, there are contradictory findings regarding the direct effect of procurement planning and public procurement performance (Odero & Ayub, 2017; Chepkesis & Keitany, 2018). This implies that the direct association of procurement planning and procurement performance remains incomplete or unexplained without establishing the underlying mechanisms through which procurement planning influences procurement performance. Therefore, to bridge the existing gaps, the study proposes stakeholder involvement as a potential mediator/third process variable to help us in fully explaining “why” and “how” procurement planning influence procurement performance.

The justification for using stakeholder involvement as a potential mediator is that previous scholars have argued that stakeholder involvement significantly influences procurement performance. For example, Aduda et al. (2020) posits that stakeholder participation improves decision-making, negotiation for efficient procurement costs, cooperative planning, sharing of duties, introducing a close interaction in sustainable buyer-supplier relationship, and procurement effectiveness. Gatobu (2020) claims that when internal and external parties are involved in the planning of the purchase and specification development, the most critical elements/function in the procurement process are accomplished in a responsive and timely manner. Nzovila et al. (2019) proposes that stakeholder involvement in procurement planning and specification development significantly improves product quality, price and lead-time procurement performance.

There is a clear connection between procurement planning, procurement performance, and stakeholder involvement, according to a study done by Wofuma (2021) on the influence of

procurement planning on the effectiveness of public construction projects through stakeholder involvement in Sironko District, the study used a cross-sectional quantitative research design to choose 132 public staff members as a representative sample. The study used a closed-ended organized questionnaire to collect data. The findings from the correlational analysis suggested that there was a strong positive association between all of the research variables. The study also ultimately determined that the procurement performance of the project and procurement planning were significantly mediated by stakeholder involvement. The report indicated that as a key strategy for improving the performance of public building projects, all public procuring institutions should adopt the notion of stakeholder involvement. However, the study was not carried out at NWSC. This therefore creates a gap requiring further investigation.

Therefore, based on the prior mentioned direct relationships between procurement planning and performance of the procurement function, it was likely that stakeholder involvement would mediate procurement planning and procurement performance, and hence we developed the fourth hypothesis:

*(H<sub>4</sub>); Procurement planning influences procurement performances indirectly through its effects on stakeholder involvement.*

## **2.5 Chapter Summary**

Chapter 2 presents a review of the literature connecting procurement planning, and stakeholder involvement to procurement performance. It elucidates how stakeholder theory is related to procurement planning, stakeholder involvement and procurement performance in the realm of public entities. This chapter is followed by research methodology.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.0 Introduction**

The study's research methodology is presented in this chapter. The chapter discusses the chosen research design, the population for the study, the sample size, the sampling method, the data collection tool, the data quality control, the procedure for data collection, the data analysis techniques, the measurement of study variables, the diagnostic tests, ethical considerations, and anticipated limitations.

### **3.1 Research design**

The study used a cross-sectional survey design. The cross-sectional survey relates to the process of collecting, analysing and presenting data at one point in time (Creswell & Creswell, 2017). This approach was preferred because it enabled the researcher to conduct a one point in time investigation on the relationship between procurement planning, stakeholder involvement and procurement performance without manipulating the variables. The design also supported an approach of quantitative research (Creswell, 2009). Therefore, quantifiable data was sought to quantify and establish the magnitude of the influence that predictor variables transferred on the outcome variable.

### **3.2 Target study population**

NWSC (2021) highlights that all its 263 Area town centres report at NWSC Head Office in Kampala. Owing to the centralized nature of purchasing decisions at NWSC, procurement is made at the Head Office in Kampala or at specific regional levels (NWSC corporate plan, 2021/2024). This study took on a population of employees at NWSC's Head Office owing to the fact that other divisional and regional employees report to senior employees at the Head Office, implying that regional staff were represented by officers they report to. The study population therefore comprised of 174 employees working at NWSC's Head Office in



Kampala. According to NWSC Human Resource Directorate (2020) there were 174 employees who are directly/indirectly involved in procurement of goods, services and works. These employees included the Accounting officer, Procurement professionals, Inventory officers, heads of user- departments, legal team, members of contracts committee, internal auditors, economists, engineers, environmentalists and sociologists as depicted in Table 3.1, on the next page.

**Table 3.1: Study Target population and sample size and sampling technique**

<b>Staff Category</b>	<b>Target Population</b>	<b>Sample Size</b>	<b>Sampling Technique</b>
Accounting officer	01	01	Purposive sampling
Procurement professionals	25	24	Simple random
Inventory staff	45	40	Simple random
Contracts committee members	05	05	Purposive
Evaluation committee members	05	05	Purposive
Legal team	06	06	Purposive
Internal auditors	10	10	Purposive
Heads of user- Departments	20	19	Simple random
Economists	07	07	Purposive
Engineers	45	40	Simple random
Environmentalists and sociologists	05	05	Purposive
<b>Total</b>	<b>174</b>	<b>162</b>	

**Source: NWSC Human Resource Directorate, 09<sup>th</sup> March, 2020.**

### **3.3 Sample size determination**

The study considered a sample size of 162 employees based on Krejcie and Morgan (1970) table for sample size determination (See. Table 1). Sampling implies selecting a subgroup of the events/phenomenon to be representative of the total population (Babbie, 2005). Sampling

is preferred since studying the entire population would be time-consuming, challenging, and expensive for the researcher. (Babbie, 2005).

### **3.4 Unit of Analysis and Unit of Inquiry**

Cavana et al. (2001) defines "unit of analysis" as the subjects or entities whose attributes are measured. Sedgwick (2014) statistically gave his view that the term "Unit of Analysis" describes the "what" or "who" for which data is evaluated and judgments is drawn. The unit of analysis for this particular study was NWSC Head Office, Kampala. On the other hand, the Unit of Inquiry referred to by Morin, Olsson, Atikcan (2021) as the unit of observation or unit of data collection is statistically defined by Sedgwick (2014) as the "what" or "who" for which data is collected or measured. In this study, the Unit of Inquiry were the employees of NWSC who are part of procurement planning and procurement performance in Kampala. These are also regarded the key informants of the study and they included, the Accounting Officer, Procurement professionals, Inventory staff, Contracts committee members, Evaluation committee members, Legal team, Internal auditors, Heads of user- Departments, Economists, Engineers, Environmentalist and sociologists.

### **3.5 Sampling technique**

Simple random sampling techniques involves giving all respondents an equal chance of being selected to represent the study (Saunders & Bezzina, 2015). Simple random sampling was considered because it gave 162 respondents working at the Head Office who represented NWSC's 263 area coverage an equal non-zero or independent chance of being selected as a member of the sample. Saunders and Bezzina (2015) also support that the aforesaid sampling technique is appropriate on larger samples, especially those exceeding 10 respondents. Simple random sampling was performed on larger target population by writing numbers ranging from 1-174 on small pieces of paper that were placed in a small box, and the targeted employees in

each category were requested to pick one at a go until the 162 employees were reached (See. Table 1). Purposive sampling was also used to select an Accounting officer, Environmentalist and sociologists, Contracts committee members, Evaluation committee members, Legal team, Internal auditors, and economists. Purposive sampling was used to select the mentioned respondents basing on the researcher's own judgment when choosing members of the population to participate in this research (Etikan, 2016). The researcher therefore selected research participants he thought were well informed about the study variables in question.

### **3.6 Data collection instrument**

A closed-ended questionnaire was employed to gather quantitative data for the study, which took the form of a survey. Data collection is the methodical process of gathering information on relevant variables in order to respond to the given research questions or hypotheses (Kabir, 2018).

#### **3.6.1 Questionnaire instrument**

The study used the survey approach which involved using a survey to obtain quantitative primary data from the chosen respondents. A questionnaire is a research tool that includes a series of predetermined questions with the goal of gathering information from respondents (Amin, 2005). As supported by NWSC Human Resource Directorate (2020) which indicated that the provided 174 employees are directly/indirectly involved in procurement of goods, services and works, one questionnaire was designed to collect data from all respondents. Close-ended questions on a Likert scale of 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree) were included in the data collection tool. A Likert scale was used to capture clusters of responses as supported by Likert (1932) in his original paper, where he underscored that an infinite number of definable attitudes existing in a given person on a given phenomenon can possibly be grouped into "clusters" of responses. A five point Likert scale

was adapted as supported by Fernandez and Randall (1991) who highlighted that a five-point Likert scales provides an option for indecision or neutrality which reduces chances of response bias because given the neutral response option, responders do not favour one response over another.

In the above regard, the questionnaire was divided into four sections: Section A, which asked about the respondent's history, Section B, which asked about procurement planning, Section C, which asked about stakeholder involvement, and Section D, which asked about procurement performance. The respondents received instructions on how to answer the questions in each component of the survey. The questionnaire's summary by variable and item may be found in Table 3.2.

**Table 3.2: Summary of the questionnaire instrument**

Section	Variable	Dimensions	No. of Items
A	Respondent's Background Information		4
B	Procurement Planning		14
C	Stakeholder Involvement		15
D	Procurement Performance	<ul style="list-style-type: none"> <li>• Efficiency</li> <li>• Effectiveness</li> <li>• Economy</li> </ul>	5 5 5

**Source:** Literature review

### 3.7 Measurement of variables

Procurement planning was measured with 14 Items adopted from Basheka (2008). Stakeholder involvement was measured using a 15-Item Scale shortened form of the stakeholder participation questionnaire created by Nangoli *et al.* (2016) and Kanungo (1982). A 15-Item Scale that was adapted from Aimable *et al.* (2019), Kumar *et al.* (2005) and Farmer and Weele (2000) was used to gauge the concept of procurement performance. These were altered to fit the circumstances under NWSC in Uganda.

### **3.8 Data collection procedure**

After approval of the research proposal, the student was given an introductory formal letter as proof that he was a Kyambogo University student. Before distributing the questionnaires or carrying out any interview, the student presented the letter of approval to the organization's management. The researcher promised research participants complete confidentiality throughout the research project.

### **3.9 Validity and Reliability**

For quality assurance and maintenance, the study considered both reliability and validity.

#### **3.9.1 Validity**

The research instrument's validity was tested using Content Validity Index. Validity related to how the research instrument/tool measured the intended constructs (Amin, 2005). In this study, all the research instruments were validated by researcher's supervisors from the school of postgraduate studies, and other procurement professionals whose input was considered before the instrument was finally administered to their study sample. Through measuring content validity indices, each question on the questionnaire was rated by professionals regarding the Relevancy (R) or Irrelevancy (IR). Research items' averages yielded computations of Content Validity Index (CVI) that were above 0.700 threshold as illustrated in the computations below:

**Table 3.3: Content Validity**

Construct	Total number of items	Number of items rated as relevant	CVI
Respondent's bio data	4	3	(3/4)= <b>0.750</b>
Procurement Planning	14	13	(10/14) = <b>0.710</b>
Stakeholder Involvement	15	12	(12/15) = <b>0.800</b>
Procurement performance	15	11	(11/15) = <b>0.730</b>

The items used represented the study material and were pertinent to the issue under investigation because the CVI was higher than 0.700.

Factor analysis was also conducted so as to aid data interpretation and to lessen the number of variables (Hatcher, 1994). Statistically, the variability of observable, associated variables is described by factor analysis. Factor loadings derived from Factor analysis were used to compute the average variance extracted (AVE) (Brown, 2014). The AVE was employed because it compares the amount of variance caused by measurement error to the amount of variance that a concept captures (Dos Santos & Cirillo, 2021). Convergent Validity is informed by computations of the AVE as provided in following Table 3.4.

**Table 3.4: Convergent Validity**

<b>Item</b>	<b>Factor Loadings</b>	<b>AVE</b>	<b><math>\sqrt{\text{AVE}}</math> (DV)</b>
We consolidate the procurement plans	.830		
There is Preparation of combined work plan	.833		
There is matching of procurement to the available funds	.758		
We always review and update the procurement plan	.537		
Procurement plans are forwarded to the PDU	.753		
Approved procurement plan is circulated to the procurement users	.734		
We Prioritize the procurement requirements	.700		
The PDU agrees with User-departments/finance on cash allocation during procurement planning	.822		
Approval of the procurement plan is always obtained	.767		
The planned procurement expenditure is realistic and achievable	.729		
We determine the method of procurement to be used	.798		
We carry out market research to establish the market prices of good, service or works	.742	<b>0.568</b>	<b>0.753</b>
In this organization, stakeholders are consulted before procurement of goods, services and works	.790		
In this organization, stakeholders are consulted to identify the procurement needs	.788		
In this organization, stakeholders are consulted when developing procurement specifications	.778		
In this organization, stakeholders are consulted during procurement planning	.832		
In this organization, the ideas/views obtained from the stakeholders' consultations are integrated in the procurement plan	.788		
In this organization, stakeholders actively participate in developing the procurement budgets	.881		

In this organization, stakeholders participate in identifying and mobilizing financial resources to facilitate procurement	.812		
In this organization, stakeholders participate in planning for procurement schedules	.860		
In this organization, stakeholders participate in choosing the appropriate procurement method	.717		
In this organization, stakeholders are the ones to decide on the quality, quantity and the price of goods, services or works to be procured	.837		
In this organization, user-departments decide on what to include in their procurement plan	.740		
In this organization, stakeholders are given the right to make-decisions on goods and services to be acquired during the procurement planning process	.703	<b>0.632</b>	<b>0.794</b>
<hr/>			
The procurement unit always achieve the intended objectives	.729		
The procurement unit receives goods, services and works procured from suppliers/vendors/contractors on-time and as stipulated in the agreement	.770		
The procurement section provides a structure to assist procurement officials in carrying out their responsibilities.	.747		
The purchasing unit makes sure that, for any given set of resource inputs, its procurement processes yield the highest output.	.834		
The procurement unit decreases waste by utilizing resources as effectively as possible.	.809		
The procuring department pays suppliers for the best-priced and highest-quality goods, services, and works.	.770		
The procurement section strikes a balance between resource utilization and achieving the proper goals at a fair price.	.894		
The procurement section spends money sensibly and reasonably to get market exposure and compete.	.779		



The cost of the resources used and the value of the output received are factors that the procurement unit considers when making decisions.	.745		
The procurement section purchases personnel and supplies of the required caliber and standard at the most affordable price.	.849	<b>0.630</b>	<b>0.793</b>

According to Table 3.4, factor loadings and the average variance extracted (AVE) were tested to ascertain convergent validity. In this case, the values obtained for factor loadings and the average variance extracted (AVE) were within the acceptable ranges  $\geq 0.700$  and  $\geq 0.500$  respectively which demonstrates that the measure fulfills the criteria to be accepted (Hayes, 2018).

**Table 3. 5: Fornell - Larcker Criterion Analysis for Checking Discriminant Validity**

	Procurement Planning	Stakeholder Involvement	Procurement performance
Procurement planning	<b>0.753</b>		
Stakeholder involvement	.624	<b>0.793</b>	
Procurement Performance	.701	.641	<b>0.794</b>

According to Table 3.5, discriminant validity for the three constructs was also achieved as supported by Fornell and Larcker (1981) who acknowledged that discriminant validity is obtained when the square root of the AVE is greater than the correlation between the constructs. To begin with, the square root of AVE for procurement planning (0.753) is greater than the correlation coefficients for stakeholder involvement, and procurement performance which are .624 and .701 respectively. Similarly, the square root of AVE for stakeholder involvement (0.793) is greater than the correlation coefficients for procurement planning, and procurement performance which are 0.624 and 0.641 respectively. Lastly, the square root of AVE for procurement performance (0.794) is greater than the correlation coefficients for procurement planning, and stakeholder involvement which are 0.701 and 0.641 respectively. Therefore,

Table 5 shows the correlation of each construct as compared with the other types. Afterwards, on the diagonal, the square root of the AVE value was inserted in order to compare it with the other correlation coefficient (Fornell & Larcker, 1981).

### 3.9.2 Reliability

The coefficient alpha/ Cronbach's alpha was used to test for the reliability of the research instrument. Reliability is the extent to which the research instrument provides consistent findings upon repeated trials (Kothari, 2011). The research tool's reliability was guaranteed by pre-testing the research instrument in another similar study setting where the sample of collected questionnaires was tested using Cronbach's alpha coefficient and all items that scored a Cronbach's alpha coefficient above the required threshold of 0.700 were retained because it implied that the instrument was reliable for subsequent testing (Nunnaly & Bernstein, 1994).

**Table 3. 6: Reliability Statistics**

Variable List	Cronbach's Alpha	N of Items
Procurement Planning	.782	14
Stakeholder Involvement	.876	15
Procurement performance	.779	15

**Source: Field data, 2022**

The results showed that all constructs had Cronbach's alpha coefficients that were higher than the necessary cut-off point of 0.7, indicating that the research tool utilized in this research was trustworthy and suitable for generalization.

### 3.10 Data analysis

Data analysis is the practice of summarizing, clarifying, compressing, and analysing acquired data by applying statistical or logical methods (Hair et al., 2019). Data was obtained, entered

into the SPSS program version 20 for analysis, and then Process Macro, correlation, regression, and descriptive statistics were used.

### **3.10.1 Descriptive statistics**

Descriptive statistics were done to provide intuitions into the sample characteristics. Descriptive statistics are the procedures used to organize, summarize and make meaning of a list of numerical data (Cooksey, 2020). Descriptive statistics were applied on demographic profile of respondents like age, gender and level of education, and to describe the nature of responses.

### **3.10.2 Correlation analysis**

Due to the nature of the data gathered using a Likert scale, correlation analysis was carried out using the Spearman correlation coefficient. This was done with the intention of determining whether there existed a marginal or substantial association between stakeholder involvement, procurement planning and performance. Monica and Antonella (2019) support that a Correlation analysis is an appropriate method for determining the direction and strength of the variables under study.

### **3.10.3 Regression analysis**

Prior to generalization of study results to the complete study population, regression analysis was utilized to identify the variation in the outcome variable (procurement performance) as a function of the predictor variables (procurement planning and stakeholder involvement). This was rooted in the fact that a statistical method called regression analysis illustrates how variations in the predictor variable lead to changes in the outcome variable (Hair et al., 2019).

### **3.10.4 Process Macro**

In this study “Process Macro” was employed in determining the mediation role of “stakeholder involvement” on the relationship between procurement planning and performance of the

procurement function. This involved running four model to fulfil the conditions of mediation according to Hayes (2018). These four conditions include; there should be a significant relationship between the predictor variable and the outcome variable (Procurement Planning and Procurement Performance), the mediator variable and the dependent variable (Stakeholder Involvement and Procurement Performance), the predictor variable and the mediator variable (Procurement Planning and Stakeholder Involvement), and finally determining the decision criteria where (Stakeholder Involvement) can either be deduced to a partial mediator or a full mediator in the relationship between procurement planning and procurement performance.

### **3.11 Ethical considerations**

The study took ethical concerns in research into account. For instance, the study made sure to get the respondent's informed consent before collecting data. The researcher promised the participants that the data provided would be kept private and used solely for the purpose for which it was intended; for reasons of confidentiality, the identities of specific people and cultural details were withheld. Honesty was kept throughout the research project, especially when reporting results, procedures, and processes, to avoid data falsification, fabrication, or distortion. References were used to properly identify and credit any quoted material.

### **3.12 Chapter Summary**

Chapter three (3) offers a description of the methodology utilized to answer the research questions. It provides an overview of the research design, sampling strategy, questionnaires, data collection procedure, and data analysis strategy for the study. The chapter also elicits on the confirmatory factor analyses to ascertain the Validity of the study's research constructs.

## **CHAPTER FOUR: PRESENTATION, ANALYSIS AND INTERPRETATION OF RESULTS**

### **4.1 Introduction**

By considering NWSC in Uganda, the study sought to ascertain how procurement planning and stakeholder involvement linked to procurement performance. The analysis of data, presentation, and interpretation of the study's results are highlighted in this chapter. To address the specific research questions, the chapter begins by presenting the rate of response, then demographic statistics, and finally findings on correlation and regression.

### **4.2 Response rate**

Although 162 respondents were the intended sample size, not all of them took part. In Table 4.1, the study's response rate is shown.

**Table 4.1: Response rate**

<b>Category</b>	<b>Target No of Respondents</b>	<b>Realized No of Respondents</b>	<b>Percentage of response (%)</b>
Respondents	162	147	90.74%

**Source: Primary data, 2022**

The results presented in Table 4.1 above showed that 162 data collection instruments were targeted to be answered by respondents in the study and only 147 filled research instruments were returned which represented 90.74% as the rate of response. Therefore, the actual number of respondents was within the desired range. Over 70% of respondents are considered to be representative enough of the population, and that it correctly offers a reflection of results that the researcher would get when the whole sample was reached (Groves et al., 2009).

### 4.3 Demographic Characteristics of Respondents

The background information of research participants covered basically the age bracket, gender, education level, and work experience of respondents at NWSC. Table 4.2 summarizes the bio data as follows.

**Table 4. 2: Background Information**

<b>Variable List</b>	<b>Categories</b>	<b>Frequency</b>	<b>Percent</b>
<b>Gender</b>	Male	87	59.2
	Female	60	40.8
	Total	147	100.0
<b>Age Bracket</b>	20-29	27	18.4
	30-39	84	57.1
	40-49	33	22.4
	50 and above	3	2.0
	Total	147	100.0
<b>Education level</b>	Certificate	3	2.0
	Bachelors	84	57.1
	Diploma	6	4.1
	Post-graduate	54	36.7
	Total	147	100.0
<b>Work experience</b>	1-5	30	20.4
	6-10	72	49.0
	Above 10 years	45	30.6
	Total	147	100.0

**Source: Primary data, 2022**

According to the gender statistics, 40.8% of the population was female and 59.2% were men. Men made up the majority of the study's participants. This was possibly because NWSC has majority male employees as compared to women. Regarding participants' age brackets, majority of respondents (57.1%) constituted the age range of 30 to 39 years, this was accompanied by respondents aged 40 to 49 years by constituting 22.4%. Other research

participants aged 20 to 29 years constituted 18.4% of the respondents. The least participation was observed among the age bracket of 50 years and above with 2.0% of the total respondents, possibly due to the conditionality of retirement in public service for employees beyond 60 years.

Regarding the education level, the study shows that majority of participants (57.1%) had Bachelor's degrees. These were followed by respondents with Post-graduate qualifications with 36.7% of respondents. Diploma holders had a representation of 4.1% of the research respondents. Minority of respondents were certificate holders with a total of 2.0% of respondents. According to the statistics, degree holders were predominant in the study. This may have occurred because one of the minimal requirements for employment at NWSC is a degree.

As per respondents' work experience, the findings revealed that majority of research participants with 49.0% had worked at NWSC between 6-10 years. Coming after this were respondents with at least 10 years' worth of employment at NWSC with 30.6% of respondents. The least number of respondents constituting 20.4% had worked at NWSC for a period of 1-5 years. In due regard, having most of research participants within the brackets of 6-10 years was possibly because of the fact that NWSC has a good employee retention policy.

#### **4.4 Descriptive analysis**

The study described the characteristics and nature of the data regarding procurement planning, stakeholder involvement, and performance of the procurement function. The method was based on the dispersion (standard deviation) and central tendency (mean). The degree to which participant views regarding procurement planning, stakeholder involvement, and procurement performance were clustered was measured by the researcher using mean. The standard

deviation calculated the degree to which individual participant opinions varied from one another.

#### 4.4.1 Procurement planning

The respondents were asked to evaluate their degree of agreement with a series of statements regarding NWSC’s procurement planning. The responses were rated on a Likert scale with a maximum of five points. The range from 0 to 2.49 was considered "poor," 2.50 to 3.49 was considered "Average," and 3.50 to 5.00 was considered "strong" when interpreting the mean score. The responses' evaluations of procurement planning are given in Table 4.3.

**Table 4.3: Level of procurement planning**

Descriptions	N	Mean	Std. Deviation
We consolidate the procurement plans	147	4.69	.679
The creation of a joint work plan is ongoing.	147	4.27	.779
Procurement is done in accordance with the funds that are accessible.	147	4.16	.768
We always review and update the procurement plan	147	4.27	.779
Procurement plans are forwarded to the PDU	147	4.63	.693
Approved procurement plan is circulated to the procurement users	147	4.29	.884
The purchase requirements are given priority.	147	4.10	.842
The PDU approves the use of funds during procurement planning with user departments and finance.	147	3.86	1.034
The buying strategy is always approved.	147	4.49	.734
The procurement strategy is clearly developed, and determines how long it will take to complete the planning process in total.	147	4.31	.790
The budgeted purchase price is reasonable and attainable.	147	3.92	.925
We choose the buying strategy to be employed.	147	3.88	.827
The purchase requirements are given priority.	147	4.31	.816
We carry out market research to establish the market prices of good, service or works	147	4.08	.807
<b>Average:</b>		<b>4.23</b>	

**Source: Primary data, 2022**



Table 4.3 portrays the descriptive statistics on the perceived level of procurement planning at NWSC. The findings show an average mean of 4.23 which is above the threshold of 3 which was an indicator that majority of respondents strongly supported the notion of procurement planning activities at NWSC. The majority of respondents therefore acknowledged that NWSC consolidated the procurement plans (mean=4.69, std. =.679). The respondents also believed that procurement plans were forwarded to the PDU (mean=4.63, std. =.693). Besides, employees of NWSC also claimed that approval of the procurement plan was always obtained at the entity (mean=4.49, std. =.734). Also, respondents revealed that the procurement plan was clearly designed (mean=4.31, std. =.790). Other respondents strongly presupposed that they were responsible for determining the method of procurement to be used (mean=4.31, std. =.816).

Additionally, the findings also revealed that respondents strongly supported the notion of procurement planning at NWSC since more research participants strongly agreed to the notion that only approved procurement plans were circulated to the procurement users (mean=4.29, Std. =.884). The study found out that most of the respondents highlighted that there was preparation of a combined work plan (mean=4.27, Std. =.779). Several respondents posited that they always made reviews and updates on the procurement plan (mean=4.27, Std. =.779). The research respondents also highlighted that there was matching of procurement to the available funds at NWSC (mean=4.16, Std. =.768). The findings also revealed that the NWSC often prioritized procurement requirements (mean=4.10, Std. =.842). The study further found out that most of the respondents highlighted that they carried out market research to establish the market prices of goods and service or works (mean=4.08, Std. =.807).

In the above regard, the respondents also acknowledged that they established the total time required to conduct the procurement planning process (mean=3.92, std. =.925). Respondents

also claimed that the planned procurement expenditure was realistic and achievable (mean=3.88, std. =.827). Minority of respondents presupposed that the PDU agreed with User-departments on cash allocation during procurement planning (mean=3.86, std. =1.034).

#### **4.4.2 Stakeholder involvement**

The participants were asked to evaluate how much they agreed with various claims made about task participation, consultations, and decision making at NWSC. The opinions were based on a Likert scale with five points. The range from 0 to 2.49 was considered "poor," 2.50 to 3.49 was considered "average," and 3.50 to 5.00 was considered "strong" when interpreting the mean score. The evaluations of stakeholder involvement are listed in Table 4.4 on the next page.

**Table 4. 4: Level of Stakeholder Involvement**

Descriptions	N	Mean	Std. Deviation
<b>Consultation</b>			
In this organization, stakeholders are consulted before procurement of goods, services and works	147	4.04	.859
In this organization, stakeholders are consulted to identify the procurement needs	147	4.16	.794
In this organization, stakeholders are consulted when developing procurement specifications	147	4.27	.725
In this organization, stakeholders are consulted during procurement planning	147	4.22	.766
In this organization, the ideas/views obtained from the stakeholders' consultations are integrated in the procurement plan	147	4.16	.768
<b>Task Participation</b>			
In this organization, stakeholders actively participate in developing the procurement budgets	147	4.27	.725
In this organization, stakeholders participate in identifying and mobilizing financial resources to facilitate procurement	147	3.71	1.092
In this organization, stakeholders participate in planning for procurement schedules	147	3.98	.745
In this organization, stakeholders participate in choosing the appropriate procurement method	147	3.37	.966
<b>Decision Making</b>			
In this organization, stakeholders are the ones to decide on the quality, quantity and the price of goods, services or works to be procured	147	3.65	1.025
In this organization, user-departments decide on what to include in their procurement plan	147	4.33	.653
In this organization, stakeholders decide when to implement the procurement plan	147	3.69	1.038
In this organization, stakeholders make the decision to modify the procurement plan	147	3.69	1.018
In this organization, stakeholders decide on the appropriate KPIs for monitoring the progress of procurement.	147	3.47	.813
In this organization, stakeholders are given the right to make-decisions on goods and services to be acquired during the procurement planning process	147	3.94	.870
<b>Average:</b>		<b>3.93</b>	

**Source: Primary data, 2022**

Table 4.4 portrays the descriptive statistics on the perceived level of stakeholder involvement at NWSC. The findings show an average mean of 3.93 which is above the threshold of 3. This was an indicator that majority of respondents strongly supported the notion of stakeholder involvement activities at NWSC. Regarding consultations, the majority of respondents acknowledged that at NWSC, stakeholders are consulted when developing procurement specifications (mean=4.27, std. =.725). The respondents also believed that NWSC, consulted stakeholders during procurement planning (mean=4.22, std. =.766). Besides, employees of NWSC also claimed that the ideas/views obtained from the stakeholders' consultations were often integrated in the procurement plan (mean=4.16, std. =.768). Also, respondents revealed that at NWSC, stakeholders were consulted to identify the procurement needs (mean=4.16, std. =.794). Other respondents strongly presupposed that stakeholders at NWSC were consulted before procurement of goods, services and works (mean=4.04, std. =.859).

As per task participation, research participants strongly agreed to the notion that NWSC's stakeholders actively participated in developing the procurement budgets (mean=4.27, std. =.725). The respondents also acknowledged that stakeholders participated in planning for procurement schedules (mean=3.98, std. =.745). Besides, respondents also claimed that NWSC gave stakeholders chance to participate in identifying and mobilizing financial resources to facilitate procurement (mean=3.71, std. =1.092). Minority of respondents in this category presupposed that stakeholders participated in choosing the appropriate procurement method (mean=3.37, std. =.966).

In regard to decision making, the majority of respondents highlighted that NWSC's user-departments decided on what to include in their procurement plan (mean=4.33, std. =.653). The respondents also believed that NWSC's stakeholders were given the right to make-decisions on goods and services to be acquired during the procurement planning process (mean=3.94,

std. =.870). Besides, employees of NWSC also claimed that stakeholders often made decisions to modify the procurement plan (mean=3.69, std. =1.018). Other respondents strongly presupposed that NWSC's stakeholders decide when to implement the procurement plan (mean=3.69, std. =1.018).

Additionally, employees of NWSC also claimed that stakeholders are the ones to decide on the quality, quantity and the price of goods, services or works to be procured (mean=3.65, std. =1.025). Also, respondents in giving further support to the notion of decision making acknowledged that NWSC's stakeholders decided on the appropriate KPIs for monitoring the progress of procurement (mean=3.47, std. =.813).

#### **4.4.3 Procurement performance**

The participants were asked to evaluate how much they agreed with various claims made about the effectiveness, economy and efficiency of NWSC's procurement efforts. The opinions were based on a Likert scale with five points. The range from 0 to 2.49 was considered "poor," 2.50 to 3.49 was considered "average," and 3.50 to 5.00 was considered "strong" when interpreting the mean score. The' evaluations of the procurement performance are listed in Table 4.5 below.

**Table 4. 5: Procurement Performance Assessment**

<b>Descriptions</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>Effectiveness</b>			
The procurement unit always achieve the intended objectives	147	3.84	.958
The procurement unit receives goods, services and works procured from suppliers/vendors/contractors on-time and as stipulated in the agreement.	147	3.39	1.143
The procurement unit offers a structure to assist procurement officials in carrying out their responsibilities.	147	4.18	.828
The procurement section makes sure that schedules are adhered to while purchasing products, services, and works.	147	4.06	.821
The purchasing unit makes certain that the proper legal processes are open to competition and transparent.	147	4.35	.746
<b>Efficiency</b>			
The procurement unit makes sure that, for any set of given material inputs, its procurement processes yield the highest output.	147	4.24	.688
In order to do its tasks, the procurement unit makes sure it uses the appropriate resources.	147	4.24	.718
The procurement unit makes sure that it carries out its duties according to correct procedures and techniques.	147	4.35	.718
The procurement unit decreases waste by utilizing resources as effectively as possible.	147	4.08	.754
The purchasing department favoured better conditions and contract terms, including those relating to quality and price.	147	4.27	.752
<b>Economy</b>			
The purchasing department pays suppliers for the best-priced and highest-quality goods, services, and works.	147	3.73	1.178
The procurement unit strikes a balance between resource utilization and achieving the proper goals at a fair price.	147	4.00	.907
The procurement unit spends money sensibly and reasonably to get market exposure and compete.	147	3.61	.989
The input costs used as well as the output value received were factors that the procurement unit considers when making decisions.	147	3.80	.950
The procurement section purchases personnel and supplies of the required standard and caliber at the most affordable price.	147	4.04	.810
<b>Average</b>		<b>4.01</b>	<b>.804</b>

**Source: Primary data, 2022**

The study found that procurement performance was generally good (mean = 4.01; std. = .804). In regard to effectiveness, this good performance was mostly attributed to the fact that the purchasing unit makes certain that the proper legal processes are open to competition and transparent (mean = 4.35; std. = .746). Besides that, the strong procurement performance is due to the fact that the procurement unit offers a structure to assist procurement officials in carrying out their responsibilities (mean = 4.18; std. = .828), ensuring that the the procurement section makes sure that schedules are adhered to while purchasing products, services, and works (mean = 4.06; std. = .821), and ensuring that the procurement unit always achieves the intended objectives (mean = 3.84; std. = .958). From the lowest extreme, this research undertaking made a revelation that the procurement unit receives services, works, and goods procured from suppliers/vendors/contractors on-time and as stipulated in the agreement (mean = 3.39; std. = 1.143).

In due regard to efficiency, the majority of respondents revealed that the purchasing unit makes sure that it carries out its duties according to correct procedures and techniques (mean=4.35, std. =.718). The respondents also believed that the purchasing department favoured better conditions and contract terms, including those relating to quality and price (mean=4.27, std. =.752). Besides, employees of NWSC also claimed that the procurement unit makes sure that, for any set of given material inputs, its procurement processes yield the highest output (mean=4.24, std. =.688). Similarly, employees also asserted that inorder to do its tasks, the procurement unit makes sure it uses the appropriate resources (mean=4.24, std. =.718). Other respondents strongly presupposed that the procurement unit decreases waste by utilizing resources as effectively as possible (mean=4.08, std. =.754).

Regarding economy, the majority of respondents revealed that the procurement section hires personnel and also purchases supplies of the required standard and calibre at the most

affordable price (mean=4.04, std. =.810). The respondents also believed that the procurement unit strikes a balance between resource utilization and achieving the proper goals at a fair price (mean=4.00, std. =.907). Besides, employees of NWSC also claimed that the input costs used as well as the output value received were factors that the procurement unit considers when making decisions (mean=3.80, std. =.950). Similarly, employees also asserted that the purchasing department pays suppliers for the best-priced and highest-quality services, works and goods (mean=3.73, std. =1.178). Other respondents strongly presupposed that the procurement unit spends money sensibly and reasonably to get market exposure and compete (mean=3.61, std. =.989).

#### **4.5 Inferential Analysis**

Spearman correlation was carried out to determine the existing relationship between research variables. Process Macro was utilized to evaluate how stakeholder involvement mediated the relationship that existed between procurement planning and NWSC's procurement performance. Finally, all of the hypotheses presented in the study's opening chapter were validated using hypothesis tests. The probability value derived from the correlation test was used to determine whether the hypothesis should be accepted or rejected. That is to say, the alternative hypothesis is accepted and the null hypothesis is rejected if the probability value is less than 0.05. In the fourth hypothesis, the level of significance when testing indirect effect was based on values of the upper and lower level bounds as articulated by Hayes (2018) who noted that if the upper and lower level bounds of 95% confidence intervals possess a zero, then the indirect effect is regarded insignificant.

##### **4.5.1 Correlation Analysis**

To analyse the association and strength of this investigation, the correlation coefficient was employed in the establishment of the association between procurement planning, stakeholder



involvement as well as procurement performance. To ascertain the outcome and predictor variables' relationship as utilized in this research undertaking, Spearman correlation analysis was done. The justification for using a spearman rank correlation is attributed to the nature of the data attained in this research. In his view Frost (2023) recounts that the spearman rank correlation analysis is one best suited for studies using ordinal data. According to Kothari (2011) correlation between two variables is calculated by using correlation coefficient, which varies from +1 to -1, where -1 denotes a strong negative connection, +1 denotes a strong positive correlation whereas zero (0) denotes a lack of association. Correlation between variables is portrayed in Table 4.6 on the following page.

**Table 4. 6: Correlation**

<b>Spearman's rho</b>		<b>1</b>	<b>2</b>	<b>3</b>
Procurement Planning (1)	Correlation Coefficient	1.000	.521**	.413**
	Sig. (2-tailed)	.	.000	.000
	N	147	147	147
Stakeholder Involvement (2)	Correlation Coefficient	.521**	1.000	.527**
	Sig. (2-tailed)	.000	.	.000
	N	147	147	147
Procurement Performance (3)	Correlation Coefficient	.413**	.527**	1.000
	Sig. (2-tailed)	.000	.000	.
	N	147	147	147

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

**Source: Primary data, 2022**

The results portrayed in Table 4.6, above reveal that there is a moderate significant relationship between procurement planning and procurement performance of NWSC ( $r = .413^{**}$  and  $P\text{-Value} < 0.01$ ). This suggested that NWSC would have a good chance of seeing an improvement in procurement performance when any effort is taken by NWSC to improve procurement planning. The findings also revealed that there was a significant relationship between

stakeholder involvement and procurement performance of NWSC ( $r = .527$  and  $P\text{-Value} < 0.01$ ). This indicates that if NWSC continues to embrace stakeholder involvement, they will on average have an increase in procurement performance.

Furthermore, the findings in Table 12, also revealed a moderate significant relationship between procurement planning and stakeholder involvement at NWSC. This is evidenced by the Spearman's correlation coefficient of  $.521$  and  $p\text{-Value} < 0.01$ . This implied that if NWSC continues to embrace procurement planning, it will on average obtain an increase in stakeholder involvement at NWSC.

#### 4.5.2 Regression Results

Regression analysis was carried out to establish the effect of procurement planning and stakeholder involvement on procurement performance. A multiple regression analysis was carried out to portray the effect of the predictor variables on the outcome variable.

**Table 4. 7: Regression Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.782 <sup>a</sup>	.611	.606	.37242

a. Predictors: (Constant), Procurement planning, Stakeholder involvement

Table 4.7 portrays the coefficient of determination (0.782) which implies that one unit of change in the independent variables (procurement planning and stakeholder involvement) causes a change of 78.2% of the Dependent variable (procurement performance). This indicated that the remaining percentage (21.8%) can be explained by other factors implemented by NWSC. More so, the R square of 0.606 implies that the two constructs of the independent variable explain only 60.6% of variations in procurement performance at NWSC, and 39.4%

of procurement performance is explained by other factors not covered in this research at NWSC.

**Table 4.8: ANOVA model summary**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.432	2	15.716	113.310	.000 <sup>b</sup>
	Residual	19.973	144	.139		
	Total	51.405	146			

a. Dependent Variable: Procurement Performance

b. Predictors: (Constant), Stakeholder involvement, Procurement planning

Table 4.8, shows that when the model's significance was tested, a P value of 0.000 which is less than 0.05 in a two-tailed test was obtained. This demonstrates that the model successfully predicted the impact of procurement planning and stakeholder involvement on procurement performance at NWSC using statistical significance.

**Table 4.9: Regression Coefficients Portraying the Effect of Procurement Planning and Stakeholder Involvement on Procurement Performance**

Model	Unstandardized		Standardized		t	Sig.
	Coefficients		Coefficients			
	B	Std. Error	Beta			
(Constant)	.356	.245			1.452	.149
Procurement Planning	.602	.070	.574		8.616	.000
Stakeholder Involvement	.282	.067	.281		4.214	.000

a. Dependent Variable: procurement performance

The multivariate regression model was adopted to establish the effect of Predictors: procurement planning and stakeholder involvement on procurement performance.

This was expressed in the regression model equation as follows:

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Which became:  $Y_i = .356 + 0.602X_1 + 0.282X_2 + \epsilon$

The model implies that when all the variables of the study are at a constant (.356), a unit enhancement in procurement planning results in 0.602 increase in procurement performance attained at NWSC. In the same regard, stakeholder involvement leads to 0.282 increase in procurement performance at NWSC.

From table 4.9, the above-mentioned regression coefficients assist in resolving the regression equation regarding the underlying effect of the factors being studied. Statistical significance was shown for the procurement planning coefficient ( $P=0.000$ ). Similar to that, it was discovered that the coefficient of stakeholder involvement was statistically significant ( $p=0.000$ ).

#### **4.5.3 Mediation Analysis**

Hayes Process Macro was used to test how procurement planning influences procurement performances indirectly through its effects on stakeholder involvement. The mediation analysis is presented in Table 4.10, on the next page.

**Table 4. 10: Mediation Analysis**

Model: 4; Y: Procurement Performance (PP); X: Procurement Planning (PPG); M: Stakeholder Involvement (STI); Sample Size: 147

**OUTCOME VARIABLE: STI**

**Model Summary**

	R	R-sq	MSE	F	df1	df2	p
	.6270	.3931	.2136	93.9381	1.0000	145.0000	.0000

**Model**

	coeff	se	t	p	LLCI	ULCI
Constant	1.1597	.2884	4.0209	.0001	.5897	1.7298
PPG	.6548	.0676	9.6922	.0000	.5213	.7883

**OUTCOME VARIABLE: PP**

**Model Summary**

	R	R-sq	MSE	F	df1	df2	p
	.7820	.6115	.1387	113.3101	2.0000	144.0000	.0000

**Model**

	coeff	se	t	p	LLCI	ULCI
Constant	.3559	.2450	1.4524	.1486	-.1284	.8402
PPG	.6021	.0699	8.6156	.0000	.4639	.7402
STI	.2820	.0669	4.2145	.0000	.1498	.4143

**TOTAL EFFECT MODEL**

**OUTCOME VARIABLE: PP**

**Model Summary**

	R	R-sq	MSE	F	df1	df2	p
	.7507	.5635	.1547	187.2160	1.0000	145.0000	.0000

**Model**

	coeff	se	t	p	LLCI	ULCI
Constant	.6829	.2455	2.7821	.0061	.1978	1.1681
PPG	.7867	.0575	13.6827	.0000	.6731	.9004

**TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y**

**Total effect of X on Y**

	Effect	se	t	p	LLCI	ULCI
	.7867	.0575	13.6827	.0000	.6731	.9004

**Direct effect of X on Y**

	Effect	se	t	p	LLCI	ULCI
	.6021	.0699	8.6156	.0000	.4639	.7402

**Indirect effect(s) of X on Y:**

	Effect	Boot SE	Boot LLCI	Boot ULCI
STI	.1847	.0500	.1035	.3047

Level of confidence for all confidence intervals in output: 95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals: 5000

**Source: Primary data, 2022**

The study assessed the mediating effect of stakeholder involvement on the relationship between procurement planning and procurement performance. The results revealed a significant direct effect of procurement planning on procurement performance ( $b = 0.602, p < 0.000$ ). Furthermore, the study found a significant effect of stakeholder involvement on procurement performance ( $b = 0.282, p < 0.000$ ). In the same regard, the study found a significant effect of procurement planning on stakeholder involvement ( $b = 0.654, p < 0.000$ ). The above revelation implied that stakeholder involvement partially mediated the relationship between procurement planning and procurement performance. Since the “a” path, and the “b” path were all found to be significant, mediation analysis was tested using bootstrapping samples (Hayes, 2018). In the present study, the 95% confidence interval of the indirect effect was obtained with 5000 bootstrap samples. The results of the mediation analysis show a significant indirect effect of the impact of procurement planning on procurement performance through stakeholder involvement ( $b = 0.184, \text{Confidence Interval (CI)} = 0.1035 \text{ to } 0.3047$ ).

The indirect effect is the product of the coefficients of the "a" and "b" paths, and it confirms the results mentioned above:  $0.654 * 0.282 = 0.184$ . Summarizing the direct and indirect effects yields the Total effect:  $0.602 + 0.1846 = 0.7867$  (This is also observed in the output). Figure 1 displays the results.

#### **4.6 Hypothesis Tests**

The first three hypotheses proposed in the study's opening chapter were tested using the significance value approach. In this method, the test statistic and sample statistic were compared to validate the study's hypotheses. Normal setting for the test statistic is 95% ( $\alpha = 0.05$ ). If the sample statistic falls below 0.05, the alternative hypothesis is considered valid and the null hypothesis is deemed invalid. If the sample statistic is higher than 0.05, on the other

hand, the null hypothesis is considered valid and the alternative hypothesis is considered invalid.

In the fourth hypothesis, the level of significance when testing indirect effect was based on values of the Lower Level Confidence Interval (LLCI) and Upper Level Confidence Interval (ULCI). According to Hayes (2018) it is noted that if the upper and lower level bounds of 95% confidence intervals do not contain zero, the indirect effect is considered significant.

**Table 4. 11: Hypothesis Tests Summary**

<b>Hypothetical Statements</b>	<b>Criterion</b>	<b>Alpha</b>	<b>Decision</b>
<b>Ha<sub>1</sub>:</b> There is a significant relationship between procurement planning and procurement performance.	0.05	.000	Accept
<b>Ha<sub>2</sub>:</b> Stakeholder involvement has a significant relationship with procurement performance.	0.05	.000	Accept
<b>Ha<sub>3</sub>:</b> There is a significant relationship between Procurement planning and stakeholder involvement.	0.05	.000	Accept
	<b>Confidence Interval</b>	<b>LLCI</b>	<b>ULCI</b>
<b>Ha<sub>4</sub>:</b> Procurement planning influences procurement performances indirectly through its effects on stakeholder involvement.	0	.103	.304

**Source: Field data, 2022**

From the table 4.11 above, it was accepted that procurement planning and procurement performance had a significant relationship because the probability value did not exceed 0.05. Similarly, this study accepted the alternative hypothesis that stakeholder involvement had a significant relationship with procurement performance. On the other hand, the alternative hypothesis that there was a significant relationship between procurement planning and stakeholder involvement was also accepted because its p-value was within the acceptable ranges. Lastly, the fourth objective which hypothesized that procurement planning influences

procurement performances indirectly through its effects on stakeholder involvement was found to be significant because the test's LLCI and ULCI did not contain zero.

#### **4.7 Chapter Summary**

Chapter four reports the empirical findings of the study. The study's findings are presented, discussed, and provided with an interpretation. The chapter begins with the response rate, then moves on to demographic information, and concludes with findings on correlation and regression in order to answer the specific objectives of the study.



## **CHAPTER FIVE: SUMMARY, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter presents the summary, discussions, conclusions and recommendations of the study. The general objective of the study was to determine how procurement planning and stakeholder involvement relate with procurement performance by considering NWSC in Uganda. The specific objectives of the study were; To examine the relationship between procurement planning and procurement performance of NWSC in Uganda, to examine the relationship between stakeholder involvement and procurement performance of NWSC in Uganda, to examine the relationship between procurement planning and stakeholder involvement at NWSC in Uganda, and to examine the mediating effect of stakeholder involvement in the relationship between procurement planning and procurement performance of NWSC in Uganda. Data was analysed, and the results were contrasted with pertinent theoretical and empirical research. While recommendations were derived from the study's limitations, the study conclusion is strongly tied to the study's unique objectives.

### **5.2 Summary of Findings**

#### **5.2.1 Relationship between procurement planning and procurement performance of NWSC in Uganda**

The study findings revealed a significant relationship between procurement planning and procurement performance of NWSC. This implied that NWSC's efforts to enhance procurement planning would be highly likely to result in an improvement in procurement performance. This finding therefore implied that the alternative hypothesis was supported whereas the null hypothesis was rejected. The supported alternative hypothesis stated that there was a significant relationship between procurement planning and procurement performance.

### **5.2.2 Relationship between stakeholder involvement and procurement performance of NWSC in Uganda**

The research findings revealed that there was a significant relationship between stakeholder involvement and procurement performance of NWSC. This implies that if NWSC continuously uses stakeholder involvement, they will on average have an increase in procurement performance. This finding therefore implied that the alternative hypothesis was supported whereas the null hypothesis was rejected. The supported alternative hypothesis stated that stakeholder involvement had a significant relationship with procurement performance of NWSC.

### **5.2.3 Relationship between procurement planning and stakeholder involvement at NWSC in Uganda**

Research findings on the third objective revealed a significant relationship between procurement planning and stakeholder involvement at NWSC. This implied that if NWSC continues to embrace procurement planning, it will on average obtain an increase in stakeholder involvement. This finding therefore implied that the alternative hypothesis was supported whereas the null hypothesis was rejected. The supported alternative hypothesis stated that there was a significant relationship between procurement planning and stakeholder involvement at NWSC.

### **5.2.4 Effect of Procurement Planning and Stakeholder Involvement on Procurement Performance of NWSC in Uganda**

The study showed a significant effect of procurement planning on procurement performance at NWSC, meaning that procurement planning practices used in the study significantly explain variations in procurement performance at NWSC. This implies that when there is adequate utilization of procurement planning, there would be an increase in procurement performance

in terms of effectiveness, efficiency, and economy. The study therefore confirms that there is a significant effect of procurement planning on procurement performance of NWSC.

The study findings also showed a significant effect of stakeholder involvement on procurement performance at NWSC, meaning that stakeholder involvement practices used in the study significantly explain variations in procurement performance at NWSC. This implies that when there is adequate utilization of stakeholder involvement, there would be an increase in procurement performance in terms of effectiveness, efficiency, and economy.

### **5.2.5 Mediation Effect of Stakeholder Involvement in the Relationship between Procurement Planning and Procurement Performance**

Research findings on the fourth objectives as highlighted in Table 15 revealed that procurement planning significantly influences procurement performances indirectly through its effects on stakeholder involvement because the test's LLCI and ULCI did not contain zero. This finding therefore implied that the alternative hypothesis was supported whereas the null hypothesis was rejected. The supported alternative hypothesis stated that procurement planning influenced procurement performances indirectly through its effects on stakeholder involvement at NWSC.

## **5.3 Discussion of findings**

This sub-section offers a discussion of research results basing on the study's specific objectives as follows.

### **5.3.1 Relationship between procurement planning and procurement performance of NWSC in Uganda**

Research findings revealed a significant relationship between procurement planning and performance of the procurement function ( $\beta=.413$ ;  $p<.05$ ), indicating that the procurement planning techniques utilized in the study considerably account for variances in NWSC's procurement performance. This suggests that when procurement planning is properly utilized,

it is quite likely that procurement performance will be enhanced in terms of increased efficiency, effectiveness, and business economy. Therefore, the analysis affirms that there is a considerable connection between NWSC's procurement performance and procurement planning.

These results are both in line with and in contrast to those of earlier studies. For instance, Chepkesis and Keitany's (2018) study in Kenya, which looked at the relationship between supplier performance and procurement planning, discovered that procurement planning was linked to increased efficiency and effectiveness, as evidenced by better value for money, time savings, improved product quality, and well-organized resource utilization. Odero and Ayub (2017), who looked at the relationship between the procurement processes and performance of public sugar producing enterprises in western Kenya, disagreed. The study found a slight but positive association between procurement planning and performance. The consequence was that the efficiency and efficacy of public procurement were not greatly impacted by the approval of procurement budgets, completing needs assessments, following the procurement procedure, making funds available, or doing market analyses.

The findings were in agreement with research findings from a study conducted by Okello and Kihara (2019) on procurement lifecycle and performance of government ministries in East Africa which found a positive significant relationship between procurement planning and performance of government ministries. The reasons for this association was rooted in the notion that procurement planning offered a strategy for developing clear product and service specifications, and scheduling supplies which helped in reducing costs and promoting efficient budget allocation.

### **5.3.2 Relationship between stakeholder involvement and procurement performance of NWSC in Uganda**

The study revealed a moderate and positive relationship between stakeholder involvement and procurement performance ( $\beta=.527$ ;  $p<05$ ), meaning that stakeholder involvement practices used in the study significantly explain variations in procurement performance of NWSC. This implies that when there is adequate utilization of stakeholder involvement, there would be an increase in procurement performance in terms of increased efficiency, economy, and effectiveness of business operations. As a result, the study affirms that there is a strong connection between stakeholder involvement and NWSC's procurement performance.

The results are in agreement with the conclusions reached upon by Ataseven and Nair (2017) in their study on supply chain integration and performance relationships which found that stakeholder integration or involvement had a significant relationship on the firm's financial performance. The scholars supported that in the perspective of procurement departments, involving/integrating both internal and external parties into the procurement processes was crucial since doing so guaranteed that the business operated as a cohesive whole and emphasized the value of carrying out procurement practices in partnership with vendors and consumers.

In the same regard, the study findings are also in conformity with study results of Nzovila et al. (2019) which investigated End-User Involvement and supply chain performance in Kenyan Universities. The study made a revelation that End-user involvement in procurement planning and specification development significantly improved quality, price and lead-time supply chain performance.

The findings were also in agreement with the Stakeholders Theory which suggested that an organization's success is dependent upon how well the organization identifies and manages its

relationships with key stakeholder groups such as shareholders, management, customers/clients, employees, suppliers, communities, financiers, among others which affect the realization of the organizational objectives which may include attainment of efficiency, effectiveness and economy (Freeman, 1984). As for the case of NWSC, the involvement of key stakeholders like; top management, user-departments, contract committee, end-users, PPDA, and accounting officers in complex procurements situations served to avoid future problems that would negatively impact on procurement performance.

### **5.3.3 Relationship between procurement planning and stakeholder involvement at NWSC in Uganda**

The study revealed a significant relationship between procurement planning and stakeholder involvement at NWSC ( $\beta=.521$ ;  $p<.05$ ), meaning that procurement planning practices used in the study significantly explain variations in stakeholder involvement at NWSC. This implies that when there is adequate utilization of procurement planning, there would be an increase in stakeholders' involvement in terms of consultation, task participation, and decision making. The study therefore confirms that there is a significant relationship between procurement planning and stakeholder involvement of NWSC.

These findings are both in agreement and contrary with the conclusions of previous studies for instance; A study conducted by Onchiri and Kwasire (2016) which posited that during procurement planning, the procurement department is also directly involved in internal consultations and advising user-department/procurement stakeholders on the purchase operations, cross-functional communication about purchasing choices, and the actual purchasing of goods.

The findings were also in agreement with research conducted in Finland by Holma et al. (2020) which investigated service specification in pre-tender/ procurement planning phase of public

procurement using a triadic model of meaningful involvement which stressed that the procurement unit is concerned with working on modalities for stakeholder involvement in procurement planning/pre-tender phase because it assists in establishing the strategies or modalities of collaborative actions and identifying the roles expected from the stakeholders. since at times stakeholders involved in procurement planning may not necessarily be aware of their expectations, roles, and inputs in the public procurement process.

#### **5.3.4 Effect of procurement planning on Procurement performance**

The research results revealed that procurement planning significantly affected procurement performance at NWSC ( $\beta=.602$ ;  $p<.000$ ), meaning that procurement planning practices used in the study significantly explain variations in procurement performance at NWSC. This implies that when there is adequate utilization of procurement planning, there would be an increase in efficiency, economy, and effectiveness which reflect procurement performance in this research. This research undertaking confirms that procurement planning significantly affects NWSC's procurement performance.

These research studies are both in conformity and contrary with the conclusions of previous studies. For instance, a study conducted in Uganda within the District of Wakiso by Asimwe (2022) on the influence of procurement planning on Local government's performance. Findings derived from a response rate of 93.7% showed that procurement planning by way of user needs assessment had a significant effect on local government performance. This compelled the scholar to recommend that technical teams and user departments ought to communicate work schedules and procurement plans to provide the procurement departments enough time to execute and complete the procurement process on schedule and meet performance goals. Relatedly, a study conducted in Kenya by Chepkesis and Keitany (2018) on procurement planning and supplier performance found out that procurement planning

significantly influenced performance of suppliers. This helped to enhance value for money, time saving, improved product quality and efficient utilization of resource.

The research findings were also in conformity with research conclusions of research undertaken in Kenya by Ogwang and Wawelu (2017) who examined how the Kisumu Water and Sewerage Company's performance was affected by procurement planning. The study discovered that certain aspects of procurement planning, particularly transparency in procurement, had a substantial impact on Kisumu Water and Sewerage Company's performance (KIWASCO). Relatedly, Okello and Kihara (2019) in their study on procurement lifecycle and performance of government ministries in East Africa which found procurement planning and performance of government ministries to be positively and significantly related. The basis for this connection was attributed to the fact that procurement planning provided a framework for creating precise product and service requirements and scheduling supply, both of which assisted in lowering costs and encouraging effective budget allocation.

### **5.3.5 Effect of Stakeholder Involvement on Procurement Performance**

The study findings showed a significant effect of stakeholder involvement on procurement performance at NWSC ( $\beta=.282$ ;  $p<.000$ ), meaning that procurement planning practices used in the study significantly explain variations in procurement performance at NWSC. This implies that when there is adequate utilization of stakeholder involvement, there would be an increase in economy, effectiveness, and efficiency which reflects enhancement in procurement performance. The study therefore confirms that stakeholder involvement significantly affects NWSC's procurement performance.

The research findings are both contrary and in conformity with the past studies' conclusions. For instance, a study conducted by Dacha (2018) which examined the impact of stakeholder involvement on the effectiveness of the procurement process in the public sector. According to



the study's findings, the procurement process effectiveness was not significantly impacted by stakeholder involvement. The results were linked to the lack of participation of users in the process of procurement, which indicated some procurement process discontent. This compelled senior management to be against the inclusion of stakeholders within the process of procurement. Consequently, during the execution of the procurement process, there was little stakeholder contact.

The results agreed with a research conducted in Sironko by Wofuma (2021) on the impact of procurement processes on the success of government projects through stakeholder involvement. According to the findings of the regression analysis, stakeholder participation had a substantial impact on how well construction projects performed. The report advised that as a key strategy for boosting the performance of public construction projects, stakeholder engagement be adopted by all public procuring agencies. The above revelation was in conformity with the stakeholder theory as propounded by Freeman (1984), which asserts that the efficiency of an organization and its effectiveness is dependent upon how well the organization identifies and manages its interactions with groups of key stakeholder, such as, shareholders, management, clients/ customers, communities, suppliers, employees, and other stakeholders. Among other stakeholders include those involved in procurement planning whose contribution affects the realization of the organizational objectives, such as, efficiency, effectiveness and economy.

### **5.3.6 Mediating effect of stakeholder involvement in the relationship between procurement Planning and Procurement Performance**

Research findings as highlighted in Table 10 showed that procurement planning significantly influences procurement performances indirectly through its effects on stakeholder involvement because the test's LLCI and ULCI did not contain zero. The study therefore confirms that

procurement planning influenced procurement performances indirectly through its effects on stakeholder involvement at NWSC. The findings were also in conformity with research conducted by Gatobu (2020) regarding the procurement process influence on Nairobi County Government public entities' performance which revealed that the inclusion of external and internal stakeholders in procurement planning and specification development ensured that the most critical elements/function in the procurement process are accomplished in a responsive and timely manner which was an indicator of procurement performance.

The study findings were also in agreement with stakeholder theory proposed by Freeman which asserts that the organization's efficiency and effectiveness is dependent upon how well the organization identifies and manages its interactions with groups of key stakeholder (Freeman, 1984). These stakeholders include, shareholders, management, clients/ customers, communities, suppliers, employees, and other stakeholders. Among other stakeholders include those involved in procurement planning whose contribution affects the realization of the organizational objectives, such as, efficiency, effectiveness and economy.

The study findings were also in conformity with those of Wofuma (2021) who studied the procurement practices' impact on construction project's performance in public institutions through stakeholder involvement in Sironko District. According to the study's findings, procurement practices and project performance were significantly mediated by stakeholder engagement. The results were explained by an increase in stakeholder engagement's key mechanism for boosting the effectiveness of public building projects.

#### **5.4 Conclusion**

The study sought to determine how procurement planning and stakeholder involvement relate with procurement performance by considering NWSC in Uganda. The findings indicate that procurement planning significantly relate with procurement performance ( $\beta=.413$ ;  $p<.05$ ).

The results also showed a positive and significant relationship between stakeholder Involvement and procurement performance ( $\beta=.527$ ;  $p<.05$ ). The findings further confirm that stakeholder involvement and procurement planning are positively and significantly related ( $\beta=.521$ ;  $p<.05$ ). Results of the Regression Process Macro showed that procurement planning significantly influences procurement performances indirectly through its effects on stakeholder involvement (LLCI .103 & ULCI .304). Regression results also confirm a significant effect of stakeholder involvement and procurement planning on procurement performance. These findings provide insights on how procurement planning, and stakeholder involvement, operationalized in terms of consultation, task participation, and decision making influence procurement performance whose measurement was through efficiency, economy, and effectiveness of NWSC. Therefore, it is vital for NWSC to generate interventions geared towards promoting procurement planning and stakeholder involvement, such as, ensuring that stakeholders are consulted before procurement of services, works, and other goods so as to identify the procurement needs and ensure that stakeholders actively participate in developing the procurement budgets, as well as make decisions on the quality, quantity and the price of goods, services or works to be procured.

### **5.5 Limitations of the study**

Like other studies, the current one has design restrictions. The in-ability of a cross-sectional design to provide definite information about the incidence by failing to provide a causal inference regarding the relationships between procurement planning, stakeholder involvement, and procurement performance. The situation was explained by a point that this type of study design just provides a snapshot; it does not take into account what transpires after or before the snapshot is captured. (Creswell & Creswell, 2017).

The research approach reported herein should also be taken into account in light of some

limitations. This research used a quantitative research approach which completely ignored the “how” and “why” research questions which are deemed relevant in stimulating a greater comprehension of things, experiences, and settings. This is the case because qualitative research enables the researcher to pose questions that are difficult to understand through numerical data (Crowe, Creswell & Robertson, 2011).

The sampling techniques used in the study are also subject to criticism. This research purposively selected the Contracts committee members, the Evaluation Committee Members, Legal Team, and others. Sampling participants purposively lures academics to frequently make generic or subjective assumptions during respondents’ selection making the sampling method susceptible to researcher bias (Andrade, 2021).

## **5.6 Recommendations**

In light of the findings, the researcher recommends that a case study design with semi structured research tools be used in a similar study to offer an in-depth, multi-faceted explorations on the research variables examined in this research. This is deemed relevant as it addresses the inadequacies of fully structured research tools used in the study (Crowe et al., 2011).

From the study, the researcher recommends that a similar study adapts a research approach which is qualitative so as to develop hypotheses through in-depth examination of few research participants to enhance learning about the behaviour and opinions of a target audience. This is relevant in addressing the shortcomings of the quantitative approach embraced in this research which completely ignored the “how” and “why” research questions yet they are deemed relevant in stimulating a deeper understanding of experiences, phenomena and context.

This research recommends that academics to undertake a related study with a dissimilar sampling technique. Most preferably, the census sampling technique be used. This is necessary in reducing sampling errors because the estimates made by census sampling are not subject to

sampling errors which are pronounced in the purposive sampling technique used in the study (Andrade, 2021).

### **5.7 Chapter summary**

Chapter five (5) offers a presentation of the findings summary, discussions, conclusion, as well as research limitations. This section concludes the thesis by offering recommendations aimed at serving as a guideline for future scholars who might wish to conduct an identical investigation at NWSC in Uganda.

## REFERENCES

- Aduda, O. S., Odhiambo, A. I., & Amollo, O. P. Influence of Stakeholder Participation on Procurement Effectiveness of Preschools' Teaching and Learning Resources in Nyando Sub-County, Kisumu County, Kenya.
- Andrade C. (2021). The Inconvenient Truth about Convenience and Purposive Samples. *Indian J Psychol Med.* 2021; 43(1): 86–88
- Agaba, E., & Shipman, N. (2007). Public procurement reform in developing countries: The Ugandan experience. *Advancing public procurement: Practices, innovation and knowledge-sharing*, 2, 373-391.
- Aimable, N., Osunsan, O. K., Florence, I., Comet, K. F., & Sarah, N. (2019). Procurement planning on value for money among selected districts in Southern Province, Rwanda. *Journal of Research in Business and Management*, 7(1), 34-40.
- Albarune, A. R. B. & Habib, M. M. (2015). A study of Forecasting Practices in Supply Chain Management. *International Journal of Supply Chain Management (IJSCM)*, 4 (2). pp. 55-61. ISSN 2050-7399.
- Amaratunga, D., & Baldry, D. (2002). Moving from performance measurement to performance management. *Facilities*.
- Amin, M.F. (2005). *Social Science Research: Conception, Methodology and Analysis*. Makerere University Press, Kampala, Uganda.
- Anane, A., & Kwarteng, G. (2019). Prospects and challenges of procurement performance measurement in selected Technical Universities in Ghana. *Asian Journal of Economics, Business and Accounting*, 1-18.

- Arnestein, S. R. (1969). A ladder of citizenship participation. *J. Am. Inst. Planners* 35:216
- Arrowsmith, S., & Trybus, M. (2003). Public Procurement: The Continuing Revolution, the Netherlands. *The Hague: Kluwer Law International*.
- Ataseven, C., & Nair, A. (2017). Assessment of supply chain integration and performance relationships: A meta-analytic investigation of the literature. *International journal of production economics*, 185, 252-265.
- Babbie, E., & Mouton, J. (2009). The practice of social research. Cape Town: Oxford University Press.
- Balakrishnan, A., and Natarajan, H. P. (2014). "Integrated procurement planning in multi-division firms," *Production and Operations Management*, Vol. 23 No. 10, pp. 1795–1810.
- Basheka, B. C. (2008). Procurement planning and accountability of local Government procurement systems in developing countries: Evidence from Uganda. *Journal of public procurement*.
- Basheka, B. C. (2009). Procurement planning and local governance in Uganda: A factor analysis approach. *International journal of procurement management*, 2(2), 191-209.
- Bienhaus, F., & Haddud, A. (2018). Procurement 4.0: factors influencing the digitisation of procurement and supply chains. *Business Process Management Journal*.
- Branco, M. C., & Rodrigues, L. L. (2007). Positioning stakeholder theory within the debate on corporate social responsibility. *Electronic Journal of Business Ethics and Organization Studies*, 12(1), 5-15.

- Brown, T. A. (2014). *Confirmatory factor analysis for applied research*. New York: Guilford Publications
- Caniato, F., Luzzini, D., & Ronchi, S. (2014). Purchasing performance management systems: An empirical investigation. *Production Planning & Control*, 25(7), 616-635.
- Cavana, R., Delahaye, B., & Sekaran, U. (2001). *Applied Business Research: Qualitative and Quantitative Methods* (3rd ed.). Australia: John Wiley & Sons.
- Changalima, I. A., Mushi, G. O., & Mwiseje, S. S. (2020). Procurement planning as a strategic tool for public procurement effectiveness: Experience from selected public procuring entities in Dodoma city, Tanzania. *Journal of Public Procurement*.
- Chepkesis, K., Keitany, P., & Kiplel, M. (2018). Effect of Procurement Planning on Suppliers Performance in Public Institutions: A Case of Moi University. *Europeans Journal of Logistics, Purchasing and Supply Chain Management*, 6(2), 1-9.
- CIPS. (2020). Stakeholder identification and management. Accessed on: <https://www.cips.org/knowledge/procurement-topics-and-skills/procurement-organisation/stakeholders/#:~:text=Stakeholders%20in%20the%20Supply%20Chain,connected%20stakeholders%20in%20this%20process>.
- Cooksey, R. W. (2020). Descriptive statistics for summarising data. In *Illustrating statistical procedures: Finding meaning in quantitative data* (pp. 61-139). Springer, Singapore.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*: Sage publications.
- Crowe, S., Cresswell, K., Robertson, A. *et al.* (2011). The case study approach. *BMC Med Res Methodol* 11, 100 <https://doi.org/10.1186/1471-2288-11-100>



- Dacha, V., & Juma, D. (2018). Effect of stakeholder participation on the efficiency of the procurement process in the Public Sector: a Case of Jomo Kenyatta University of Agriculture and Technology. *Strategic Journal of Business & Change Management*, 5.
- Danis, O., & Kilonzo, J. M. (2014). Resource allocation planning: Impact on public sector procurement performance in Kenya. *International Journal of Business and Social Science*, 5(7), 1.
- Demirkesen, G. K., & Reinhardt, G. M. (2021). Effect of stakeholder involvement on performance of the government projects in Poland. *Journal of Entrepreneurship & Project Management*, 5(1), 129-137.
- Donaldson, T., & Preston, L. (1995). The Stakeholder Theory of the Modern Corporation: Concepts, Evidence and Implications. *Academy of Management Review*, 20 (8), 65-91.
- Doppelt, B., & McDonough, W. (2017). *Leading change toward sustainability: A change-management guide for business, government and civil society*. Routledge.
- Dos Santos, P. M.; Cirillo, M. A. (2021) *Construction of the average variance extracted index for construct validation in structural equation models with adaptive regressions. Communications in Statistics - Simulation and Computation*
- Dzuke, A., & Naude, M. J. (2017). Problems affecting the operational procurement process: A study of the Zimbabwean public sector. *Journal of Transport and Supply Chain Management*, 11(1), 1-13.
- Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*. 5. 1. 10.11648/j.ajtas.20160501.11.

- Farmer, D., & Weele, V. (2000). *Handbook of Purchasing Management*; 2nd ed. Hampshire.Gower.
- Fernandes, M., & Randall, D. (1991). The social desirability response bias in ethics research. *Journal of Business Ethics*, 10 (11), 805-807.
- Flynn, A. (2018). Measuring procurement performance in Europe. *Journal of Public Procurement*.
- Fornell, C. & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 39-50.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Marshfield, MA7 Pittman Publishing.
- Frost, J. (2023) Spearman's Correlation Explained. Available at: <https://statisticsbyjim.com/basics/spearman-correlation/>
- Gambo, N., & Musonda, I. (2021). Procurement planning factors influencing the quality performance of primary healthcare building facilities: A mediation effect of the firm's business partnership. *Cogent Engineering*, 8(1), 1872823.
- Gatobu, F. H. (2020). Influence of procurement process on the performance of Public Entities (A Case Study of Nairobi County Government). *International Journal of Academic Research in Business and Social Sciences*, 10(4).
- Glomsås, H. S., Knutsen, I. R., Fossum, M., & Halvorsen, K. (2021). 'They just came with the medication dispenser'-a qualitative study of elderly service users' involvement and welfare technology in public home care services. *BMC health services research*, 21(1), 1-11.

- Gordon, M. F., & Louis, K. S. (2009). Linking parent and community involvement with student achievement: Comparing principal and teacher perceptions of stakeholder influence. *American journal of education, 116*(1), 1-31.
- Haensel, M., & Hofmann, E. (2018). An integrative approach for the purchasing and evaluation of business services from a buyer's perspective. *Journal of Business & Industrial Marketing*.
- Hair, J.F., Hult, G.T.M., Ringle, C., Sarstedt, M.: (2016). A primer on partial least squares structural equation modeling (PLS-SEM). Sage Publications
- Hair, J. F., Page, M., & Brunsveld, N. (2019). *Essentials of business research methods*. Routledge.
- Hamza, S. B., Gerbi, A., & Ali, S. H. (2017). Factors affecting procurement performance in the case of awassa textile share company. *Global Journal of Management and Business Research*.
- Hatcher, L. (1994). A step-by-step approach to using the SAS system for factor analysis and structural equation modeling. Cary, NC: SAS Institute Press
- Hayes, A. F. (2018). Partial, conditional, and moderated moderated mediation: Quantification, inference, and interpretation. *Communication monographs, 85*(1), 4-40.
- Holma, A. M., Vesalainen, J., Söderman, A., & Sammalmaa, J. (2020). Service specification in pre-tender phase of public procurement-A triadic model of meaningful involvement. *Journal of Purchasing and Supply Management, 26*(1), 100580.
- Hui, W. S., Othman, R., Omar, N. H., Rahman, R. A., & Haron, N. H. (2011). Procurement issues in Malaysia. *International journal of public sector Management*.

- Islamic Development Bank. (2019). Procurement strategy and procurement plan. April, 2019
- Johnsen, Å. (2016). Strategic planning and management in local government in Norway: Status after three decades. *Scandinavian Political Studies*, 39(4), 333-365.
- Kabir, E., Hu, J., Wang, H., & Zhuo, G. (2018). A novel statistical technique for intrusion detection systems. *Future Generation Computer Systems*, 79, 303-318.
- Kakwezi, P. & Nyeko, S. (2019). Procurement processes and performance: Efficiency and effectiveness of the procurement function. *International Journal of Social Sciences Management and Entrepreneurship (IJSSME)*, 3.
- Kalubanga, M., Kakwezi, P., & Kayiise, D. (2013). The effects of fraudulent procurement practices on public procurement performance. *International Journal of Business and Behavioral Sciences*, 3(1), 17-27.
- Kamotho, D. K. (2014). *E-procurement and procurement performance among state corporations in Kenya*. University of Nairobi.
- Kanungo, R. N. (1982). Measurement of job and work participation. *J. Appl. Psychol.* 67:341-349.
- Kiage, J. O. (2013). Factors affecting procurement performance: A case of ministry of energy. *International journal of business and commerce*, 3(1), 54-70.
- Kibet, W & Njeru, A. (2014). Effects of Procurement Planning on Procurement Performance: A Case Study of Agricultural Development Corporation, Nairobi.
- Klijn, E. H., Eshuis, J., & Braun, E. (2020). The influence of stakeholder involvement on the effectiveness of place branding. *Public Management Review*, 14(14), 499-519.

- Komakech, R. A., & Machyo, J. (2015). Public Procurement Reforms: A Disaster for Public Secondary Schools in Uganda. In *International Conference on Good Governance and Service Delivery in Developing Economies, held from 24th to 28th August*.
- Komatina, N., Nestic, S., & Aleksic, A. (2019). Analysis of the performance measurement models according to the requirements of the procurement business process. *International Journal of Industrial Engineering and Management*.
- Krejicie, R. V., & Morgan, D. W. (1970). Determining Sample Size of Research Activities. *Journal of Education and Psychology Measurement*, 30, 608 - 615.
- Kukutai, T. (2014). Continuity and change in census methodologies worldwide". *Journal of Population Research*. 32: 3-22.
- Kumar, A., Ozdamar, L., & Ng, C. P. (2005). Procurement performance measurement system in the health care industry. *International journal of health care quality assurance*.
- Likert, R. (1932). A technique for the measurements of attitudes. *Archives of psychology*. 1932; 140(22):5-55.
- Luyet, V., Schlaepfer, R., Parlange, M. B., & Buttler, A. (2012). A framework to implement stakeholder participation in environmental projects. *Journal of environmental management*, 111, 213-219.
- Lynch G. (2018), The Procurement Planning and procurement Plan. Why are they Important?
- Mamiro, R. G. (2010). Value for Money; The Limping Pillar in Public Procurement. Tanzania Procurement

- Marius, G. O. (2017). Stakeholder involvement and nature of procurement process in the united nations organization stabilization mission in the democratic republic of Congo (MONUSCO) entebbe support base. *International Journal of Supply Chain and Logistics*, 1(2), 55-81.
- Monica, F., & Antonella, I. (2019). Correlation Analysis. *Encyclopedia of Bioinformatics and Computational Biology*, 1, 706-721.
- Morgan, C. (2015). Stakeholder consultation: Keep your ears to the ground. Available at: <https://www.b2binternational.com/publications/stakeholder-consultation>.
- Morin, J., Olsson, C., Atikcan, E, O. (2021). Research Methods in the Social Sciences: An A-Z of key concepts. *Oxford University Press*. ISBN: 978019885029
- Moretto, A., Ronchi, S., & Patrucco, A. S. (2017). Increasing the effectiveness of procurement decisions: The value of big data in the procurement process. *International Journal of RF Technologies*, 8(3), 79-103.
- Muhwezi, L., Musiime, F. T., & Onyutha, C. (2020). Assessment of the Effects of Procurement Planning Processes on Performance of Construction Contracts in Local Governments in Uganda. *Journal of Civil, Construction and Environmental Engineering*, 5(6), 151.
- Namukasa, J. (2017). Records management and procurement performance: A case of NAADS program in the central region of Uganda. *Records Management Journal*.
- Mutoro, W. J., Makokha, E. N., & Namisonge, G. (2018). Factors Affecting Procurement Planning in Bungoma County Government in Kenya. *European Journal of Business*, 5(34), 74-82.
- Nangoli, S., Namiyingo, S., Kabagambe, L., Namono, R., Jaaza, M., & Ngoma, M. (2016).

*Stakeholder participation : An empirical investigation.* 10(8), 182–186.

<https://doi.org/10.5897/AJBM2015.8019>

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd Ed.). New York, NY: McGraw-Hill. Inc.

NWSC (2021). *NWSC Areas*. Available at: <https://www.nwsc.co.ug/nwsc-areas/> Accessed on 08<sup>th</sup>/08/2022

Nzimande, N., & Padayachee, P. (2017). Evaluation of the current procurement planning process in a district municipality. *International Journal of Public Policy and Administration Research*, 4(1), 19-34.

Nzovila, R., Mburugu, K. N., & Kirima, L. K. (2019). End User Involvement and Supply Chain Performance in Kenyan Universities; A Case of Chuka University, Kenya. *International Journal of Supply Chain and Logistics*, 3(3), 24-33.

Odero, J. A., & Ayub, S. E. (2017). Effect of procurement practices on procurement performance of public sugar manufacturing firms in Western Kenya. *International Journal of Management Research and Reviews*, 7(4), 521.

Okello, T. M., & Kihara, D. A. (2019). Effect of procurement lifecycle on performance of government ministries in Kenya. *International Journal of Supply Chain and Logistics*, 3(2), 105–128.

Onchiri & Kwasire (2016). Influence of end users involvement in procurement decision making on purchasing performance at Kenya Police College, Kiganjo. *Journal of Investment and Management*. 5 (6)115-121.

- Patrucco, A. S., Luzzini, D., & Ronchi, S. (2016). Evaluating the effectiveness of public procurement performance management systems in local governments. *Local Government Studies*, 42(5), 739-761.
- Patton, M. Q. (2008). Utilization-focused evaluation (4th ed.). Thousand Oaks, CA: Sage.
- Rendon, J. M., & Rendon, R. G. (2016). Procurement fraud in the US Department of Defense: Implications for contracting processes and internal controls. *Managerial Auditing Journal*.
- Saad, S. M., Kunhu, N., & Mohamed, A. M. (2016). A fuzzy-AHP multi-criteria decision-making model for procurement process. *International journal of logistics systems and management*, 23(1), 1-24.
- Salim, A. S., & Kitheka, S. (2019). Effect of procurement planning on procurement performance of state corporations in Mombasa County, Kenya.
- Salkind, N. (2010). Cross-sectional design. In N. Salkind (Ed.), *Encyclopedia of research design*. (pp. 314-315). Thousand Oaks, CA: SAGE Publications, Inc. doi: <http://dx.doi.org.library.capella.edu/10.4135/9781412961288.n96>.
- Sarah, N., Philip, G., & Onzima, A. R. D. (2015). Performance of Procurement Departments in Regional Referral Hospitals of Eastern Uganda.
- Saunders, M. N., & Bezzina, F. (2015). Reflections on conceptions of research methodology among management academics. *European management journal*, 33(5), 297-304.
- Schiavo-Campo, S., & Sundaram, P. (2000). *To serve and to preserve: Improving public administration in a competitive world*. Asian Development Bank.



- Sedgwick, Philip. (2014). Unit of observation versus unit of analysis. *BMJ* (online). 348.g3840. 10.1136/bmj.g3840.
- Tamakloe, D., & Agbenyega, J. S. (2017). Exploring preschool teachers' and support staff's use and experiences of assistive technology with children with disabilities. *Australasian Journal of Early Childhood*, 42(2), 29-36.
- Vaillancourt, A. (2017). Procurement consolidation in humanitarian supply chains: a case study. *International Journal of Procurement Management*, 10(2), 178-193.
- Walker, H., Schotanus, F., Bakker, E., & Harland, C. (2013). Collaborative procurement: a relational view of buyer–buyer relationships. *Public administration review*, 73(4), 588-598.
- Waswa, J. M., & Namusonge, G. (2017). Factors affecting procurement planning in Bungoma County Government in Kenya.
- Wayne Gould, R. (2012). Open innovation and stakeholder engagement. *Journal of technology management & innovation*, 7(3), 1-11.
- Willy, K., & Njeru, A. (2014). Effects of procurement planning on procurement performance: a case study of agricultural development corporation, Nairobi. *International Journal of Business and Commerce*, 3, 58-68.
- Wofuma, G. (2021). Procurement Practices, Stakeholder Engagement and Project Performance in Local Governments: A Case of Sironko District. Available at: <https://ir.busitema.ac.ug/bitstream/handle/20.500.12283/541/Wafuma-%20Dept.%20EM%2C%202020-Absract.pdf?sequence=3&isAllowed=y>

Yee, S. B., Eze, U. C., & Gan, G. G. G. (2010). Factors influencing environmentally responsible manufacturing system implementation in a manufacturing firm. In *The 11th Asia Pacific Industrial Engineering and Management Systems Conference*.

Zainudin A. (2012). *Structural Equation Modelling Using AMOS Graphic*. Shah Alam, Malaysia: UiTM Press.

Zwikael, O. (2009). Critical planning processes in construction projects. *Construction innovation*.

## LIST OF APPENDICES

### Appendix I: Questionnaire

*Dear Respondent,*

Kindly receive and fill our questionnaire. My name is Osujo Moses, a student of Kyambogo University conducting research study titled *“Procurement Planning, Stakeholder Involvement and Procurement Performance of National Water and Sewage Corporation”*.

The information that you will provide in response to this questionnaire shall be treated with utmost confidentiality.

Thank you

#### SECTION A: GENERAL INFORMATION

**Instruction:** Please tick [√] the option that best describes you.

**1. Gender**

a) Male

b) Female

**2. Age**

a) 20 – 29

b) 30 – 39

c) 40 – 49

d) 50 years and above

**3. Educational Level**

a) Certificate

b) Diploma

c) Bachelors

d) Post-Graduate

**4. Work Experience**

a) 1 – 5 Years

b) 6 – 10 Years

c) More than 10 Years

**SECTION B: PROCUREMENT PLANNING**

*Kindly read carefully and understand the questions as you answer them to your level best by ticking (✓) appropriate option from 1= Strongly disagree (SD), 2=Disagree (D), 3=Neutral (N), 4= Agree (A), 5= Strongly Agree (SA) that matches your opinion in regard to the questions below.*

<b>Procurement Planning</b>						
<b>In this organization.....</b>						
<b>PPP1</b>	We consolidate the procurement plans	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>PPP2</b>	The creation of a joint work plan is ongoing.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>PPP3</b>	Procurement is done in accordance with the funds that are accessible.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>PPP4</b>	We always review and update the procurement plan	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>PPP5</b>	Procurement plans are forwarded to the PDU	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>PPP6</b>	Approved procurement plan is circulated to the procurement users	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>PPP7</b>	The purchase requirements are given priority.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>PPP8</b>	The PDU approves the use of funds during procurement planning with user departments and finance.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>PPP9</b>	The buying strategy is always approved.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>PPP10</b>	The procurement strategy is clearly developed, and determines how long it will take to complete the planning process in total.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>PPP11</b>	The budgeted purchase price is reasonable and attainable.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>PPP12</b>	We choose the buying strategy to be employed.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>PPP13</b>	The purchase requirements are given priority.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>PPP14</b>	We carry out market research to establish the market prices of good, service or works	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

<b>SECTION C: STAKEHOLDER INVOLVEMENT</b>						
<b>Consultation</b>						
<b>STC1</b>	In this organization, stakeholders are consulted before procurement of goods, services and works	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>STC2</b>	In this organization, stakeholders are consulted to identify the procurement needs	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>STC3</b>	In this organization, stakeholders are consulted when developing procurement specifications	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>STC4</b>	In this organization, stakeholders are consulted during procurement planning	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>STC5</b>	In this organization, the ideas/views obtained from the stakeholders' consultations are integrated in the procurement plan	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Task Participation</b>						
<b>TP6</b>	In this organization, stakeholders actively participate in developing the procurement budgets	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>TP7</b>	In this organization, stakeholders participate in identifying and mobilizing financial resources to facilitate procurement	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>TP8</b>	In this organization, stakeholders participate in planning for procurement schedules	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>TP9</b>	In this organization, stakeholders participate in choosing the appropriate procurement method	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Decision Making</b>						
<b>DM10</b>	In this organization, stakeholders are the ones to decide on the quality, quantity and the price of goods, services or works to be procured	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>DM11</b>	In this organization, user-departments decide on what to include in their procurement plan	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>DM12</b>	In this organization, stakeholders decide when to implement the procurement plan	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>DM13</b>	In this organization, stakeholders make the decision to modify the procurement plan	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

<b>DM14</b>	In this organization, stakeholders decide on the appropriate KPIs for monitoring the progress of procurement.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>DM15</b>	In this organization, stakeholders are given the right to make-decisions on goods and services to be acquired during the procurement planning process.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>SECTION D: PROCUREMENT PERFORMANCE</b>						
<b>Effectiveness</b>						
<b>In this organization.....</b>						
<b>PE1</b>	The procurement unit always achieve the intended objectives	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>PE2</b>	The procurement unit receives goods, services and works procured from suppliers/vendors/contractors on-time and as stipulated in the agreement.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>PE3</b>	The procurement unit offers a structure to assist procurement officials in carrying out their responsibilities.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>PE4</b>	The procurement section makes sure that schedules are adhered to while purchasing products, services, and works.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>PE5</b>	The purchasing unit makes certain that the proper legal processes are open to competition and transparent.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Efficiency</b>						
<b>EFF6</b>	The procurement unit makes sure that, for any set of given material inputs, its procurement processes yield the highest output.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>EFF7</b>	In order to do its tasks, the procurement unit makes sure it uses the appropriate resources.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>EFF8</b>	The procurement unit makes sure that it carries out its duties according to correct procedures and techniques.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>EFF9</b>	The procurement unit decreases waste by utilizing resources as effectively as possible.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

<b>EFF10</b>	The purchasing department favors better contract terms and conditions, including those relating to price and quality.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Economy</b>						
<b>EC11</b>	The purchasing department pays suppliers for the best-priced and highest-quality goods, services, and works.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>EC12</b>	The procurement unit strikes a balance between resource utilization and achieving the proper goals at a fair price.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>EC13</b>	The procurement unit spends money sensibly and reasonably to get market exposure and compete.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>EC14</b>	The cost of the resources used and the output value received are factors that the procurement unit considers when making decisions.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>EC15</b>	The procurement section purchases personnel and supplies of the required standard and caliber at the most affordable price.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

.....**THE END**.....