

**PROCUREMENT PLANNING AND MATERIALS MANAGEMENT
IN PUBLIC UNVESRITIES IN UGANDA.**

A CASE STUDY OF MAKERERE UNIVERSITY BUSINESS SCHOOL (MUBS).

BY

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Declaration

I **Annette Nabirye**, hereby declare that the work herein is original with exception of sources of information which are duly acknowledged and referenced and I declare that it has never been presented to any institution of higher learning for any award.

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Approval

This is to certify that this dissertation has been under our supervision and is now ready for submission for examination. Submitted with our consent;

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List of Acronyms

AO:	Accounting officer
CC:	Contracts Committee
FOC:	Faculty of Commerce
FRR:	Fee Requirement Review
GDP:	Gross Domestic Products
MPI:	Market Price Index
MUBS:	Makerere University Business School
MUECCA:	Makerere University Establishment of Constituent College Amendment
MUK:	Makerere University
NCBS:	National College of Business Studies
OECD:	Organization for Economic Cooperation and Development
PDU:	Procurement and Disposal Unit
PE:	Procuring Entity
PP:	Procurement Plan
PPDA:	Public Procurement and Disposal of Public Assets Authority
PPOA:	Public Procurement Oversight Authority
RBV:	Resource-Based View
UN:	United Nations

Abstract

The study was about procurement planning and materials management in public universities in Uganda, with the case of MUBS. The study objectives were to: evaluate the effect of procurement plan preparation on materials management at MUBS, assess the effect of procurement plan implementation and materials management at MUBS and finally, to establish the relationship between procurement plan evaluation and materials management at MUBS. The study adopted a case study approach, using cross sectional survey research design and adopted both quantitative and qualitative approaches. Data was collected using questionnaires, interviews and documentary review, from a sample of 140 respondents.

The study findings revealed that procurement plan preparation positively affects materials management revealed at 0.622 (62.2%), there is a positive effect of procurement plan implementation on materials management confirmed at 0.500 (50.0%) and there is a positive significant relationship between procurement plan evaluation and materials management at MUBS which was confirmed at Pearson correlation coefficient of 0.762**.

The study recommended that: Public Universities should issue Standard Procurement Plan formats to all PDUs and budget call circular which requires AOs to prepare Annual Procurement Plans to ensure that the procurement budget is integrated with the approved expenditure programme of the entity; Public universities should also ensure that the core steps of procurement planning are managed exceptionally well, the core procurement planning practices are embedded in all procurement systems, the core departments are carefully involved in procurement planning and finally; The contracts committee should ensure that the tenders submitted are fully compliant with the special conditions outlined in the data sheet and ensuring that the evaluation and ranking of bidders is completed in a fully transparent manner without bias to any one bidder.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

In today's competitive business environment, procurement has positioned itself among core organizational functions, and its management is increasingly becoming critical for the well-functioning of any organization at the global level. Makerere University Business School is one of the public organizations that are required to undertake procurement planning in order to ensure effective and efficient material management as per PPDA Act and Regulations 2003. The study aimed at establishing how Procurement Planning affects materials management at Makerere University Business School (MUBS). In this study, Procurement planning was conceptualized as an independent variable while material management at Public Universities was the dependent variable. This chapter presents the background to the study, statement of the problem, purpose of the study, objectives, research questions, conceptual frame work, justification and the scope of the study, significance of the study, definition of terms.

1.2 Background to the Study:

1.2.1 Historical Background

The last decade of the twentieth century has witnessed the start of the global evolution in regulation of public procurement and to make public spending accountable and be able to meet the objectives of nations through procurement planning and trade that started to take root after World War I(Arrowsmith and Trybus,2003). In US, the "Buy American" Act (1933) protected the domestic industry during the great Depression and all US government agencies were obliged to buy only domestic products, unless special consent was given (CBP.Gov, 2005).

Most industrialized countries spend at least 10% of their GDP on public procurement. Consequently, developed and developing countries have the need for a well-functioning public procurement system. This is particularly true for developing countries, where procurement usually accounts for a high proportion of total expenditure, for example 40% in Malawi and 70% in Uganda (Agaba and Shipman, 2007). Over the past few years, developing countries especially those in Sub-Saharan Africa have been awakened on the importance of efficient and effective management of the procurement process at all levels in Government Ministries, Departments and Agencies and its subsequent contribution to smooth operations of the public sector. Procurement; a function that was traditionally viewed as a clerical and reactive task has since positioned itself among core organizational functions, and its management is becoming increasingly critical for the well-functioning of any organization (Schiavo-Campo & Sundaram, 2000).

A significant number of African countries have over the years adopted measures aimed at the development of procurement planning and administration and this fashion became popular in the 1980s (Livingstone & Charlton, 2001). By the late 1990s the failure of the existing procurement systems to cope with the expansion in government procurement requirements to attain value for money had become generally accepted among government institutions and donor partners (Agaba and Shipman, 2007). In Uganda, procurement planning is part and parcel of the traditional planning notably, procurement budgeting. It states that a procurement plan should be integrated into the annual sector expenditure program to enhance financial predictability, accounting and control over procurement budgets. The combined work plan for the procuring and disposing entity will include details of activities of works, services or supplies to be

procured, a schedule of procurement requirements in order of priority, a statement of required resources supported by a schedule of the projected funding(PPDA,2006).

1.2.2 Theoretical Background

This study was guided by the Resource-Based View (RBV) theory. The Resource-Based View (RBV) has emerged as one of several important explanations of persistent firm performance differences in the field of strategic management. The Resource Based theory is an economic and management tool used to determine the strategic resources available to the organization. The underlying principle of the Resource Based View is that sustained competitive advantage is generated by the unique bundle of resources at the organization's disposal (Barney 1991). Further, the Resource Based View of the firm holds that each company has a unique combination of competencies. The Resource-Based View (RBV) assumes that firms possess resources, a subset of which enables them to achieve competitive advantage, and a subset of those that lead to superior long-term management of materials delivery (Barney et al. 2001). An organization may seek to improve its materials management by concentrating on those activities that best fit its competencies, hence depending on the other firms to supply it with products, services or support activities for which it has lesser competency and this concentration may be considered horizontally or vertically (Radebaugh, et al, 2009). It should be observed at this point that the implicit in the resource based perspective is the primacy of the organization's resources. In this regard, assets and all other resources owned by an organization or companies may therefore explain the differences in materials management (Agaba, 2011).

1.2.3 Conceptual Background

The key concepts of this study were Procurement planning and material management. According to PPDA (2003), procurement planning is an integral part of the procurement process involving Works/Services/Supplies required to meet organizational needs in an efficient, cost effective and timely manner in accordance with established procedures and guidelines. Economic Commission of Africa (2003) defines procurement planning as the purchasing function through which organization obtain products and services from external suppliers. A good procurement plan will go one step further by describing the process you will go through to appoint those suppliers contractually.

Procurement is the acquisition of goods, works and / or service at the services at the best possible total cost of ownership in the right quality and quantity at the right time, in the right place and from the right source for the direct benefit or use of corporations, individuals, or even governments, generally via a contract (Lysons & Gillingham, 2005). It is public procurement if such acquisition is by government or public sector organization (OGC,2006) and such procurement can be by any means, purchase, rental, leas, hire purchase, licenses, tenancy, franchise, or any other contractual means, of any type of works, services or supplies or any combination (PPDA,2003).

Different researchers provide different definitions for material management. Therefore, different definitions can be found in different references. Basically, material management is concerned with the planning, identification, procuring, storage, receiving and distribution of material. Bailey and Farmer (2009), defines material management as a concept concerned with the

management of materials until the materials have been used and converted into the final product. Activities include cooperation with designers, purchasing, receiving, storage, quality control, inventory control, and material control. According to Stukhart (2007), defines material management as the activities involved to plan, control, purchase, expedite, transport, storage, and issue in order to achieve an efficient flow of materials and that the required materials are bought in the required quantities, at the required time, with the required quality and at an acceptable price.

Management of materials deals with planning and design for the movement of materials, or with logistics that deal with the tangible components of a supply chain. Specifically, this covers the acquisition of goods or materials and replacements, quality control of purchasing and ordering such goods, and the standards involved in ordering, shipping, and warehousing the said goods or materials (Crocker, 2009). Materials management is an important management tool, which will be getting right supplies, quality at the right time and the right inventory control and condemnation and methods used to process the sound will improve the efficiency of the organization and it also helps in the working atmosphere in higher institution learning organizations, whether private or government (Stukhart,2007).

Summarily, procurement planning consists of the major procurement process in terms of Procurement plan Preparation, procurement plan implementation and procurement plan evaluation. While management of materials delivery consist of dimensions of Quality acquisitions, Timeliness of acquisitions, Cost and Quantity (Lysons & Gillingham, 2005; Agaba, 2011and PPDA, 2003).

1.2.4 Contextual Background

Makerere University Business School (MUBS) is a Constituent College in Uganda and it is located in Nakawa Division, Kampala. It was established by Makerere University (Establishment of Constituent College) order 1997 as a Constituent College of Makerere University (MUK). The School was created from a merger between the Faculty of Commerce (FOC) and the National College of Business Studies (NCBS). The merger involved the physical movement of the Faculty of Commerce from the Makerere Campus to Nakawa where the NCBS was located. The actual merger and movement took place in January 1998. In the year 2000, the law was amended to give financial and administrative autonomy by the Makerere University (Establishment of Constituent College) (Amendment) order (MUECCA (A) 2001).

Makerere University Business School as a public institution, also follows PPDA Act (2003) and Regulations in acquisition of goods, services and disposal. The institution involves the Bursar as the Accounting officer (AO), Procurement and Disposal Unit (PDU) with staff and a Contracts Committee (CC) as per (UG CMR, 2004). The user departments include the Academic faculties and departments and Libraries. Departmental Heads are supposed to plan and forward their procurement needs to the PDU and are required to manage the supply contracts and ensure that the needed materials are delivered on time, in the right quality, quantity and cost (PPDA Regulations, 2003). In view of the above, some User Departments of Makerere University Business School are found to be highly unsatisfactory (most non-compliant) to the requirement of procurement planning in terms of undertaking a thorough preparation, procurement plan implementation and procurement plan evaluation to the procurement function on a timely basis.

Besides, adhering to such procurement plans by the University in acquiring the required goods, services and works is sometimes wanting. As a consequence, the material management in terms of procuring high quality supplies, timely delivery of supplies, right quantity of delivery and the cost at which the deliveries are made still fall below the average as exemplified by the user departments' failure to have the work plans in place that Procurement and Disposal Unit would have used to draw up a consolidated procurement plan. Although, there has been an improvement in this area, a lot more needs to be done (Annual Procurement & Disposal Audit Report for the Financial Year 2012/2013).

1.3 Statement of the problem

Makerere University Business School being a Constituent College of Makerere University in Uganda, it undertakes procurement planning as required by PPDA Act 2003 and PPDA Regulation (2014) as amended which gives guidelines on a systematic, fair and transparent procurement process and value for money.

However, the MUBS procurement and disposal compliance Audit report findings of the Financial years of 2010/2011 and 2012/2013, revealed that some user departments do not usually undertake thorough procurement planning through preparation and implementation of procurement plans before evaluation of the procurement plans on a timely basis as required by the PPDA Act 2003 (PPDA Audit Report, 2013). It was revealed that much as MUBS undertake procurement planning as required by the PPDA Act 2003 and PPDA Regulation (2014), there has been a stock out of the required items with purchasing of poor quality and delayed delivery of supplies, shortage of some materials like Printing Paper, scarcity of Toner and Whiteboard Markers among others (MUBS Monthly Departmental Reports, 2014). It was also reported in the

New Vision, (2015), that MUBS owes a lot of money to suppliers of services, logistics and utilities planned which indicate gaps in the procurement planning. Therefore, this trend of events needs to be checked against to overcome poor material management at MUBS. It is for this reason therefore, that there is need to carry out a study to examine the effect of procurement planning on materials management in public universities in Uganda using a case study of Makerere University Business School (MUBS).

1.4 Purpose of the Study

The purpose of the study was to examine the effect of Procurement Planning on Materials Management at MUBS.

1.5 Objectives of the study

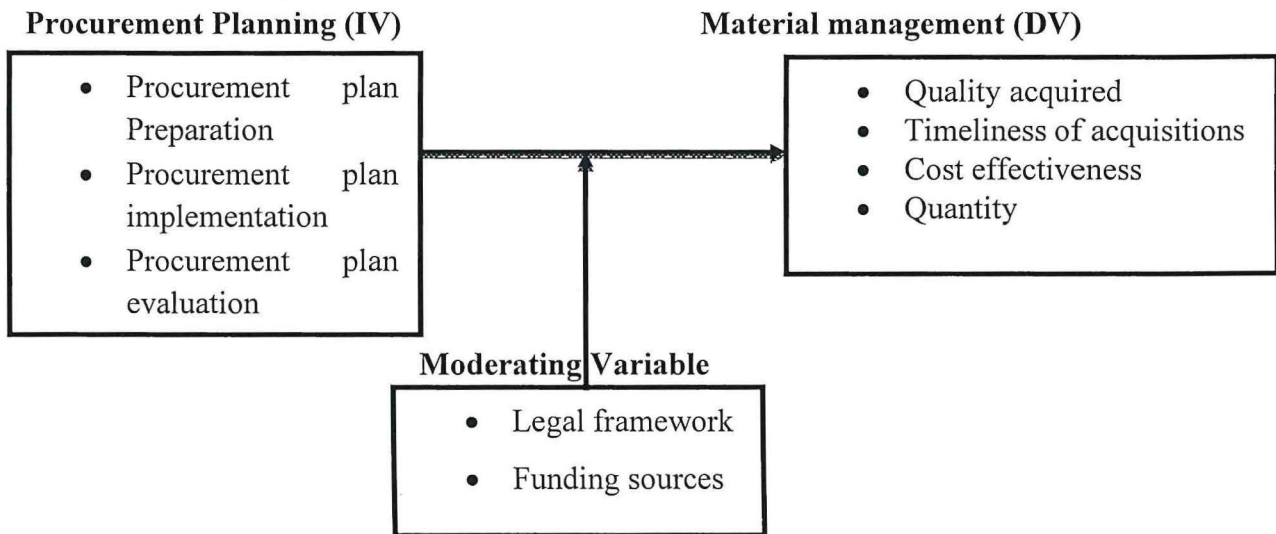
- i. To evaluate the effect of procurement plan preparation on materials management at MUBS.
- ii. To assess the effect of procurement plan implementation and materials management at MUBS.
- iii. To establish the relationship between procurement plan evaluation and materials management at MUBS.

1.6 Research questions

1. What is the effect of procurement plan preparation on influences material management of MUBS?
2. What is the effect of procurement plan implementation on materials management at MUBS?

3. What is the relationship between procurement plan evaluation and material management at MUBS?

1.7 The Conceptual Frame Work



Source: Adapted from PPDA (2003) (Procurement Planning Process).

Figure 1: Illustrates the conceptual framework

The conceptual framework above illustrates how the independent variable affects the dependent variables. The Independent variable in this case is the procurement planning with key dimensions of Procurement plan Preparation, procurement plan implantation and evaluation adapted from PPDA (2003) Procurement Planning Process. A careful preparation effort attaches appropriates resources by the user departments in line with the approved budget in the work plan on the procurement plans. Material management as the dependent variable is described with the main dimensions of quality acquired, timeliness of acquisitions, cost effectiveness and right quantity modified from Agaba, (2011). The effect is moderated by the nature of funding which is affected

by reliability, adequacy, freedom of allocation and conditions attached. Some sources of funds dictate the manner in which their funds must be spent and funding sources to this matter include Government of Uganda, Donors, internally generated and sponsors. With the legal frame work (PPDA) is the other moderating because all procurement plan are guided by the legal frame work in the country. This is intended to investigate a many to one type of relationship of the dimensions of procurement planning and a single variable of materials management. However, in this study, the moderating variables (legal framework and funding sources) were not studied.

1.8 Significance of the Study

It is envisaged that the study will address the Procurement Planning challenges resulting into materials management gaps in the Procurement function. It is important to note that the study will benefit the Procurement practitioners and Professionals both locally and globally as well as Scholars in the Procurement and Supply Chain Management profession on how to effectively plan for the available funds to prepare procurement budgets in order to achieve value for money and proper management of the required materials in the institution.

Procurement is a performance area for Universities. Good procurement achieves value for money from effective service delivery for which the government of Uganda is most interested. This study will also benefit the PDUs in Universities in the sense that public universities will improve on their procurement planning process. This knowledge will be of benefit in the procurement compliance monitoring of public universities by the Audit committee.

The will also benefit stakeholders to have better value for money, higher quality goods and service delivery and identifying procurement objectives.

Furthermore, the findings and recommendations of the study will help user departments and PDU Staffs in addressing ways of improving material management of Higher Institutions of learning especially Makerere University Business School as per study recommendations in chapter five of this study.

1.9 Justification of the Study

Procurement planning is one of the primary functions of procurement and regarded very critical in ensuring value for money in the Procurement process. It is central to the entire procurement function for efficient and effective management. Noted, is that there have been limited studies on this very important Procurement component in the developing world. Uganda in particular many studies that have been carried out by different researchers have not looked at procurement planning and materials management at Makerere University Business School. The study therefore will be of a great benefit to many stakeholders.

1.10.0 Scope of the study

1.10.1 Subject Scope

The study was about procurement planning and materials management in Public Universities in Uganda and taking a case of Makerere University Business School. The variables of procurement planning which include Procurement plan Preparation, procurement plan implementation and procurement plan evaluation were assessed on how they affect materials management at Makerere University Business School.

1. 10.2 Geographical Scope

The study was carried out at Makerere University Business School as Constituent College of Makerere University which is one of the public universities in Uganda. The school's campus is located at 118 Port Bell Road, in Nakawa Division with in Kampala district. The interest of study by the researcher was due to the study variables and the costs incurred to complete the dissertation.

1.10.3 Time Scope

The research was conducted from February to September 2015.

1.11 Definitions of Terms.

Procurement Planning: -Refers to an integral part of the procurement process involving Works/Services/Supplies required to meet organizational needs in an efficient, cost effective and timely manner in accordance with established procedures and guidelines.

Public Procurement: - Refers to the process by which large amounts of public funds are utilized by public entities to purchase goods and services from the private sector.

Procurement: - Refers to the acquisition of goods, services or works from an external source. It is favourable that the goods, services or works are appropriate and that they are procured at the best possible cost to meet the needs of the acquirer in terms of quality and quantity, time, and location (Weele,2010).

Material Management:- This refers to the planning and control of the functions supporting the complete cycle (flow) of materials, and the associated flow of information. These functions

include; identification, cataloging, standardization, need determination, scheduling, procurement, inspection, quality control, packaging, storage, inventory control, distribution, and disposal.

Procurement Plan Evaluation: - This involves collecting knowledge gained throughout a project and using it to ascertain whether community needs and expectations have been fulfilled and whether “value for money” has been achieved. It can also be defined as the planning and control document for conducting the evaluation of offers received in response to either a Request for Tender or a Request for Quotation.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the review of the related literature to procurement planning and material management generally. Basically, the literature review mainly focuses on Procurement plan preparation and management of material, consolidation of procurement plan and management of material and finally approval of procurement plans procurement and materials management in general terms and summary of the literature.

2.2 Theoretical Review

The study was guided by The Resource-Based View (RBV). The Resource-Based View (RBV) has emerged as one of several important explanations of persistent firm performance differences in the field of strategic management. The Resource Based theory is an economic and management tool used to determine the strategic resources available to the organization. The underlying principle of The Resource Based View is that sustained competitive advantage is generated by the unique bundle of resources at the organization's disposal (Barney 1991). The Resource-Based View (RBV) argues that firms possess resources, a subset of which enables them to achieve competitive advantage, and a subset of those that lead to superior long-term management of materials delivery. Resources that are valuable and rare can lead to the creation of competitive advantage. That advantage can be sustained over longer time periods to the extent that the firm is able to protect against resource imitation, transfer, or substitution. In general, empirical studies using the theory have strongly supported The Resource-Based View.

Further, the Resource Based View of the firm holds that each company has a unique combination of competencies. An organization may seek to improve its management of materials delivery by concentrating on those activities that best fit its competencies, hence depending on the other firms to supply it with products, services or support activities for which it has lesser competency and concentration may be considered horizontally or vertically (Radebaugh, et al, 2009). In this regard, Makerere University Business School with the core mandate of strengthen the institute providing commercial and business education in order to provide high quality standards in the commercial sector through an increased intake of students and output of qualified personnel from the various degree, diploma and certificate programmes in commercial and business education to plan for the acquisition of the necessary resources required to achieve its intended objectives. It should be observed at this point that the implicit in the Resource Based perspective is the primacy of the organization's resources. In this regard, assets and all other resources owned by an organization or companies may therefore explain the differences in management (Agaba, 2011). According to Resource Based Theorists, organizations can achieve sustainable competitive advantage from such resources as strategic planning, management expertise and skills, capital and employment of highly skilled personnel, (Michalisin et al, 1997). Since the resource based view puts into context the procurement planning as an underlying factor of superior purchasing performance, the theory was therefore found to be of a fundamental help in the study.

Planning as both a concept and function is probably one of the extensively talked about concepts in the management literature. It is a function that forms the foundation for the rest of management functions. When planning is properly conceived and implemented, it can serve as

an important mechanism for extracting, distributing and allocating resources. Planning generally enhances the gathering, evaluating and interpreting of essential data and information in order to produce knowledge relevant to good policy making. In many developing countries, planning has not arrived at the level of achieving the aims described because of problems related to human and technical resources (Basheka, 2008).

2.3 Procurement Planning and Materials Management.

Procurement planning is a process of determining the procurement needs of an entity and the timing of their acquisition and their funding such that the entities operations are met as required in an efficient way. As a function, procurement planning endeavors to answer the following questions: What do you want to procure?; When do you want to procure it?; When are you to use the procurement?; Where will you procure them from? When will resources be available?; Which methods of procurement will you use? ; How will timely procurement or failure affect the user of the item(s) and the Procuring and Disposing Entity? How can you be more efficient in the procurement process?; and Who will be involved in the procurement?(PPDA,2003)

Planning is an intellectually demanding process; it requires the conscious determination of courses of action and the basing of decisions on purpose, knowledge and considered estimates (Koontz, et al, 2007). It should be noted therefore that the environment of public sector purchasing has become more complex than ever before. Purchasing is no longer considered a clerical function performed independently by untrained individuals within a governmental agency.

Procurement deals with the acquisition of materials to be used in the operations. The primary function of procurement planning is to get the materials at the lowest cost possible, but keeping in mind quality requirements. Expediting is the continuous monitoring of suppliers to ensure on time deliveries of materials purchased. The purpose of materials management and planning is to procure the materials for the dates when they are needed, storage facilities, and handling requirements. The primary function of materials handling is to manage the flow of materials in the organization. The manager has to assure that the costs associated with handling materials are kept to a minimum. In cost control, the manager has to insure that the costs to buy materials are kept to a minimum. In other words, the manager has to insure that he is buying the products at the lowest possible price. The inventory management deals with the availability of materials. Transportation involves using the safest most economical means to transport the materials to the site where they are needed (Stukhart, 2007).

2.3.2 Procurement Plan Preparation and Material Management.

The most important outcome of the procurement planning process is to clearly and directly link an agency's procurement activities to its materials management to improve the way the agency procures the necessary goods and services so as to value for money. This is only possible when clear procurement objectives are set. Thus procurement plans need to be clear and succinct to enable the understanding of the agency's procurement objectives, the linkage of the objectives to agency's service delivery outcomes, what initiatives are planned and how the agency will measure the achievement of these initiatives. Performance of procurement is measured against the achievement of its objectives and thus it is therefore very important to set procurement

objectives and draw strategies to achieve the set objectives. The objectives must be achievable, measurable and should be consistent with the overall organizational strategy (NSW, 2006).

Procurement plan preparation involves the transformation of a stated requirements or organizational goals and objectives into measurable activities to be used to plan, budget and manage the procurement function within the organization towards excellent materials management in terms of quality, quantity, cost and timely delivery. As with the traditional procurement planning process, procurement budgeting and forecasting is vitally important to ensure an effective, efficient, strategically viable and sustainable result, (UN, 2006). The budget is the single most important policy document of governments, where policy objectives are reconciled and implemented in concrete terms. Budgeting is a major management tool for facilitating management tasks and leading business towards achieving their goals. Especially in the context of an increasingly competitive and global market place as well as increasingly limited resources, organizations seeking to maintain their competitive advantage must make the best use of the available resources or be displaced by more effective and efficient competitors. Many organizations use budgets to motivate employees, allocate resources and evaluate performance (Walker, 1999). Recent attention to public management reform and the role of performance based budgeting is not new. Australia and New Zealand, for example, have developed very extensive performance based budgets and processes to ensure better results out of the procurement plans.

It should be noted that financial budgeting in procurement is a precondition for effective public participation in the procurement plan processes. The combination of procurement budgeting and

public participation in budget processes has the potential to combat corruption, foster public accountability of government agencies and contribute to the judicious use of public funds (OECD, 2002). Such procurement budgets need to be implemented in an efficient and effective manner to satisfy the needs of all public procurement stakeholders. In every Country, the implemented budget varies from the adopted one. The variance therefore between the adopted and implemented budget depends on the Country's fiscal conditions, stability and certainty in the Country's finances, the role of the finance ministry and the type of the budget system,(World Bank, March 2004).The most effective implementation of budgets and annual budgets typically contain financial details by time and departments. It is observed that a shorter time span is generally required for initiating control as well for material management delivery of the procurement function. Superiors frequently use a budget emphasis style of evaluation because its relative objectivity, enhanced budgetary performance results in bonuses, pay raises and promotions, (Huang and Chen, 2010).

According to the PPDA Act (2007), purchases must be economical and efficient. This means that they should be based on market prices and should be able to generate saving. It also means that bad practices such as irresponsible procurement leading to wastage, wear and tear of stocks, over invoicing, unplanned expenditure, shortage of goods when needed, poor quality products and similar factors needs to be avoided for the better management of materials delivery. The PPOA prepares and updates a Market Price Index (MPI) to be used by the Procuring Entity (PE) on a periodic basis.

The Procurement Plan (PP) must be integrated into the budgetary processes based on the indicative or approved budget, as stipulated in the PPDA (2006). The budget as well as the procurement plan are to be based on realistic cost estimates derived from the market research database which is to be compiled and updated regularly by the procurement unit in line with regulations, PPDA (2009). Costs are one of the factors that are concerned with the customer perspective but price is not seen as the only parameter for costs.

Part V of PPDA regulations (2003) state that “procurement or disposal shall only be initiated or continued on the confirmation that funding, in the full amount over the required period is a reliable or will be made available at the time of contract commitment is made” The Uganda (2004) reported that procurements are launched either when funds are available or annual basis, regardless of how this corresponds with current needs. Consequently when the funds released, procurement is rushed to loss of value for money. The report then suggested that the budgeting process needs to include procurement planning before the proper links between budgeting and procurement are made (Uganda CPAR, 2004).

Vaughan (2009) noted that the Uganda National Budget for the 2009/10 financial year outlined a bleak for the future of higher education and recognized that of the over Sh1 trillion for education, only 12% was allocated for the tertiary education sector. Kasozi (2007) found out that most Uganda universities, students pay about 30% of the annual cost of the programs for which they are registered. He then warns that government institutions with decreasing government budget allocation coupled with deteriorating infrastructure, declining ability to purchase inputs and increasing student numbers are unlikely to provide high quality higher education for

sustainable period of time. This raises the question of whether universities have tried to find sustainable alternative sources of funding for procurement and other strategic activities to deliver the required levels of higher education service quality and quantity.

According to Hon. Amama Mbabazi, the former Uganda's Prime Minister, deviations from the planned Budget, whether positive or negative, appear to impact negatively on performance, saying that the government's performance was affected by deviations in financial releases away from approved budgets in the last 2011/2012 financial year. He said that during the financial year 2010/2011, Shs7.90 trillion was released against an approved budget of Shs7.04 trillion. Public resources amounting to Shs861 billion were mobilized outside the original budget resource envelope, while a further Shs870 billion were reallocated away from their planned use. Mr. Mbabazi said variations in budgetary allocations resulted in 40 Ministries, departments and agencies experiencing financial release challenges, (Daily Monitor of April 25th 2012).As a result, the affected departments performed at 41%.It should be noted that the Ministries, departments and agencies that received all their approved budgets registered an average performed at 69%. Further, Ministries, departments and agencies that received supplementary releases registered an average performance of 64%. Therefore, effective budget implementation is central to superior performance and value for money realization thus if government does not implement a clear budget that enables public universities to perform their procurement functions as to register better material management in terms of cost effectiveness, quality and quantity.

2.3.2 Procurement Plan Implementation and Materials Management.

According to the (PPOA, 2009), the beginning of the procurement process is the need realization and identification of the requirements. This is informed by the inventory status, projects plan, production schedules, work plans, capital or operational requirements budgets and the procurement plan. Establishment of the requirements is the foundation for conducting market survey to ascertain aspects such as prices, new products or alternative or substitute products, new sources of supply, nature of competition and environmental aspects that may affect the supply market.

Procurement planning clarifies what to procure and when to procure to both the user and the buyer. Effective procurement planning enables the procuring organization and its staff to work smoothly to achieve the organization's goals with the right quality and quantity of inputs in place; ineffective procurement planning may result in failure to achieve those goals, putting in jeopardy the Fee Requirement Review (FRR) and procurement principles and causing damage to the credibility of the organization. Materials management has become a key element in the modern public sector governance and many developing Countries have introduced it as a means to measure procurement efficiency in order to ensure that public sector organizations meet the needs of the public(Ohemeng,2009). Increasing effectiveness, efficiency and transparency of public procurement systems has become an ongoing concern of governments and the International development Community, (OECD, 2006).

Oluka & Eyaa, (2011) contends that the ultimate goal of procurement planning is coordinated and integrated action to fulfill a need for goods, services or works in a timely manner and at a

reasonable cost. Early and accurate planning is essential to avoid last minute, emergency or ill-planned procurement which is contrary to open, efficient and effective and consequently transparent procurement. In addition, most potential savings in the procurement process are achieved by improvements in the planning stages. Even in situations where planning is difficult such as emergencies, proactive measures can be taken to ensure contingency planning so as to be better prepared to address upcoming procurement requests. Good procurement planning therefore is essential to optimize the contribution of the procurement function towards achieving the overall goals of the organization in supporting;

- Transparency and accountability
- Effective and timely solicitation of offers, award of contracts and delivery of the goods, services and works required.
- Early requisition to reduce any delays in procurement and timely delivery to goods and services.
- Sourcing the right suppliers on time to avoid taking short cuts under rush procurement to meet deadline or budget expenditure.
- Effective supply strategy and timely programme and project implementation.
- Early identification of right commodities and quantities to meet organizational needs.
- Avoidance of unnecessary exigencies and urgencies enabling full competition and full compliance with standard rules and procedures.
- Strengthened procurement power Vis-a Vis supplier.
- Obtaining best prices for aggregate requirements.

- Establishment of criteria to measure effectiveness of the procurement function.
- Development of long term agreements.

Therefore, effective procurement planning enables the procuring organization and its staff to work smoothly to achieve the organization's goals with the right quality and quantity of inputs. In place, ineffective procurement planning may result in failure to achieve those goals, putting in jeopardy the procurement principles and causing damage to the credibility of the organization (Oluka & Eyaa, 2011).

Evennet & Heekman (2005) states that procurement planning enables the identification of major investment expenditures which in turn facilitates budgetary decision making. It is quite difficult for a public institution to cause effective public service delivery to its people without good procurement planning and budget practice. Purchases must be planned and budgeted in the manner that conforms to the budget procedures (Johan, 2006). It is the plan that checks the budget whether it is equal or over the estimated expectations. It is planning that guides the procurement team how to implement within the means with the aim of maximizing value for money. Procurement planning sets adequate guideline and communication channels through various contractual arrangements important to control the process so that the goals are achieved. Love & Smith (1999), claim that absence of quality focus throughout the supply chain process, often result into poor quality and quantity argued that proper planning is about 34% for local government that accounts for a huge expenditure in Uganda and is an essential element of good procurement.

Increasing the effectiveness, efficiency and transparency of procurement planning process has become an ongoing concern of governments and of the international development community (OECD, 2006). Measuring its performance therefore, is a graceful way of calling an organization to account and in public sector performance measurement accountability is the central concern and therefore, without credible and practical methods of measuring the performance of procurement functions one cannot know what best practice is or how to improve the existing practice (Erridge, 2000). To maximize good material management in your organization, you need to execute many different processes to achieve the desired result. Planning is a vital aspect that is easily overlooked or taken for granted. In every organization, user departments need to be completely engaged with the procurement planning process, if they are acquire good quality materials and right quantity and at right time and cost. There is saying that “Athletes never plan to fail, but they fail to plan”. This emphasizes the pivotal role that proper planning plays in achieving one’s peak performance.

Ariko (2009) asserts that an ideal procurement planning should have in place a good planning implementation frame work. However, Basheka (2008) contends that the negative effects of poor procurement planning are a great hindrance to superior performance of the procurement function since the success of the subsequent procurement processes heavily depend on how planning is done. There cannot be a good procurement performance without a plan, and there budget to fund it. Planning is a process that consists of many steps and the bottom line is that planning is not concerned with future decisions but rather with the future impact of decisions made today.

Agaba & Shipman, (2007) contends proper planning for a huge expenditure is an essential element of good procurement in the public institutions of the country. The procurement objective is to provide quality goods and services through open and fair competition in the exact quantity and proper quality as specified; and has to be delivered at the time and place where needed. Therefore, to secure such goods and services at competitive prices requires accurate planning and involvement of a number of stakeholders. The objective of this study is to help fill the gap on procurement planning in relation to creating a better materials management. Agaba (2007) argues that public institutions must ensure that the core steps of procurement planning are managed exceptionally well, the core procurement planning practices are embedded in all public institution procurement systems, the core departments are carefully involved in procurement planning, and the importance of procurement planning must be rigorously shared among the multitude of stakeholders taking into account the quality, quantity, cost and time of delivery of goods and services.

The literature revealed mainly what is supposed to be done but the practice. This research will seek to establish whether user departments do their work in time and with the help of the procurement disposal unit to implement their needs according to the budget.

2.3.3 Procurement Plan Evaluation and Material Management.

Wardni et al (2006) noted that procurement plan evaluation strategy should contain options analysis and recommendation around arrange of issues depending on the precise nature of the procurement plan. Typically, for a complex procurement plan, that includes discussion of the contracting process itself, the number and nature of the supplier required; the length and type of contract, contract and supplier management issues, consideration might also be given as to

whether an existing contract could be used, either one let by the authority or whether another government contract could be available for wide use. This can be an effective and efficient route, saving time and money in the procurement planning process. The evaluation process should attempt to determine the full cost of the procurement process, including an estimate of actual and implicit cost incurred by both the buyer and bidders.

The evaluation of tenders and awarding of contracts to suppliers is an important phase of the procurement planning process (Maurer, 2004). It is the process that determines the actual quality, reliability, delivery, quantity and cost of the goods and services. The procurement department coordinates the following;

- Analyzing and evaluating the bids against set criteria, specification requirements and presenting the analysis of procurement appointed committee.
- Verification of supplier capability and quality control/assurance processes
- Reviewing product inspection results where necessary
- Verification of technical evaluation reports where applicable.
- Negotiates with vendors where it is recommended by the committee
- Placing orders and expediting the delivery.

In addition, Shaw (2010) contended that it is very important for the procurement department to assess and consult on any big price variations, to avoid potential conflict of interest, undue influence, price fixing and favouritism, and to ensure consultative decision making and sharing of responsibilities. Also, the tender box should not be opened by one person only, and the criteria used to evaluate bids should be tested and validated by the committee before reception of bids so

that the right supplier is awarded and if better material management is to be attained in regards to cost at the materials are acquired, quality, quantity and time of delivery.

Once the order is placed and the supplier has confirmed receipt and agreed to the contract terms and conditions, the role and the amount of work that staff in procurement have to undertake will be affected by the performance of the suppliers (Bovis, 2007). It is necessary therefore, for the procurement staff to monitor and evaluate the progress of orders and the performance of the suppliers so as to receive the right quality and quantity of materials at the right time and cost to attain value for money hence enhancing materials management. Supplier performance will determine the amount of time and money that has to be spent in expediting orders and the managing of suppliers. To ensure an uninterrupted flow of goods and services, expediting should be a continuous when evaluating the procurement planning process, especially in emergencies. The continuous monitoring and evaluation enables the organization to pick out break-down points in the system and quickly identify solutions for materials management (Shaw, 2010).

Lewis and Roehrich (2009) argue that procurement only facilitates delivery through expediting for timely delivery and trouble-shooting returns. The physical receipt and inspection of goods takes place at the delivery point. Procurement only needs to know that delivery has taken place and that the supplier has delivered in accordance with the purchase order and complied with delivery contract requirements. In addition, whoever is responsible for accepting delivery and inspecting the goods should understand the procedure to follow in the event that there are any problems or discrepancies that might affect the management of materials. For certain goods or commodities an independent inspection committee may be used to check the quality and quantity

of the materials if they meet the planned and budgeted quality and quantity and also vary with the costs at which they are acquired (Shaw, 2010).

Eriksson (2008) noted that given the limited resources available to government, ensuring very effective monitoring and evaluation system in procurement is a key to ensuring the optimum utilization of scarce budgetary resources. Effective evaluation is the primary driver for procurement. It usually means buying the products or service with the lowest whole-life costs that is fit for purpose and meets specification. Where an item is chosen that does not have the lowest whole-life costs, then the additional value added benefit must be clear and justifiable so that to avoid poor management of goods in the organization in terms of quality and quantity desired by the organization. Assessment of supplier bids should be conducted only in relation to a published set of evaluation criteria, which must be relevant to the subject of the contract, and any price must flow these defined criteria. Therefore, if there is poor procurement planning evaluation of the suppliers before contract award, it also affects the materials management in terms of cost, quality, quantity and timely delivery in the organization.

Many cases of mistrust or concern over poor material management in a service relationship result from a failure to communicate at senior management level or from each party's failure to understand the business goals or intentions of the other during the evaluation of the budgeted or required materials (Smith, Rathgeb & Lipsky, 1993). Encouraging the sharing of information during the process of the procurement plan evaluation involves a significant change in practice; however, there should be a realistic balance between openness and reserving negotiating positions. After contract award, the relationship can be developed partly by engendering a

culture of information sharing; the objectives should be made explicit and discussed openly so that the contracts committee members come up with reliable supplier in regards to quality, quantity, cost and delivery time of the goods by the supplier being awarded the contract so as to maintain good material management (Van & David, 2003).

According to the public procurement Act, it is important for procurement practitioners to evaluate the procurement process to see how efficient and effective the procurement processes have been. There is the need to identify weaknesses and problems for corrective measures and evaluation may include a formal procurement audit. A formal procurement audit is done to give assurance to management; to see if objectives are being achieved; it highlights deficiencies; ensures compliance with the Public Procurement Act 663; ensures if the regulations are being followed to the latter and helps in the discovery of irregularities, fraud, and corruption. A formal audit also helps in performance monitoring and improvement and in the enforcement of the rules and regulations and subsequent prosecution of those who are found culpable of non-compliance with the Act. A formal auditing of a procurement process has the following actors: auditors, the Public Procurement Board, Ministry of Finance, stores personnel or donor staff or consultants where donor financing is involved (Public Procurement Act, 2003).

2.5 Summary of literature review

The literature reviewed highlights the effect of procurement planning and materials management in public universities in Uganda. Proper Procurement planning therefore usually leads to successful materials management. However Literature on procurement planning and materials management reviewed reveals that poor Procurement plan preparation, poor implementation and

poor evaluation of procurement plans usually leads to acquisition of poor quality materials and services and works, acquiring goods and services at a high cost, delayed delivery of supplies, services and ultimately leading to poor materials management and customer service. In summary, while a number of authors establish the effects of procurement planning on materials management in public universities, given the nature of relationship, it is also understood that there are challenges in such relationships which has intended the researcher to conduct this study.

This chapter has presented the information related from the topic under study from books, journals, past thesis, government, ministry and parliamentary acts and online articles. The review of literature has provided a ground through which the study compared what had been done by other researchers in this field, clearly identifying the gap. The next chapter presents the research methodology that was followed during collection of data from the field.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents and discusses the research design, study population, sample size and sampling techniques and procedure, data collection methods and instruments, the validity and reliability of data collection instruments, the research procedure, data analysis and measurement of variables.

3.2 Research Design.

A research design is defined as a basic plan for a piece of research; it illustrates all the issues involved in planning and executing a research project Punch (2000). The study followed a case study design and cross-sectional research design was adopted using both quantitative and qualitative approaches aimed at quantifying and qualifying the relationship between Procurement plan Preparation, procurement plan implementation and procurement plan evaluation and materials management at MUBS. Cross-sectional research is concerned to describe the characteristics of an event, providing information about the population by describing who, what, how, when, and where of a situation at given point in time (Amin, 2005). Qualitative and quantitative data was collected, qualitative research design was employed and Amin (2005) says this design is exploratory, and it is used when we don't know what to expect, to define problem or develop an approach to the problem. Therefore it was used to go deeper into issues of interest related to procurement planning and material management in MUBS. Common data collection methods that were used in qualitative design were in-depth interviews on procurement planning and materials management at Makerere University Business School. This was still accompanied

by the Quantitative research design which is conclusive in its purpose as it tried to quantify the materials management in Public Universities in Uganda (Punch, 2000). All this helped the resources to make clear conclusion on the procurement planning and materials management at Public Universities in Uganda.

3.3 Area of the Study

The study was carried out at Makerere University Business School as Constituent College of Makerere University which is one of the public universities in Uganda. The school's campus is located at 118 Portbell Road, in Nakawa Division within Kampala district. The interest of using this case study was due to the variables in the study and ease access for the researcher to collect the data so as to complete the study in the required time set by the university. In this study the researcher concentrated on the procurement department, contracts committee members, suppliers of academic/instructional materials, user departments like faculty Deans, Heads of Departments, Lecturers, Management staff and Bursar's office at Makerere University Business School.

3.4 Study Population

The study population consisted of 220 respondents working at Makerere University Business School and some supplier of materials. The population of the study included 5 Procurement staff, 8 Contract committee members, 7 staff from Bursar's office, 6 Supplier of materials, 1 Deputy Principal. From the total population, a total of 193 respondents from user departments included; 7 Faculty Deans, 14 Heads of Departments and 172 Lecturers. They were used in this study because in their course of work at Makerere University Business School, they are affected, and thus best suited to assess the problem of the study. The people who were selected to

participate in the study included those whose experience with Makerere University Business School operations is not less than 1 year.

3.5 Sample Size and Selection

The total sample size of 140 staff and suppliers of materials was studied and determined basing on statistical tables of Krejcie, R and Morgan, W. (1970). Sample selection depends on the population size, its homogeneity, the sample media and its cost of use, and the degree of precision required (Salant & Dillman, 1994, p. 54).

Table1: Showing total target population, Sample size, sampling technique

Population Category	Population	Sample size	Sampling technique
Procurement staff	5	5	Census sampling
Contract committee members	8	8	Census sampling
Supplier of materials	6	4	Simple random
Faculty Heads (Deans)	6	6	Census sampling
Heads of department	14	10	Purposive and simple random
Lecturers	173	102	Simple random
Management Staff	1	1	Census sampling
Staffs in Bursar's office	7	4	Purposive and simple random
Total	220	140	

Source: Adapted from the MUBS Strategic plan (2012) and Krejcie, Robert V., Morgan, Daryle W. 1970 Table for Determining Sample Size from a Given Population.

3.6 Sampling Techniques and Procedure

The researcher used Non-probability sampling techniques including simple random, census sampling and purposive sampling techniques. Simple random sampling refers to a form of sampling where every entity in the population has an equal chance of being included in the sample (Mugenda and Mugenda, 1999). Purposive sampling was used to select respondents who

can provide desired information due to their knowledge and experience about the subject under study (Sekaran, 2003). This method was chosen since it gives equal chance to respondent to participate and cheaper. The study respondents were divided up into categories as described in table 1 above. There were eight strata of participants, i.e. Procurement staff, Contract Committee members, Suppliers, User department staff (Lecturers, Faculty Heads and Heads of Department), Management Staff and Staff from Bursars' office. The respondents from each category were selected basing on their level of involvement in the various procurement aspects. In this case therefore, simple random sampling was used to draw respondents from a pool where 4 Suppliers, 102 Lecturers from different department, 3 from the Bursar's office and 8 Heads of Departments from different faculties were be randomly sampled and the reason for using this technique includes being highly representative if all subjects participate; the ideal, the technique highlights limited bias and classification error among others. In addition, simple random sampling offers, as it gave each member in the population a fair chance of being selected. Also a sample of 5 Procurement Staffs, 8 Contract Committee Members and 6 Faculty Heads were sampled using census sampling technique. The advantage of using technique was that it increased confidence interval and gave maximum chance of identifying of negative feedback. A sample of 1 Bursar's Office and 2 Heads of department were purposively sampled. The advantage of this technique was that it permitted the researcher to use respondents, who had good grounds in what they trust in and the sample size involved is very small and it is unlikely to be known with exactness.

3.7 Data Collection Methods

Data was collected from both primary and secondary sources. Primary data was used because it is reliable and dependable accurate information without bias (Mugenda & Mugenda, 2003).

Secondary data was used because it helps to make primary data collection more specific since with the help of secondary data, we are able to make out what are the gaps and deficiencies and what additional information needs to be collected (Mugenda & Mugenda, 2003). Qualitative and quantitative methods were used in the collection of data. Primary data was collected using self-administered questionnaires and interview guides. While secondary data was obtained from review of documents such as journals, audit reports, planning documents, memos, and files. The data was collected from Makerere University Business School by the researcher and assisted by research assistants for convenience and speed.

3.7.1 Questionnaires

This method was used since it is reliable and dependable for large samples and it gave respondents adequate time, free from interviewer bias and it was cheap, (Mugenda & Mugenda, 2003). The questionnaires were delivered by the researcher and a team of two research assistants. The researcher administered questionnaires to various respondents under the study. Each item in the questionnaire was developed to address a specific objective, research question of the study and these questionnaires were distributed by the researcher herself and help of the research assistant. The questionnaires were addressed to total number of 117 respondents and the total number of the questionnaires that were filled returned by the respondents was 109 and these were the Lecturers, Heads Of Department, Staff from the Bursars' office and supplier of academic/instructional and other material since they were many and the researcher could not reach them all.

3.7.2 Interviews

Interviews, being face to face encounters were administered orally using an interview guide. This method was used because it offered the researcher an opportunity to adapt questions, clarify them by using the appropriate language, clear doubts and establish rapport and probe for more information (Sekaran, 2003). Interviews were carried out among a sample of 23 respondents, the researcher managed to interview 12 respondents and these included Contract Committee members, Procurement Staff, Staff from Bursars' Office, Faculty and department Heads under study. To obtain accurate information through interviews, the researcher established friendly relations with the respondents for maximum cooperation prior to conducting the interviews (Mugenda & Mugenda, 2003).

3.7.3 Documentary Review

Documentary review was used to collect secondary data during the study. Documents under procurement management reviewed and these include various user departments, procurement plans, procurement evaluation reports, procurement budget plans contract performance reports, procurement audit and compliance reports. These helped the researcher to get an internal view of the relationship between procurement planning and materials management. A documentary checklist (Appendix III) was developed and used to guide the researcher on the data in order to generate the necessary information for the study (Mugenda & Mugenda, 2003).

3.8 Data Collection Instruments

3.8.1 Interview Guide:

In-depth interviews were conducted using the interview guide. The interview guide (Appendix II) was unstructured and semi-structured. For either technique, the method enable the researcher to collect accurate information from the officials who were selected to participate as key informants; because, they have a wealth of experience and knowledge in procurement processes and practices Mugenda & Mugenda, (2003). The instrument well ensured that reliable information is gathered; because, it facilitated a deeper investigation into the topic under study. It helped the researcher to explain or clarify questions thereby increasing the useful of the responses. The interviews only applied to members of the only top management.

3.8.2 Questionnaire:

A five linkert-scale questionnaire (Appendix I) was used to examine the effect procurement planning and materials management in public University in Uganda at Makerere University Business School. A five linkert-scale questionnaire was used because it can be easily understood and quantifiable, subjective to computation of some mathematical analysis and responses are very easy to code when accumulating data since a single number represents the participant's response(Amin, 2005).A questionnaire was used because it increases the degree of reliability due to the many items in it and it well enhanced the chances of getting valid data, (Amin, 2005).The questionnaire were designed according to the objectives and study variables and responses to the questions were anchored on a five (5) point Likert scale ranging from 5- strongly agree to 1 - strongly disagree. The questionnaires were applied to employees of Makerere University Business School and the members selected in the researcher's sample size.

3.8.3 Documentary Checklist:

According to Balihar (2007), documentary checklist is the use of outside sources, documents, to support the viewpoint or argument of an academic work. Documentary checklist (Appendix III) was used to collect secondary data during the study from various documents such as procurement plans, contract performance reports, procurement audit and compliance reports, procurement budget plans. Secondary data was done by reading existing materials, internet, newspaper, text books, and journals as to come up with a thorough report. This method was used to analyze existing data. It was assumed that all responses/ complainants on procurement planning and materials management were kept on file for record purpose and that information could be used as evidence to reveal the materials management at Makerere University Business School. These helped the researcher to get an internal view of the relationship between procurement planning and material management in the public universities in Uganda.

3.9 Validity and Reliability

3.9.1 Validity

Validity is the ability to produce findings that are in agreement with the theoretical or conceptual values (Mugenda and Mugenda, 2003). The research instruments were proof read by Kyambogo University supervisors to establish their face validity. The researcher ensured that the questions were relevant through the calculation of Content Validity Index (CVI), given by the formula:

$$\text{CVI} = \frac{\text{No. of items declared Valid}}{\text{Total no. of items on the instrument}}$$

$$\text{CVI} = \frac{23}{32} = 0.72\%$$

Table 2: Showing results on the validity analysis

Variables	No. of items before Computing CVI	No. of items after Computing CVI	CVI
Procurement plan preparation	9	6	0.7
Procurement plan implementation	8	6	0.8
Procurement plan evaluation	7	5	0.7
Materials management	8	6	0.8
Total	32	23	0.72

Source: Primary data

The results of the calculated CVI indicated that out of the 32 items only 23 items with the CVI of 72% were declared valid because they were corresponding CVIs within the accepted range of 0.7 to 1 which is in line with Amin, (2005) and these were finally considered in the questionnaire for data collection.

3.9.2 Reliability

Reliability is the measure of the degree to which the research instrument yields consistent results or data after repeated trials (Mugenda and Mugenda, 2003). Thus, Reliability was assessed using Cronbach's Coefficient Alpha of the questionnaires instrument. The Cronbach's Alpha reliability coefficient was used on a two score to correlate and evaluate the results on Procurement plan Preparation, procurement plan implementation and procurement plan evaluation on material management in the public universities in Uganda. The data collection instruments were tested for reliability on 5% of the study elements to ensure that they produce results whenever the same instrument is used to collect data. The higher the coefficient of the stability, the more reliable the instrument, for an instrument to be taken as reliable a minimum coefficient of 0.5 is assumed as suggested by Mugenda & Mugenda (2003) in which case the research proceed.

Table 3: Reliability table

Reliability Statistics			
	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Preparation of procurement of plan	.962	.975	6
Procurement planning Implementation	.856	.865	6
procurement planning evaluation	.641	.640	5
Material management	.898	.888	6

Source: Primary data

Table 3 above illustrates that the reliability analysis results according to Cronbach's Alpha coefficient for the variables was above 0.5 that ranges from 0.640 to 0.975. Basing on Mugenda & Mugenda (2003), the results imply that the items that were adopted in this study were highly reliable.

3.10 Data Sources

In this study, the sources of data were both primary and secondary source. Primary data refers to new information that is collected directly by the researcher. The primary data was the first hand information collected from the field using collection tools such as questionnaires and interviews (Mugenda & Mugenda, 1999).

3.11 Data Collection Procedure

Using an introduction letter from the Head of Graduate School, the researcher obtained an approval letter from Makerere University Business School authorities to conduct the research. The researcher then made contact with the various authorities to whom the letter was addressed and together with the authorities made appointments as to when the study was carried out to

enable proper planning. On the agreed dates, the researcher and her two research assistant went to the various user departments at Makerere University Business School to meet the respondents and collect the data. The data collection was carried out for a period of one week. In the event of any incompleteness of the data collecting exercise, the researcher rescheduled the appointments on consultation with the respondents. After data collection, data analysis was done and a report was made, which marked the final activity of the research process.

3.12 Data Processing, Presentation and Analysis

3.12.1 Data Processing

The information collected was edited for completeness, accuracy, consistency, and Comprehensibility. The completed interview and questionnaire response were thoroughly checked to eliminate any possible errors that might have occurred due to careless marking or recording. Coding was done by assigning numbers to opinions and views of respondents in order to arrive at statistical meaning of data. Responses to certain questions were classified accordingly and coding frames was constructed using the Statistical Package for Social Science (SPSS).

3.12.2 Data Analysis

According to Patton (2002), “Analysis is the process of bringing order to the data, organizing what is there into patterns, categories and basic descriptive units. Interpretation involved attaching meaning and significance to the analysis, explaining descriptive patterns and looking for relationships and linkages among descriptive dimensions”. The study focused on collecting qualitative and quantitative data.

3.12. 2.1 Qualitative Analysis

The qualitative data was collected by way of interviews and was analyzed by content analysis. Content Analysis is a technique for gathering and analyzing the content of text (Sanghera, 2007). The content was words, phrases, sentences, paragraphs, pictures, symbols, or ideas. It was done quantitatively as well as qualitatively and computer programs (Statistical Package for Social Sciences Version 20 and Microsoft Excel 2010 Version) were used to assist the researcher. The initial step involved sorting the content into themes, which depended on the content. Data collected was organized into a common data pool. It was transcribed, synchronized and grouped into themes. During analysis, themes were generated from the responses and categories. A coding scheme was devised, usually in basic terms like frequency (amount of content), direction (who the content is directed to), intensity (power of content), and space (size of content) to enable reduction of the themes into major themes. It was these major themes that formed the basis of extrapolating out the emergent issues related to the research question subject matter. Checking was done to minimize errors of double selection and other forms of repetition. The interpretation from the data analysis was used to draw conclusions and make recommendations.

3.12.2.2 Quantitative Analysis

This is the systematic empirical investigation of observable phenomena via statistical, mathematical or computational techniques (Lisa M, 2008). The quantitative data analysis techniques used include both descriptive statistics and inferential statistics to analyze the research findings. Descriptive statistics included measures of central tendency and measures of variability about the average. Inferential statistics helped in undertaking correlation and regression analysis (Lisa M, 2008). These data analysis techniques were used because they

enable to use statistics to generalize the findings, looks at relationships between variables and can establish cause and effect in highly controlled circumstances. Both descriptive statics and inferential statics (correlation and regression analysis) results were generated using Statistical Package for Social Scientists (SPSS) that gave the researcher a 'picture' of the data collected and used in the research as well as helped to interpret the data.

3.12.3 Data Presentation.

Qualitative data was presented in writing in a report form, whereas quantitative data was presented in tables and charts where they were required. Data presented was interpreted using the knowledge of both qualitative and quantitative methods to arrive at clear meanings and conclusions.

3.13 Measurements of Variables

In this study, the measurement of variables was conducted using the works of Sekaran (2004) and three scales was used; nominal, ordinal and interval. Also, other measures like descriptive statistics were used to establish and analyze data using the SPSS application. Under this study, the researcher had two variables, one procurement planning being as independent variable materials management in public universities being the dependent variable. The responses to the questionnaire were arranged in a five point interval scale of strongly agree (5), agree (4), Not Sure (3), disagree (2) and strongly disagree (1) in that order of measurement. This was because the responses can be easily quantifiable and subjective to computation of some analysis (Statistical programme for social sciences) and makes question answering easier on the respondent (Amin, 2005).

3.13 Limitations to the Study

- (i) The respondents approached were reluctant in giving information fearing that the information they give might be used to intimidate them or print a negative image about the institution. The researcher handled the problem by carrying an introduction letter from the institution and assured the respondents that the information they gave was to be treated confidentially and it was to be used purely for academic purpose.
- (ii) Non- response, some respondents were willing to answer the questions in the questionnaires. Though they lacked time to approach all the questions however in order to address this problem constant monitoring by the researcher was done to help overcome this problem.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF RESULTS

4.1 Introduction

This chapter presents analyses and interprets the results. It is divided into two sections of the research study findings on the demographic characteristics and the section second section is about the empirical study results. The first section of the empirical study presents analyses and interprets the results on the evaluation of Procurement plan Preparation influence on materials management at MUBS. The second section presents analyses and interprets the results on the effect of procurement plan implementation and materials management at MUBS. The third section presents analyses and interprets the results on the relationship between procurement plan evaluation and materials management at MUBS.

4.2 Response Rate

Table 4: Showing the response rate.

	Target No	Released NO	Percentage
Questionnaire	117	109	
Interview	23	12	
Total	140	121	86

Source: Primary data

Basing on table 4 above showing response rate, the researcher was able to collect information on 121 (approximately 86%), out of 140 from the study targeted population. However, out of the 117 questionnaires expected to be filled and returned by the respondents, 109 were filled and returned which was a good response rate for data analysis as recommended by (Amin, 2005).

The respondents that were interviewed by the researcher were 12 out of the 23 respondents that were expected the researcher to provide qualitative information to add on the quantitative data.

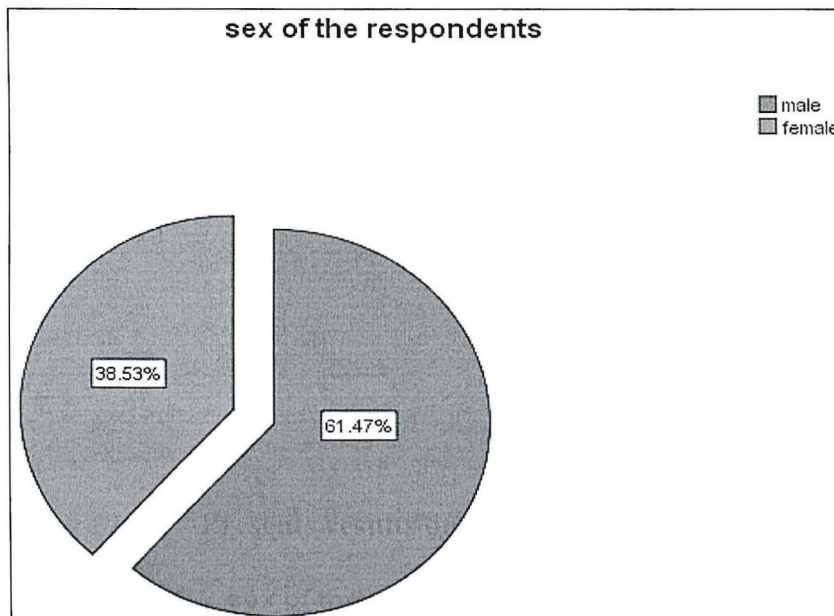
4.3. Demographic Characteristics

In this section, data is presented on the socio-demographic composition of the sample obtained through the questionnaire, which included; Age, Gender and Highest Level of Education attained of the respondents. All the tables are based on the 109 respondents. The purpose of collecting demographic data on respondents was to help in establishing the respondent sample characteristics and be able to form appropriate opinions about the research findings. The detailed analysis of these characteristics and interpretation are presented in the following subsections:

4.3.1 Distribution by sex

The study aimed at establishing the gender of the respondents. This information was gathered using a questionnaire administered to the Makerere University Business School (MUBS) administrators, officials from the procurement department and officials from the various departments of Makerere University Business School (MUBS).

Figure 2: Presents results on sex of the respondents.



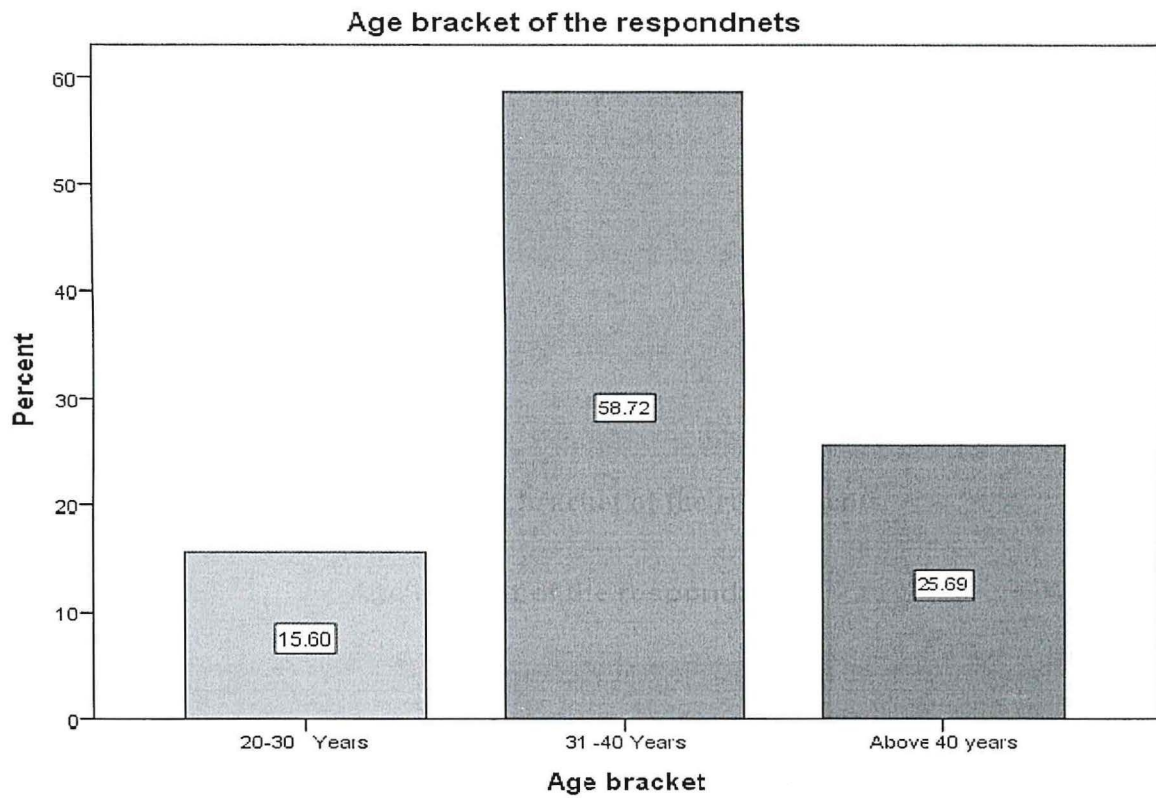
Source: Primary data

Figure 2 above illustrates that 61.47% of the majority respondent were male and 38.53% were female respondents thus both sex was captured. This implies that this organization employees both sex which is in line with affirmative action and the majority being the male employees involved in the procurement planning compared to the female employees.

4.3.2 Distribution by age bracket

The study aimed at establishing the gender of the respondents. This information was gathered using a questionnaire administered to the Makerere University Business School (MUBS) administrators, officials from the procurement department and staff members from the various user departments of Makerere University Business School (MUBS).

Figure 3: Shows results on the age bracket of the respondents.



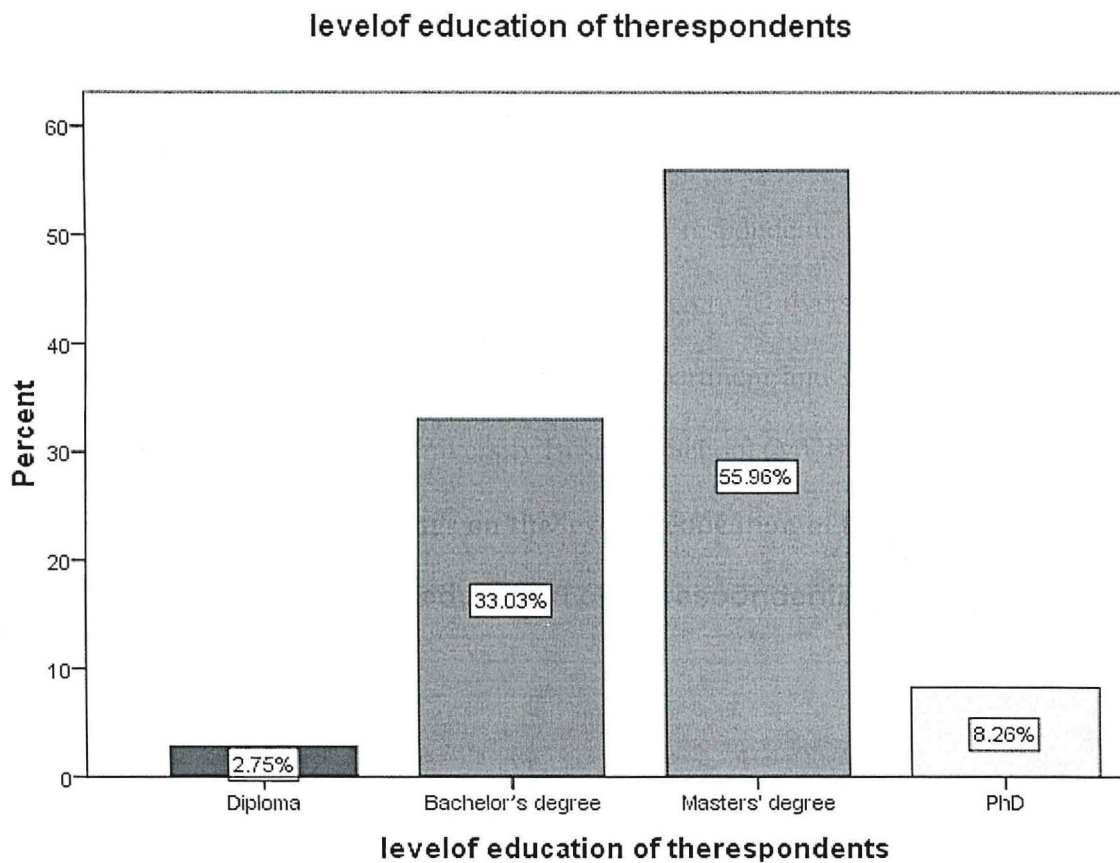
Source: Primary data

The results in figure 3 above shows that 58.72% of the respondents were in the age bracket between 31-40 years, 25.69% were above 40 years, 15.60% were between the age bracket of 20-30 years. This implies that the majority of the employees in this organization are between the age of 31-41 indicating people who are still strong and mature.

4.3.3 Distribution by level of education.

The study aimed at establishing the gender of the respondents. This information was gathered using a questionnaire administered to the Makerere University Business School (MUBS) administrators, officials from the procurement department and staff members from the various user departments of Makerere University Business School (MUBS).

Figure4: Illustrates findings on the level of education of the respondents.



Source: Primary data

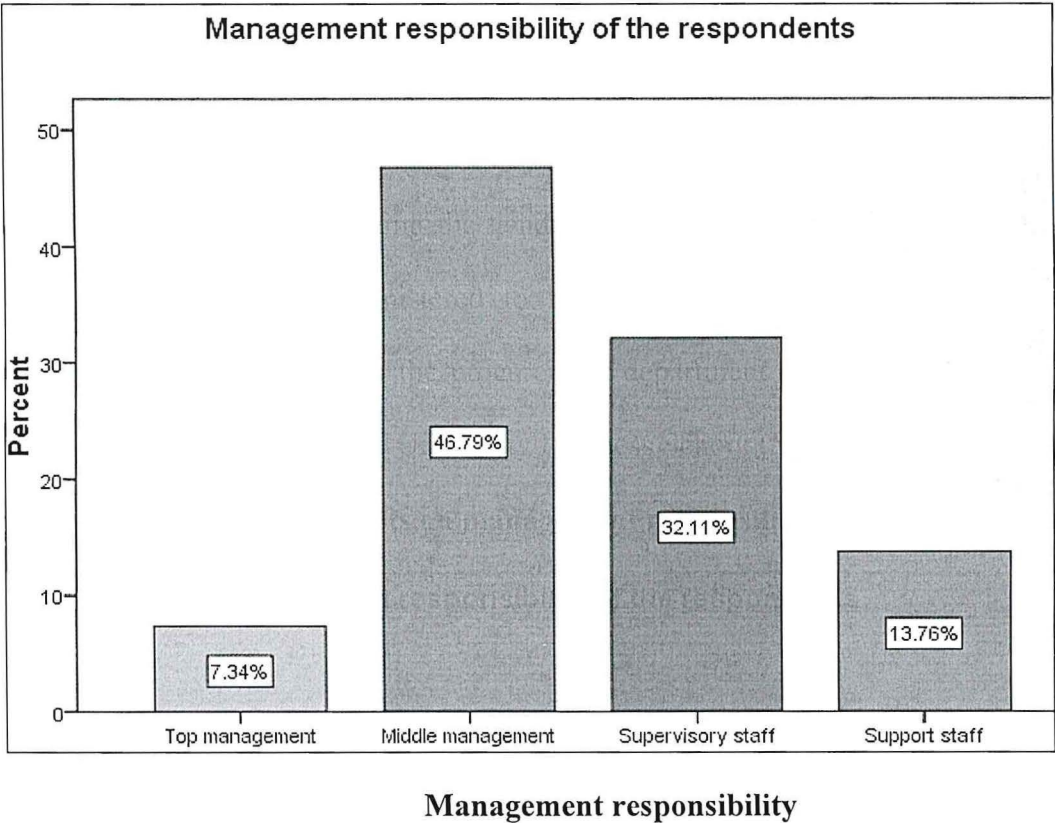
From figure 5 above, it is illustrated that 55.96% of the respondents attained education up to masters' degree, 33.03% attained education up to Bachelor's degree and at least 8.26% of the total number of the respondents have hold PhD and only 2.75% have attained Diploma. This

implies the respondents were able to read and understand the questions that were asked since the study questions were designed in English thus giving reliable results and had knowledge on procurement planning and how it affects materials management this organization.

4.3.4 Distribution by management responsibility

The study aimed at establishing the gender of the respondents. This information was gathered using a questionnaire administered to the Makerere University Business School (MUBS) administrators, officials from the procurement department and staff members from the various user departments of Makerere University Business School (MUBS).

Figure 5: Presents results on management responsibility of the respondents.



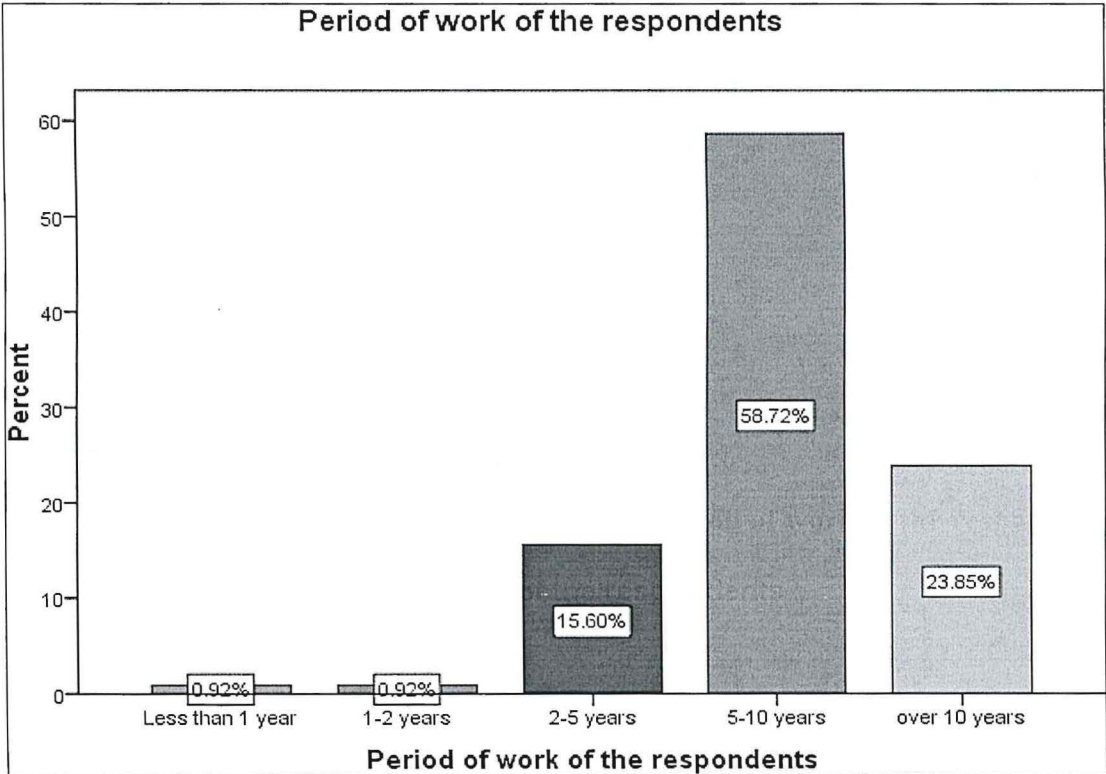
Source: Primary data

The results in figure 5 above 46.79% of the respondents hold the middle management responsibility, 32.11% were supervisory staff, 13.76% of the respondents were support staff and only 7.34% of the total numbers of the respondents were those from the top management. However, since the majority of the respondents were from the middle management level and supervisory level, it implies most of the people involved in the procurement planning in this organization are aware of the required materials since they are involved in the day to day running of the organization thus enabling the organization to attain good material management in terms of quality, quantity, cost and at the right time.

4.3.5 Distribution by period of work

The study aimed at establishing the gender of the respondents. This information was gathered using a questionnaire administered to the Makerere University Business School (MUBS) administrators, officials from the procurement department and staff members from the various user departments of Makerere University Business School (MUBS).

Figure 6: This illustrates the results on the period of work of the respondents.



Source: Primary data

The results in figure 6 above illustrates that 58.72% of the majority respondents have worked with the organization for a period between 5-10 years, 23.85% have worked for over 10 years, 15.60% have worked between 2-5 years and only 0.92% of the total number of the respondents have worked between 1-2 year and less than 1 year. This implies that majority of the employees of the organization have worked between the period of 5-10 years thus they have good information and experience on the procurement planning process and how it affects materials management of the organization.

4.4 Empirical results

4.4.1 The effect of Procurement plan preparation on materials management.

This section presents results in line with procurement plan preparation and materials management at MUBS. This objective was conceptualized using six questionnaire items which required each respondent to do self-rating on how the Procurement plan Preparation affects materials management. Responses were based on a 5-Likert scale ranging from 1 which represented strongly disagree to 5 which reflected strongly agree, although these were thereafter categorized into disagree, not sure and agree sections. The resulting summary statistics are in Table 4 below, depicting the disagree, not sure and agree;

Table 5: Findings on the effect of procurement plan preparation on Materials management.

		Valid			
		Disagree	Not sure	Agree	Total
I participate in procurement planning in my department	Frequency	24	6	79	109
	Percent	22.0	5.5	72.5	100.0
User departments usually prepare procurement work plans for the financial year	Frequency	7	16	86	109
	Percent	6.4	14.7	78.9	100.0
PDU prepares a consolidated procurement plan subject to the approved annual budget	Frequency	4	19	86	109
	Percent	3.7	17.4	78.9	100.0
Procurement departments drafts basic time table for procurement plan preparation	Frequency	6	22	81	109
	Percent	5.5	20.2	74.3	100.0
All procurement requirements are conducted in line with the PPDA Act and Regulations 2003	Frequency	5	21	83	109
	Percent	4.6	19.3	76.1	100.0
We make purchases basing on market prices	Frequency	5	20	84	109
	Percent	4.6	18.3	77.1	100.0

Source: Primary data

Results in table 5 above indicate that respondents agreed that they participate in procurement planning in their department and procurement department drafts basic time table for procurement plan preparation at (72.5% and 74.3%) respectively, (5.5% and 20.2%) were not sure and (5.5%

and 22.0%) of the respondents disagreed with the statement. The respondents agreed at (78.9%) that User departments usually prepare procurement work plans for the financial year, (14.7%) were not sure and (6.4%) disagreed with the statement. At (78.9%), the findings further indicate that the PDU prepares a consolidated procurement plan subject to the approved annual budget, (17.4%) were not sure and (3.7%) disagreed with the statement. With (76.1%), the respondents agreed that all procurement requirements are conducted in line with the PPDA Act and Regulations 2003,(19.3%) were not sure,(4.6%) of the respondents disagreed with the statement. The findings further, reveals that at (77.1%), the respondents agreed they make purchases basing on market prices, (18.3%) were not sure and (4.6%) disagreed with the statement.

Adding on the quantitative finding as described above, qualitative findings gathered from the interviews that the researcher held with some key informants reveals;

One key informant during the interviews revealed that user's plan, plans are presented to budget committee for approval, PDU consolidates and submit to PPDA and ministry of Finance and Treasury by that MUBS has managed has managed to have a good materials management.

During the interviews, one respondent from the procurement department revealed that MUBS Procurement plan preparation is established from the PPDA Act as a control measure and monitoring compliance checks and MUBS being one of the beneficiaries of government fund, follows the PPDA Act when developing its procurement plan and there is a standard template provided by PPDA which is being used during the preparation of the procurement plan.

4.4.1.1 Documentary checklist findings revealed that;

According to the Guideline (5) 2014 of procurement and disposal, the findings reveals that every User department shall prepare a procurement plan for procurement based on the approved budget, which shall be submitted to the PDU for implementation and may seek technical assistance, where necessary.

According to Good Procurement Practice (GPP) May (2009),it recommends that a good Annual Procurement Plan should provide potential suppliers with useful information about the agency and the environment in which it conducts procurement, provide early information about the agency’s intended procurements for the period covered by the Annual Procurement Plan and facilitate good procurement planning within the organization.

Table 6: Regression analysis on the effect of procurement plan preparation on materials management.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.789 ^a	.622	.569	.34601

a. Predictors: (Constant), Procurement plan preparation

Table 6 above shows the regression model summary results, indicating the adjusted R square as 0.622, showing that about 62.2% of the variation (Adjusted R²=0.569) in materials management could be attributed to procurement plan preparation. The result further shows that materials management is dependent on procurement plan preparation by 62.2% and 37.8% of the variance in materials management could be explained by other factors outside the model used.

4.4.2 The effect of procurement plan implementation on materials management at MUBS.

This section presents results in line with procurement plan implementation and materials management. This objective was conceptualized using six questionnaire items which required each respondent to do self-rating on the effect of procurement plan implementation on materials management. Responses were based on 5-Likert scale ranging from 1 which represented strongly disagree to 5 which reflected strongly agree, although these were thereafter categorized into disagree and not sure and agree sections. The resulting summary statistics are in Table 5 below, depicting the disagree, not sure and agree;

Table 7: Showing findings on effect of procurement plan implementation on materials management.

		Valid			
		Disagree	Not sure	Agree	Total
Money is released on time to execute procurement activities	Frequency	38	41	30	109
	Percent	34.9	37.6	27.5	100.0
Procurement plans are drawn on the approved budgeted	Frequency	12	18	79	109
	Percent	11.0	16.5	72.5	100.0
All procurement requisitions are usually within the approved procurement plan.	Frequency	28	25	56	109
	Percent	25.7	22.9	51.4	100.0
We strictly follow the consolidated procurement Plan.	Frequency	19	34	56	109
	Percent	17.4	31.2	51.4	100.0
We make early identification of right commodities and quantities to meet organizational needs.	Frequency	10	40	59	109
	Percent	9.2	36.7	54.1	100.0
Money is normally available to procure goods according to plan	Frequency	32	34	43	109
	Percent	29.4	31.2	39.4	100.0

Source: Primary data

From table 7 above, it is illustrated that employees disagreed that money is released on time to execute procurement activities and is normally available to procure goods according to plan (34.9% and 29.4%) respectively, (37.6% and 31.2%) of the respondents were not sure, (27.5%

and 39.4%) agreed with the statement. At (72.5%), respondents agreed that procurement plans are drawn on the approved budgeted, (16.5%) were not sure and only (11.0%) disagreed with the statement. The findings also reveal that at (51.4%), respondent agreed that all procurement requisitions are usually within the approved procurement plan, (22.9%) of the respondents were not sure and (25.7%) disagreed with the statement. The respondents also agreed that they strictly follow the consolidated procurement plan at (51.4%), (31.2%) were not sure and only (17.4%) disagreed with the statement. The results also indicate that employees make early identification of right commodities and quantities to meet organizational needs at (54.1%), (36.7%) were not sure and (9.2%) disagreed with the statement.

However, the results from the interviews that the researcher held with some respondents revealed that;

The MUBS PDU request users to submit their Unit procurement plan as it shows the actual requirement which is derived from the budget before new financial year and the PDU consolidates all Units plans and aligned according to the approved school budget. The plan is approved by contracts Committee then presented to management committee as the Accounting Officer approves and PDU submits to PPDA.

During the interview, one respondents revealed that procurement plan implementation enables MUBS manage its funds and to overcome procuring items not planned for to enable transparency, timely requisitions, compliance and timely deliveries for the better materials management.

4.4.2.1 Documentary checklist the findings revealed that;

According to the Procurement and Disposal Audit Report for Financial Year 2013/2014, the audit revealed that contrary to Regulation 259 of the PPDA Regulations 2013, there were cases where contract managers were not appointed and in other cases where a contract management committee was appointed, there was no evidence of reports prepared. In this report, it was revealed that some files had a template of a contract implementation plan but it had not been completed.

From the Procurement planning report 2014, it was revealed that advertisement shall be run in the media for interested firms to bid for supply of the institution materials and sealed bids shall be received by the Manager Procurement and Disposal Unit who shall set a date for bid opening in the presence of bidders.

Table 8: Regression analysis on the effect of procurement plan implementation on materials management

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.707 ^a	.500	.496	.35699

a. Predictors: (Constant), Procurement Plan Implementation

Table 8 above shows the regression model summary results, indicating the adjusted R square as .500, showing that about 50.0% of the variation (Adjusted R²=0.496) in materials management could be attributed to procurement plan implementation. The result further shows that materials management is dependent on procurement plan implementation by 50.0% and 50.0% of the variance in materials management could be explained by other factors outside the model used.

4.4.3 The relationship between procurement plan evaluation and materials management at MUBS.

This section presents results in line with procurement plan evaluation and materials management. This objective was conceptualized using five questionnaire items which required each respondent to do self-rating on the relationship between procurement plan evaluation and materials management. Responses were based on 5-Likert scale ranging from 1 which represented strongly disagree to 5 which reflected strongly agree, although these were thereafter categorized into disagree, not sure, agree sections. The resulting summary statistics are in Table 6 below, depicting the disagree, not sure and agree;

Table 9: Presenting the relationship between procurement plan evaluation and materials management

		Valid			
		Disagree	Not sure	Agree	Total
We integrate procurement plans from all use departments into the allocated budget.	Frequency	9	27	73	109
	Percent	8.3	24.8	67.0	100.0
We identify which materials and supplies are needed and prioritize those that require urgent attention when planning	Frequency	13	36	60	109
	Percent	11.9	33.0	55.0	100.0
Our contracts committee verifies of supplier capability and quality control	Frequency	9	28	72	109
	Percent	8.3	25.7	66.1	100.0
Procurement plans are drawn from the approved budget	Frequency	4	23	82	109
	Percent	3.7	21.1	75.2	100.0
We assesse supplier bids only in relation to a published set of evaluation criteria	Frequency	3	27	79	109
	Percent	2.8	24.8	72.5	100.0

Source: Primary data

Findings in table 9 above indicates that employees agreed that they integrate procurement plans from all user departments into the allocated budget at (67.0%), (24.8%) of the respondents were not sure and only (8.3%) disagreed with statement. At (55.0%), the respondents also agreed they identify which materials and supplies are needed and prioritize those that require urgent attention

when planning, (33.0%) were not sure and (11.9%) disagreed with the statement. The respondents went ahead and agreed at (66.1%) that their contacts committee verifies supplier capability and quality control, (25.7%) of the respondents were not sure and (8.3%) disagreed with the statement. At (75.2%) of the respondents agreed that procurement plans are drawn from the approved budget, (21.1%) were not sure and (3.7%) disagreed with statement. The results shows that (72.5%), respondents agreed that they assess supplier bids only in relation to a published set of evaluation criteria,(24.8%) were not sure and (2.8%) disagreed with the statement.

However, basing on the qualitative data on the relationship between procurement plan evaluation and materials management at MUBS, the results from the interviews that the researcher held with some key informants were consistent with the quantitative data as revealed below;

One respondent revealed that procurement plan evaluation is aligned with the approved School budget. The respondent further revealed that the performance of the procurement plans is evaluated according to the implemented resources from the funders. At MUBS, the source of funds that facilitates the planned procurement budget includes the Government of Uganda, internally generated mainly from private sponsored students, Donors and sponsors and these always expect proper procurement planning that will results into good materials management thus attaining value for money.

One key informant during the interview revealed that at MUBS, procurement plan evaluation and materials management are all control flow measures which necessary in the day to day operation. The respondent further explained that without good

procurement plan evaluation that is to say good selection of supplier, it affects the materials management.

4.4.3.1 The findings from the documentary checklist reveal that;

From the Guideline 5 2014 of procurement and disposal for schools of learning, it was revealed that contracts committee shall be responsible for approving the recommendation from PDU and awards of contracts. In particular it shall be responsible for approving the PDE's annual procurement plan and any amendments to the plan approving evaluation reports, approving negotiation teams, ensuring that before it is approved, a procurement is in accordance with the procurement plan, approving bidding and contract documents for the purpose of the public assets of a procuring and disposing entity, approving procurement and disposal procedures and approving membership of evaluation committees and negotiation teams and ensuring adherence to best practices in relation to procurement and disposal.

It was also revealed that all evaluation shall be conducted by evaluation committee, which shall report to the PDU. The evaluation committee is formed on a case by case basis. The evaluation committee shall assess the bid in accordance with the appropriate criteria with a view to determining the best evaluated bid and evaluation of micro procurement need not be evaluated by an Evaluation committee. The PD can conclude this evaluation by comparison of at three quotations.

According to the Makerere University Transport Management Policy Guidelines July 2011 the opened bid documents shall be evaluated to choose the best bidder and the evaluation report shall be submitted to the Contracts Committee for the final decision on the firm to supply the vehicle.

According to the Procurement And Disposal Audit Report For Financial Year 2013/2014, the overall audit objective was to review the entire procurement and disposal system of MUBS to obtain assurance that procurement and disposal activities and processes for the financial year ended June 2014 were administered with due diligence and were compliant with the public procurement and disposal policies and procedures as laid out in the PPDA Act and Regulations. The audit was carried out in July 2014. This is the third audit of the Entity. The first was for FY 2006/07, the second was for FY 2012/2013 and the third is for FY 2013/2014.

Table 10: Showing the correlation coefficient on the relationship between procurement plan evaluation and materials management.

Correlations			
		PROCUREMENT PLAN EVALUATION	MATERIALS MANAGEMENT
PROCUREMENT PLAN EVALUATION	Pearson Correlation	1	.762**
	Sig. (2-tailed)		.000
	N	109	109
MATERIALS MANAGEMENT	Pearson Correlation	.762**	1
	Sig. (2-tailed)	.000	
	N	109	109

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

Table 10 above shows that the correlation coefficient results between procurement plan evaluation and materials management was $r = 0.762^{**}$, with probability value ($p = 0.000$) that is less than $\alpha = 0.01$ level of significance. This shows a significant positive relationship between procurement plan evaluation and materials management. This implies that an improvement in procurement plan evaluation, there is likely to be a corresponding effect in terms of materials management.

Table 11: Regression analysis on the relationship between procurement plan evaluation and materials management

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.469 ^a	.220	.213	.44597

a. Predictors: (Constant), Procurement Plan Evaluation

From table 11 above presents the regression model summary results, with the adjusted R Square as 0.220 (22.0%) (R square tells how a set of independent variables explains variations in the dependent variable). This shows that about 22.0% of the variation (Adjusted R² =0.213) of the dependent variable (materials management) can be explained by procurement plan evaluation and the rest could be attributed to factors other than procurement plan evaluation.

Table 12: Showing the multiple regression analyzing results on the effect of procurement planning (Procurement plan Preparation, procurement plan implementation and procurement plan evaluation) on materials management.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.732 ^a	.536	.522	.34738

a. Predictors: (Constant), Procurement Plan Evaluation, Procurement Plan Implementation, Procurement Plan Preparation

The results in table 8 above shows that about 53.6% of the variation (Adjusted R²=0.522) indicates how much of the dependent variable, materials management can be explained by the independent variable Procurement plan Preparation , procurement plan implementation and procurement plan evaluation(procurement planning).It implies that materials management is dependent on Procurement plan Preparation, procurement plan implementation and procurement

plan evaluation (procurement planning) by 53.6% and 46.4% could be attributable to other factors, other than procurement planning that were not used in this model.

CHAPTER FIVE

SUMMARY, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary and discussion of the study findings as presented in chapter four, conclusions and recommendations and suggested areas for future studies.

5.2 Summary of major findings

5.2.1 The influence of Procurement plan Preparation on materials management.

The study findings revealed that Procurement plan Preparation significantly influences materials management in this organization as per the first objective in this study. This meant that when procurement plan preparation is well conducted, it enables User departments prepare procurement work plans for the financial year and also PDU prepares a consolidated procurement plan subjected to the approved annual budget, this will improve on materials management in public universities in Uganda especially at (MUBS).

5.2.2 The effect of procurement plan implementation and materials management.

According to the second objective of this study, it was revealed that procurement plan implementation positively affects materials management in this organization. This meant that proper procurement plan implementation is achieved when Procurement plans are drawn on the approved budgeted and procurement practitioner make early identification of right commodities and quantities to meet organizational needs thus improving quality, quantity, timelines and value for money as per the PPDA Act 2003.

5.2.3 The relationship between procurement plan evaluation and materials management.

From the third objective of this study, it was revealed that there was positive significant relationship between procurement plan evaluation and materials management. A positive correlation coefficient was observed at $r = 0.762^{**}$, with probability value ($p = 0.000$) that is less than $\alpha = 0.01$ level of significance. This meant that effective procurement plan evaluation can be achieved supplier bids are only assessed in relation to a published set of evaluation criteria and the contracts committee verifies supplier capability and quality control to enable an organization to achieve value for money and thus improving on its materials management.

5.3 Discussions of the study findings.

The discussion is organized according to the research objectives directly derived from the objectives of the study. In the course of the discussion, attempt is made to cross-reference the implications of the findings with existing literature.

5.3.1 The influence of Procurement plan Preparation on materials management.

Basing on the first objective of this study that was to evaluate how the Procurement plans Preparation influences materials management. The study findings revealed that employees participate in procurement planning in their department and procurement department drafts basic time table for procurement plan preparation. However, according to the World Bank, March (2004) procurement budgets need to be implemented in an efficient and effective manner to satisfy the needs of all public procurement stakeholders as procurement practitioner are required to perform procurement activities with all procurement code of ethic thus the involvement of employees in the procurement planning process indicates the openness of the procurement

department while drafting the basic time table for users to follow hence enabling proper materials management.

From the findings, it was revealed that User departments usually prepare procurement work plans for the financial year which confirms with UN, (2006) reports as revealed that with the traditional procurement planning process, procurement budgeting and forecasting is vitally important to ensure an effective, efficient, strategically viable and sustainable result. The budget is the single most important policy document of governments, where policy objectives are reconciled and implemented in concrete terms which needs user departments to prepare procurement work plan for the financial year which needs budgeting for the goods and services thus in the end, it enhances proper materials management of the organization.

The study results it was also revealed that the PDU prepares a consolidated procurement plan subject to the approved annual budget. However, these findings were in line with the literature that revealed that Procurement Plan (PP) must be integrated into the budgetary processes based on the indicative or approved budget, as stipulated in the PPDA (2006). The budget as well as the procurement plan are to be based on realistic cost estimates derived from the market research database which is to be compiled and updated regularly by the procurement unit in line with regulations, PPDA (2009) which enhances value for money thus enabling better management of goods and services.

The respondents further agreed that all procurement requirements are conducted in line with the PPDA Act and Regulations 2003. Part V of PPDA regulations (2003) state that “procurement or disposal shall only be initiated or continued on the confirmation that funding, in the full amount

over the required period is a reliable or will be made available at the time of contract commitment is made and thus influencing materials management.

The results also revealed that employees make purchases basing on market prices. According to the PPDA Act (2007), purchases must be economical and efficient. This means that they should be based on market prices and should be able to generate saving. It also means that bad practices such as irresponsible procurement leading to wastage, wear and tear of stocks, over invoicing, unplanned expenditure, shortage of goods when needed, poor quality products and similar factors needs to be avoided for the better management of materials delivery.

5.3.2 The effect of procurement plan implementation and materials management.

From the second objective of this study which was to assess the effect of procurement plan implementation and materials management. The results from the first and sixth question on this objective revealed that employees disagreed that money is released on time to execute procurement activities and is normally available to procure goods according to plan. These findings correlates with the literature by Ohemeng, (2009) as revealed that procurement planning implementation clarifies what to procure and when to procure to both the user and the buyer. Effective procurement planning enables the procuring organization and its staff to work smoothly to achieve the organization's goals with the right quality and quantity of inputs in place. Therefore, the failure to release money on time to execute procurement activities leads to ineffective procurement planning results which affect materials management and failure to achieve organization goals and causing damage to the credibility of the organization.

The findings also revealed that all procurement requisitions are usually within the approved procurement plan and strictly follow the consolidated procurement plan. The results were in line with the literature that was revealed by Agaba & Shipman, (2007) as contends that proper planning for a huge expenditure is an essential element of good procurement in the public institutions of the country. The procurement objective is to provide quality goods and services through open and fair competition in the exact quantity and proper quality as specified; and has to be delivered at the time and place where needed as approved procurement plan and strictly follow the consolidated procurement plan. Therefore, to secure quality goods and services at competitive prices, it requires accurate planning and involvement of a number of stakeholders so as enable better materials management. However, the objective of this study is to help fill the gap on procurement planning in relation to creating a better materials management.

The respondents agreed that employees make early identification of right commodities and quantities to meet organizational needs. Evennet & Heekman (2005) states that procurement planning enables the identification of major investment expenditures which in turn facilitates budgetary decision making and making identification of right commodities and quantities to meet organizational needs. It is quite difficult for a public institution to cause effective public service delivery to its people without good procurement planning and budget practice. Therefore, it implies that making early identification of right commodities and quantities to meet organizational needs facilitates the good management materials.

5.3.3 The relationship between procurement plan evaluation and materials management.

According to the third objective of this study which was to establish the relationship between procurement plan evaluation and materials management, the study results indicated that there is a positive significant relationship between procurement plan evaluation and materials management. Basing on the questions that were asked on this objective, the results on the first question revealed that procurement plans are integrated from all user departments into the allocated budget. Shaw (2010) contended that it is very important for the procurement department to assess and consult on any big price variations, to avoid potential conflict of interest, undue influence, price fixing and favouritism, and to ensure consultative decision making and sharing of responsibilities to ensure that procurement plans are integrated from all user departments into the allocated budget which enables proper materials management.

The study findings also revealed that respondents agreed they identify which materials and supplies are needed and prioritize those that require urgent attention when planning. Literature confirmed with Eriksson (2008) as noted that given the limited resources available to government, ensuring very effective monitoring and evaluation system in procurement is a key to ensuring the optimum utilization of scarce budgetary resources. Effective evaluation is the primary driver for procurement. It usually means buying the products or service with the lowest whole-life costs that is fit for purpose and meets specification. Where an item is chose that does not have the lowest whole-life costs, then the additional value added benefit must be clear and justifiable so that to avoid poor management of materials in the organization in terms of quality and quantity desired by the organization.

From the findings, procurement plans are drawn from the approved budget and contracts committee verifies supplier capability and quality control. However, these findings were line with Maurer, (2004) as also revealed in a study that the evaluation of tenders and awarding of contracts to suppliers is an important phase of the procurement planning process. It is the process that determines the actual quality, reliability, delivery, quantity and cost of the goods and services. Therefore, it is necessary for the procurement staff and contracts committee to monitor and evaluate the progress of orders and the performance of the suppliers so as to receive the right quality and quantity of materials at the right time and cost to attain value for money hence enhancing materials management.

The results also revealed that in this organization, supplier bids are only assess in relation to a published set of evaluation criteria which implies that contracts are only awarded to qualified supplier that meets the right evaluation criteria thus enabling to select the best supplier for the better management of materials in the organization and attaining value for money.

5.4 Conclusions

The study findings revealed that the selected procurement planning demission of (Procurement plan preparation, procurement plan implementation and procurement plan evaluation) had a positive effect on materials management in public universities in Uganda which would ensure that management protects the best interests of all stakeholders and ensure procurement ethical code of conduct are maintained during procurement planning process as recommended in the PPDA ACT , 2003 and the Regulatory amended Act, 2014 for all the public institutions to follow.

5.4.1 Procurement plan Preparation and materials management.

The study findings revealed that Procurement plan preparation positively affects materials management. However, despite of a positive effect, the requirement for procuring entities to prepare annual procurement plan is a mandatory one under the Public Procurement Act 2004. Public Universities and governmental purchasing departments have not been particularly successful in enlisting the assistance of operating departments and personnel in planning and scheduling procurements and some user departments do not give the preparation of annual procurement plan the proper attention it deserves. As a result, urgent needs often had to be addressed through emergency rather than standard procurement procedures. The effect has been disrupting, resulting in inefficient use of purchasing staff and delays in providing other need goods and services thus affecting materials management. A properly prepared and executed annual procurement plan will enable the procuring entity to identify early signs of problems to any planned procurement and thus devise the best approach to the procurement in question in order to meet its intended purpose

5.4.2 Procurement plan implementation and materials management.

The study results also revealed that procurement plan implementation positively affects materials management. However, basing on the positive effect, it was revealed that employees disagreed that money is released on time to execute procurement activities and is normally available to procure goods according to the plan. This implies that in Public Universities, Procurement planning implementation is more affected by the delay of releasing money to procure the planned goods and services due to lack of cooperation between Procurement Disposal Unit and user

department because, in order for Procurement Disposal Unit to prepare a comprehensive procurement plan, it depends more on the submission of schedule of requirements on time from user departments. However, it was also disclosed that lack of support from user departments is caused by lack of understanding of Public Procurement Act No.21 of 2004 which states the responsibility of each personnel.

5.4.3 Procurement plan evaluation and materials management.

Lastly the study found a significant positive relationship between procurement plan evaluation and materials management which was revealed at 76%. However, despite of a positive relationship that was revealed, respondents agreed that they assess supplier bids only in relation to a published set of evaluation criteria and identify which materials and supplies are needed and prioritize those that require urgent attention when planning as per one of the questions on this objective with the highest percentage at 72.5%. In this case therefore, there is still need to strengthen the evaluation process in terms of compliance checks, safeguarding confidential information, the process for evaluating alternative tenders and the calculation of value for money which enhances materials management in public universities.

5.5 Recommendation

From the preceding of the findings in chapter four and conclusions, the following recommendations are made in line with the study objectives:

5.5.1 Procurement plan preparation and materials management.

- ❖ The study recommends that when preparing procurement plan in public universities, the procurement plan templates should clearly indicate the estimated value of the

procurement for each procurement activity using appropriate methods that should be guided by Part VI & the Fourth Schedule of the PPDA Act 2003. The estimated value should to a large extent reflect the market price and budgeted amount for that procurement. To assist procuring and disposing entities to prepare correct estimates, reference should be made to the Authority's average price list for supplies and non-consultancy services.

- ❖ Procurement practitioners and other professionals should know that annual procurement planning is very important in the organization as it acts as a road map to procurement of the organization which later assures the availability of goods and services for continual operations of the organization hence achieve the targeted goals.
- ❖ The study also recommends that the Public Universities should issue Standard Procurement Plan formats to all PDUs and budget call circular which requires AOs to prepare Annual Procurement Plans to ensure that the procurement budget is integrated with the approved expenditure programme of the entity and the cash flow projection, promote the use of framework contracts and avoiding splitting issued prices for common user items to guide PDEs.

5.5.2 Procurement plan implementation and materials management.

The study recommends Public Universities should put in place a good procurement planning implementation frame work so that to attain the procurement objective of providing quality goods and services through open and fair competition in the exact quantity and proper quality as specified; and has to be delivered at the time and place where needed. Public universities should also ensure that the core steps of procurement planning are managed exceptionally well, the core

procurement planning practices are embedded in all procurement systems, the core departments are carefully involved in procurement planning, and the importance of procurement planning must be rigorously shared among the multitude of stakeholders taking into account the quality, quantity, cost and time of delivery of goods and services hence enhancing materials management.

5.5.3 Procurement plan evaluation and materials management.

- ❖ The contracts committee should ensure that the tenders submitted are fully compliant with the special conditions outlined in the data sheet and ensuring that the evaluation and ranking of bidders is completed in a fully transparent manner without bias to any one bidder. The public universities should also provide procurement staff and contracts committee members with appropriate tender assessment and evaluation training and experience to improve tender assessment and evaluation processes so as to maintain, audit and review evaluation procedures and ensure that Evaluation and Contracts Committee members declare any conflicts of interest.
- ❖ The study also recommends that in order to identify and evaluate critical areas within the supply system, it is necessary for the procurement planning team to have an understanding of the core components of the system. The team should therefore initiate the program of work by assessing the efficiency and adequacy of each component so that the system as a whole can ensure continuous availability of materials. An assessment of the system can be implemented by collectively answering a series of key questions which have been developed in this study to identify principle determinants of the procurement process. This process facilitates the collection of information required to develop the

procurement plan, and stimulates discussion within the procurement planning evaluation team on challenges and opportunities that will affect materials management in the organization and efficiency of the procurement and supply process.

- ❖ The study also recommends that the procurement planning team must also review product and supplier specifications as well as administrative procedures for procurement. A review of product/ supplier specifications can avert problems later in the process that may affect lead times and availability of product (due to for example, suppliers not having the capacity to meet demand, or suppliers not being able to provide required documentation etc). In addition it is important to define timelines within the forecasting model, to account for delays that otherwise may render the materials management mainly products inaccurate.

5.6 Areas for Further Study / Research

Since this study focused on procurement planning in terms of (Procurement plan preparation, procurement plan implementation and procurement plan evaluation), a further study should be carried out to undertake procurement planning by Public Universities as required by PPDA Act 2003 and PPDA Regulation (2014) which gives guidelines on a systematic, fair and transparent procurement process. A study should be carried out on procurement function and materials management in public universities in Uganda. The same study can be carried out in other higher public intuitions of learning and private universities in Uganda.

Considering the moderating variable (funding sources), a study should be carried out on procurement budgeting and materials management in public universities in Uganda. There

should also be a study on procurement ethics which pertains to be the legal frame work as the one moderating variable on materials management.

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APPENDENCES
APPENDIX I
QUESTIONNAIRE
QUESTIONNAIRE FOR STAFF MEMBERS OF MAKERERE UNIVERSITY BUSINESS
SCHOOL

Dear respondent,

I am Annette Nabirye a Masters student of Kyambogo University and I am pleased to inform you that you are one of the selected individuals who were randomly selected to respond to this questionnaire. The data collected using this questionnaire will be used to compile an academic research report to be presented to Kyambogo University for award of a Master’s Degree in Science in Supply Chain Management.

You are cordially requested to spare some time and fill this simple questionnaire. The information obtained through this questionnaire shall be used for aforementioned purpose and will be taken with utmost confidentiality. For this reason, I do not seek to know the name or identity of any respondent.

Yours Sincerely

.....

Annette Nabirye

RESEARCHER

SECTION A: BACKGROUND INFORMATION

Please answer the following questions by **ticking the box** with the most appropriate option:

1. Sex:

(a) Male (b) Female

2. Age bracket:

(a) 20-30 Years (b) 31 -40 Years (c) Above 40 years

3. What is your level of education?

(a) Certificate (b) Diploma (c) Bachelors (d) Masters (e) PhD

4 What is your management responsibility?

(a) Top management (b) Middle management (c) Supervisory staff (d) Support staff

5 How long have you been working with this organization?

(a) Less than 1 year (b) 1-2 years (c) 2-5 years (d) 5-10 years over 10 years

SECTION B

In this section you are requested read the following statements, please tick the number that best indicate your opinion using the following scale; strongly disagree (1), disagree (2), Not sure (3), Agree (4) and strongly agree (5).

1. Procurement plan preparation

	Statement	1	2	3	4	5
6	I participate in procurement planning in my department					
7	User departments usually prepare procurement work plans for the financial year.					
8	PDU prepares a consolidated procurement plan subject to the approved annual budget					
9	Procurement departments drafts basic time table for procurement plan preparation.					
10	All procurement requirements are conducted in line with the PPDA Act and Regulations 2003.					

11	We make purchases basing on market prices					
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2. Procurement Planning Implementation

	Statement	1	2	3	4	5
12	Money is released on time to execute procurement activities					
13	Procurement plans are drawn on the approved budgeted					
14	All procurement requisitions are usually within the approved procurement plan.					
15	We strictly follow the consolidated procurement Plan.					
16	We make early identification of right commodities and quantities to meet organizational needs.					
17	Money is normally available to procure goods according to plan					

3. Procurement Planning Evaluation

	Statement	1	2	3	4	5
18	We integrate procurement plans from all use departments into the allocated budget.					
19	We identify which materials and supplies are needed and prioritize those that require urgent attention when planning.					
20	Our contracts committee verifies of supplier capability and quality control					
21	Procurement plans are drawn from the approved budget					
22	We assesse supplier bids only in relation to a published set of evaluation criteria					

4 Materials Management

	Statement	1	2	3	4	5
23	My organization carries out market research to determine prices, quality and quantity of different materials and supplies.					
24	We always verify the quality and quantity of goods delivered by the supplier.					
25	We handle procurement of material requisition timely					
26	We pay the lowest possible prices, consistent with quality and value requirement for purchases materials					
27	User Departments are satisfied with the level of quality of materials offered by Procurement and Disposal Unit					
28	We have adequate materials on hand when needed					

Thank you very much for your time

Annette Nabirye

APPENDIX II
INTERVIEW GUIDE
INTERVIEW GUIDE FOR TOP AND MIDDLE MANAGERS

- 1) How is procurement planning done to have good materials management?
- 2) Does your organization follow the PPDA Act and Regulations to design its procurement plan? If yes, how.
- 3) What procedure does MUBS implement procurement planning?
- 4) What criteria MUBS use to evaluate procurement plan.
- 5) What are the sources of funds that facilitate the procurement planed budget?
- 6) How does Procurement plan Preparation influences material management of MUBS?
- 7) What is the effect of procurement plan implementation on materials management?
- 8) What is the relationship between procurement plan evaluation and material management?
- 9) Who is responsible for implementing the procurement planed budget?

APPENDIX III

DOCUMENTARY CHECK LIST

Check for c

Check for user department reports

Check for procurement audit reports

Check for materials management systems.

Check with procurement disposal unit budgets.

APPENDIX IV
INTRODUCTORY LETTER

APPENDIX V

TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN POPULATION

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Source: Krejcie & Morgan (1970)

Note:-

N =is population size.

S =is sample size.