

STOCK CONTROL AND ORGANISATIONAL OPERATIONS

A CASE STUDY OF KAMPALA CITY COUNCIL

BY

NAKALEMA LILIAN

BSP/4842/31/DU

**A RESEARCH REPORT SUBMITTED TO THE FACULTY OF
BUSINESS AND MANAGEMENT AS PARTIAL FULFILMENT
FOR THE AWARD OF A BACHELORS DEGREE IN
PROCUREMENT AND SUPPLIES MANAGEMENT OF
KAMPALA INTERNATIONAL UNIVERSITY**

SEPTEMBER, 2007

DECLARATION

I NAKALEMA LILLIAN, do declare that this piece of work presented herein is my own original work and has never been presented anywhere for the award of a degree in any institution or university whatsoever

Signed Nakalema L. Date 16/10/2007

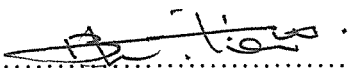
NAKALEMA LILLIAN

APPROVAL

This piece of work has been submitted with my approval

Supervisor: BALIRUNO JOHN THE BAPTIST

Signed:

.....

Date:

..... 12 / 10 / 07

DEDICATION

This publication is dedicated with love and gratitude to my late grand father Dr. Samson Kisekka Babikulya whose love, extreme tolerance and deep understanding have sustained me throughout my childhood age and into this early age of my adult life.

I also dedicate it my dad Mr. Samson Kisekka junior and my Mum Sylvia Lwanga. Your care for me during my early infant age greatly contributed much to my life on the planet earth.

ACKNOWLEDGEMENT

I thank the Almighty God for giving me knowledge and enabling me the successful completion of this research report. You are the most gracious and wonderful who looks after the father and motionless. Glory is for you.

I acknowledge in a special way, the generosity, confidence, humanity and understanding of the late Dr. Samson Kisekka Babikulya who over the years entrusted me and invested in my education

It's quite implicative to note that his care, love, compassion and generosity to me is what made me what iam today. He is the reason for my success; it's therefore him whose love, work ethics, honesty, integrity and humanity I strive to emulate. May your soul rest in peace

I acknowledge in a very special way Kampala City Council management for giving me the necessary information especially my uncle Dr. Livingstone Makanga and Semuwemba Ben who did a lot to make my studies a success.

I acknowledge the contribution of my lecturer, mentor and supervisor Mr. **Baliruno John The Baptist** for his advisory, supervisory and invaluable role during the course of my research. You have always been approachable, flexible and understanding and therefore so helpful to me.

I acknowledge with joy, the contribution of my relatives who helped me in one way or the other in the course of my studies, especially aunties; Rose Lwanga, Olivia Lwanga, Pr. Simon Lwanga, Sylvia Lwanga and my Dad, Samson Kisekka Jr. thank you for being so considerate. Acknowledgement also goes to my classmates more especially Nabwato Diana, Anaso Hellen and Odelle Jacinta, it was for and privileged sharing with you those fascinating and imaginative ideas you are the reason for my excellence

Despite all the assistance I received from the various sources, my mistakes, error or misstatement herein is entirely my own welcome my conclusion and observation.

May the Almighty God bless you all!

TABLE OF CONTENTS

DECLARATION	II
APPROVAL	III
DEDICATION	III
ACKNOWLEDGEMENT	V
TABLE OF CONTENTS	VI
CHAPTER ONE.....	1
BACKGROUND	1
STATEMENT OF THE PROBLEM.....	4
PURPOSE OF THE STUDY	4
OBJECTIVE OF THE STUDY	4
RESEARCH QUESTIONS	4
SIGNIFICANCE OF THE STUDY	5
SCOPE OF THE STUDY	5
AREA OF THE STUDY	5
DEFINITION OF TERMS	5
CHAPTER TWO	6
LITERATURE REVIEW	6
INTRODUCTION.....	6
STOCK CONTROL AND STOCK LEVELS	6
MAXIMUM STOCK LEVEL	8
REORDER LEVEL	9
MINIMUM STOCK LEVEL	11
DIFFERENTIAL CONTROL (ABC ANALYSIS)	12
THE ISSUANCE FUNCTION	15
TIMING OF ISSUES	17
CHAPTER THREE	22
METHODOLOGY	22
INTRODUCTION.....	22
RESEARCH DESIGN	22
AREA OF THE STUDY	22
STUDY POPULATION.....	22
SAMPLE SELECTION	22
SAMPLE SIZE	23
STUDY VARIABLES	23
INSTRUMENT OF DATA COLLECTION	23
SOURCES OF DATA	23
PROCEDURES OF DATA COLLECTION.....	23
DATA PROCESSING AND PRESENTATION.....	24
PRE- TESTING.....	24
LIMITATIONS OF THE STUDY	24
CHAPTER FOUR.....	24
INTRODUCTION	25
RESULTS AND INTERPRETATION	25
CHAPTER FIVE.....	30
DISCUSSION, SUMMARY, CONCLUSION AND RECOMMENDATION	30
INTRODUCTION	30
DISCUSSION OF THE FINDINGS	30
SUMMARY	31
CONCLUSION	32

RECOMMENDATIONS32

REFERENCES.....33

APPENDICES.34

APPENDIX A: INTRODUCTORY LETTER.....34

APPENDIX B: KAMPALA CITY COUNCIL AND ITS DIVISIONS......35

APPENDIX C: MANAGEMENT STRUCTURE OF KAMPALA CITY COUNCIL36

APPENDIX D: QUESTIONNAIRE37

CHAPTER ONE

BACKGROUND

Stock control systems in many organizations play a vital role in determining the organizations' existence and production capacity levels to meet varying customer demands. Stocks of raw materials may represent a significant investment for the business; it is therefore vital that an effective system of controlling material stocks is implemented. The research was centered on stock control systems employed by Kampala City Council in its bid to provide efficient services to its five political divisions in Kampala District. Being the largest urban center and the heart of Uganda, it's charged with responsibility of ensuring efficient service delivery in terms of raw materials, work in progress and finished products and/or services to the citizens. Kampala District consist of five political administrative units/divisions namely; Central, Makindye, Kawempe, Nakawa and Rubaga.

Zenz (1994), observed that inventory or stock control involves the planning, ordering and scheduling of materials used in the manufacturing or service processes. It exercises control over three types of inventories namely; raw materials, work –in progress and finished goods.

According to Saleemi (1997) stock control is the process whereby the investment in materials and parts carried in stock as regulated within predetermined limits set in accordance with inventory policy established by management.

Stock control is the operation of continuous arranging of receipts and issues so that stock balances are adequate to support the current rate of consumption with due regard to economy. It involves the related process of provisioning which is the means whereby instructions are given for the placing of orders. Morrison (1981)

To sum it all, stock control is a quantitative control technique with strong financial implications. Inventory control technique is perhaps a single most important control having a direct relationship with production, marketing, purchasing, and financial policies (Zenz 1994)

In any organization, there is need to control stock as effectively as possible in order to avoid the negative effect of overstocking, under stocking and the uncontrolled stock issues, thus uncontrolled losses to the organization. Such control can be done by the use of the action level method, the differential control which is the ABC analysis and the effective control of the stock issues (Morrison, 1981)

The research was centred on stock control systems in the operations of Kampala City Council. The Kampala City Council budget is financed from Government transfers. Funds specified for development programs by donors and local revenue for Kampala City Council are; property rates, ground rent, market fees licenses and vehicle parking fees. These resources collectively accounted for 78% of the total revenue in the fiscal year 2002/03

Kampala City Council has had significant developments in all areas since 1990. Like any other organization, Kampala City Council has a management structure as described here below;

- The Mayor/ Deputy Mayor and executive committee are responsible for making decisions and bylaws and monitoring programmes and policies.
- The district council is the legislative arm of the district
- Five committees, each headed by a councilor and advised by the executive, prepare and recommend policy and other decisions by the council. The five committees are; works, physical planning and inspection, health, hygiene and environment improvement, finance and economic affairs social improvement, community development and antiquities and education information and sports

- Five semi-independent committees decide on matters in their jurisdiction. These are; Contracts Committees, District Land Board, District Service Commission and the Human Rights Committee.
- The town clerk is the chief executive officer of Kampala City Council. He is responsible for implementing the policies enacted by LC.5 council and for day management of district affairs. Each division is headed by a principal assistant town clerk who reports to LC.3 chairpersons and the town clerk

According to Zenz (1994), purchasing is the act of obtaining by procurement, lease or hire or any other legal or contractual means, the equipment material and supplies required by an undertaking organization to meet its corporate objectives. The main objective of purchasing is to buy materials and services of the right quality in the right quantities at the right time from the right source and at the right price.

STATEMENT OF THE PROBLEM

Stock control is very important in organizational operations. However, failure to establish the stock levels and to group the materials according to their usage value has led the council into a situation of reactive buying (acting in crisis) which is a hindrance to an organization that deals with emergencies. Lack of research on stock control has left management unaware of the problem. Therefore, the research is intended to investigate the relationship between stock control and organizational operations.

PURPOSE OF THE STUDY

The study was designed to examine the impact of stock control on efficiency of the organizational operations.

OBJECTIVE OF THE STUDY

- To investigate the impact of stock levels on organizational operations
- To examine the differential control technique (ABC Analysis) on organizational operations
- To establish the impact of issuance of materials on organizational operations

RESEARCH QUESTIONS

- 1) What is the impact of stock levels on organizational operations?
- 2) What is the impact of differential control technique on organizational operations?
- 3) What is the impact of issuance of materials on organizational operations?

SIGNIFICANCE OF THE STUDY

1. The findings of this study can help Kampala City Council to develop an efficient and effective stock control system
2. The findings of the study can enable Kampala City Council management to reduce waste through the categorization system based on value attachment to the raw materials to realize value for money.
3. The findings of the study can enable future researchers to come carry out further research in the areas of stock control in both private and public enterprises.

SCOPE OF THE STUDY

The study was limited to respondents from stores/stock control, accounts department of Kampala City Council, Kampala District. The content scope was limited to establishing the impact of; stock levels, differential control (ABC analysis) and issuance of materials on organizational operations.

AREA OF THE STUDY

In this research, the area of the study was Kampala City Council. This is an urban city authority, which was entrusted with the control and service delivery to the city users.

DEFINITION OF TERMS

Impact in this study refers to having an effect on something.

Stock control in this study refers to the pre- determination of materials required by an organization.

Organization operation in this study refers to activities in the working order

CHAPTER TWO

LITERATURE REVIEW

INTRODUCTION

This chapter reviewed literature on approaches to stock control that are relevant to the impact of stock levels, differential control and issuance of materials on organizational operations.

STOCK CONTROL AND STOCK LEVELS

Lewis as quoted in Bailey (1987) defined stock control as the science- based art of controlling the amount of stock held in various firms within a business to meet economically the demands placed upon the business. What it aims to do is to meet the demands and not to meet them economically.

Owler *et al* (1987), suggest that the balance of any account in the stores ledger should agree with the balance shown as the bin card or stock card for some materials and frequent checking of these dual records should be made as well as the actual quantity in stock. They further observed that regular and consistent stock taking if not undertaken by an organization like Kampala City Council, a likelihood of stock outs could result and this would give all its competitors to do risk business.

Dave Needham *et al* (1995), comment that whether a stock system is in operation or not, it is important that stock balances are physically verified at least once during an accounting year where no stock records are maintained. It is necessary to stock take at the accounting year end, however, if an effective and accurate perpetual inventory system is in operation, the stock record card will be a true reflection of the actual stock in stores.

Morrison (1981) stock control is the operation of continuously arranging receipts and issues so that stock balances are adequate to support the current rate of consumption, with

due regard to economy. It involves the related process of provisioning which is the means whereby instructions are given for the placing of orders.

Catter *et al* (1996) explain stock taking as a system of stock control and the security of accountability for all materials is a direct responsibility of a stores manager and his staff. They further explain that stock control systems will be a tested verification by physical counts which act as a form of performance check on these systems and adjustments. Computerized control systems will be verified. Computers are only as good as the data supplied to them, so the data being supplied from stock records and stock control departments of Kampala city Council must be relevant and accurate.

Fig 1.3. An illustration of the Stock Control Card/Record Card

Stock taking date:		
Description	Sheet ref. No	
	Calculated stock	Variance
Code Number		
Physical count		
Unit of issue		
Location		
Stock taker's signature		
Comment on stock conditions		

Saleemi (1997) states that systematically and scientifically, stock levels are important in the operations of an organization. Stock levels in most organizations like Kampala city council are set by the stores manager or stock controller. There are various levels in stock control which include; maximum stock level, reorder level, minimum stock level among others.

Maximum Stock Level

Maximum stock levels represent the level beyond which the stock in hand is not allowed to exceed. This is because if stock exceeds this level, it will involve more investment, require more space, amounts to more wastage because of double handling hence more chances of damage, spoilage, obsolescence and involve more carrying costs; excess stock will involve unnecessary locking up of capital and prevent its availability for a more profitable use, excess stock will increase the cost of storage, thereby increasing production/selling costs thus defeating the very purpose of efficient stock keeping. Stock in excess will prevent management from taking advantage of price fluctuations and favourable market conditions (Saleemi, 1997)

Saleemi (1997), further states that the fixation of maximum levels depend on the following factors; rate of consumption of the materials, time necessary to obtain the deliveries, amount of money available, possibility of loss due to evaporation, deterioration, market conditions, seasonal and price fluctuations, economic order quantity. Government restrictions as in the case of explosive materials, staff and other facilities available for the maintenance of stores and the maintenance costs involved and need of buffer stock (safety stock) in relation to active stock

Morrison (1981), maximum stock level is the amount expressed in units of issue above which the stock should not be allowed to rise. In a city authority like Kampala City Council, the purpose of this level is to curb excess investment. In fixing a maximum, the main consideration is usefully financial and the figure is arranged so that the value of the stock will not become excessive at any one time. Other points affecting this level are; the possibility of items becoming obsolete as a result of operational changes, and the danger of deterioration in perishable commodities. When the level is reached, it is a signal to differ or cancel outstanding deliveries, if any.

The maximum stock level can be calculated as follows;

Maximum stock level = reorder level + EOQ – (Minimum x minimum level quantity)
Consumption re -order point)

Reorder Level

Storey (1995), states that the calculation of the reorder level tells management when materials have to be ordered. It is the first stock level to be calculated as it forms a constituent of the maximum and minimum level consumptions. When stock reaches this reorder level, a purchase order will be raised placing an order for the reorder quantity. This is to ensure that sufficient stock is available for future production needs thus avoiding out of stock situation. The assumption behind the reorder level computation is that production is at its highest, therefore, demand for the materials is at its greatest but the supplier's lead time is undependable.

Mearns (1981), this is the level at which the material must be replenished. In other words, this is the level at which it is necessary to raise a purchase requisition for additional supplies for the materials in question.

Drury (1996) observed that to determine the point at which the order should be placed to obtain additional stocks (i.e. the re- order point), we must ascertain the time that will elapse between placing the order and the actual delivery of stocks. This period is referred to as the lead-time.

According to Kampala City Council, re-order point was the number of days/weeks lead-time multiplied by the daily/weekly usage during the period. For materials, components and supplies, the re-order point is the point in time, which the purchase requisition is initiated and the order is sent to the supplier. For the finished goods, stock of a manufacturer the re-order point is the level of finished goods stock at which the production order should be issued. If we assume that an annual usage of a raw material at Kampala City Council is 6,000 units and the weekly usage is constant, then if there are 50 working weeks in a year, the weekly usage will be 120 units. If the lead-time is two weeks, the weeks the order should be placed when stock falls to 240 units.

Under this system, the rate of use of an item is determined by past experience and forecasts, and the length of time required to obtain delivery is secured from inventory control, ledger and from studies of alternative sources of supply. Under Kampala City Council at this point a reorder point is established. This point is equal to the monthly usage multiplied by the delivery time in months plus the safety factor (Zenz, 1994).

Bailey (1987) observes that ordering cycles can be varied by viewing different classes of stock at different intervals. For instance at Kampala City Council, class A items can be viewed frequently, class B items less frequently, class C items every 6-12 months. Review work can be planned to give an even workload. Articles obtained from the same source can be reviewed at the same time and ordered together. Since orders are placed at fixed intervals, variations in usage (or demand) have to be covered by varying the order quantities. Enough goods are ordered to replace what had been used and to cover expected requirements for the next cycle. It is advisable to order enough to bring stock up to present maximum otherwise, this would give an order quantity below minimum order size.

Order Level = (average demand per week x lead time in weeks + buffer stock)

Robbins and Coulter (1996), agree that in many personal checkbooks, you will find a reorder form inserted in among the remaining checks after you've used about 95 percent of them. It reminds you that it's time to reorder. This is an example of a fixed re-ordering system. At some pre-established point in the operations process, the system is designed to "flag" or alert users to the fact that the inventory needs to be replenished.

The flag is triggered when the inventory reaches a certain point. The goal of a fixed point re-ordering system is to minimize inventory carrying costs and to ensure a reasonable level of customer service (dependability) and therefore, the reorder point should be established to equate the time remaining before a stock out and the lead time to receive delivery of the re-order quantity.

As Kampala City Council, the newly ordered items would arrive at the same time as the last item in inventory was used up. More realistically, management of Kampala City Council doesn't allow the inventory to fall below some safety stock level. By using

certain statistical procedures, decision-makers can set a re-order point at a level that gives an organization enough inventories to get through the lead period and some reasonable insurance against greater usage than expected during the lead time.

Minimum stock level

Morrison *et al* (1991) defined the minimum stock level as the amount expressed in units of issue below which the stock of any given commodity should not be allowed to fall. When the level is reached, it triggers off urgent action to bring forward delivery of the next order, and it is sometimes called the “danger level”. In fixing a minimum, the main factor to be taken into account is the effect, which a stock -out would have upon the flow of work or operations. For many items, this effect is negligible, and it may be desirable to have a minimum stock level of “NIL”.

In other cases, such raw materials or important spare parts for vital sufficient stock must be held as a minimum to avoid shortages at least in normal supply conditions.

Saleemi (1997) observes that the minimum level points to the level below which the stock in hand shall not be allowed to fall. This limit is fixed in order to avoid the possibility of the suspension of production due to shortages of material. It is necessary that the stock on hand shall always be kept a little above this level to be on the safe side but never to fall below this level.

For Kampala City Council, this is usually fixed taking into account two important factors among others namely; the time required to obtain fresh stock, that is to say, lead time and the rate of consumption of materials. Minimum level gives an element of safety in production as materials can always be kept in reserve for emergencies. This is why sometimes the stock at this level is known as emergency reserve stock. The level in any case is not allowed to touch the zero level.

Theoretically, the minimum inventory level could be zero. The last unit of inventory would be used up at the moment a new shipment arrives. The maximum inventory would be the correct order quantity or economic order quantity. In practice, it would be unwise to follow this extreme policy since it involves planning that is much too close for safety.

In the minimum- maximum system, a safety factor is established, which becomes the minimum point below which the inventory should not go under normal circumstances. The maximum inventory consists of this safety factor plus the correct ordering quantity (Zenz, 1994).

Zenz (1994) adds that the safety factor ensures against such contingencies as sudden increase in the rate of usage, failure to receive deliveries on scheduled, in-bound traffic disruptions, vendor strikes, receipts of defective materials that cannot be used and clerical error in the records of bin balances. The size of this safety factor depends on investment, and the availability of substitutes on short notice. A high safety factor is indicated for any item, the lack of which would cause production shut down.

For instance if Kampala City Council lacked these levels, it would experience a situation of stock outs.

Maher (1997) states that depending on the nature of a product, a stock out may require a special trip to pick up extra- materials or shutting down operations until new materials arrive resulting in lost sales and customer goodwill, idle salaries and wages wasted lighting and heating and security. Keeping an optimal amount of safety stock can minimize such added costs and should be in line with the organizations policy to avoid incidences of over stocking that may result into obsolescence and deterioration in perishable items.

DIFFERENTIAL CONTROL (ABC ANALYSIS)

Bailey (1987) states that Pareto analysis (named after an Italian philosopher and economist Wilfred Pareto) is the study and representation of the way some characteristics such as value or order is distributed among a population such as all orders placed in period. It is usually found that there are few large orders and many small orders. As applied to stock control, this is often called ABC analysis. The range of stock items is split into 3 classes called A, B and C. Typically, 70% of the total demand for stock is due to only 10% of the items of class A. Another 20% the demand, class B. and that leaves

class C, comprising 70% of the items on lines in stock, but accounting for only 10% of the demand in monetary terms.

Because most of the money is spent on “A” items, it is economical to order frequently, control tightly, calculate requirements as exactly as possible shortages are prevented but frequent checks and energetic chasing rather than buffer stocks (Bailey, 1987).

Because of the nature of the Pareto distribution, it is possible to reduce both the administrative cost of controlling stock and the size of the total stock investment by applying ABC analysis.

For instance, “A” items could be ordered once a month, “B” items every three months and “C” items once a year. This results both in fewer orders and in lower stocks than ordering three months supply of every category item.

Bailey (1987), further states that in large firms, it is quite possible for tens of thousands of different items to be stored. It is therefore essential that stocks be classified into categories of importance and/or value so that a firm can apply the most elaborate procedures for controlling them and not only the critical items. The most common procedure is known as ABC classification

Richard *et al* (1990) observed that the purpose of classifying items into groups is to establish the appropriate degree of control over each item. On periodic basis for example, class A items may be more clearly controlled with weekly ordering, B items may be ordered biweekly, and C items may be ordered monthly or bimonthly.

Richard *et al* (1990) further observes that sometimes, an item may be critical to a system if its absence creates a sizable loss. In this case, regardless of the item’s classification, sufficiently large stocks should be kept on hand to prevent run out. One way to ensure close control is to designate this item an A or a B, forcing it into the category even if its dollar volume does not warrant such inclusion.

The ABC method requires that an estimate be made of the total purchase cost for each item of stock for the period. The sales forecasts are the basis used for estimating the quantities of each item of stock to be purchased during the period. Each item is then grouped in decreasing order of annual purchase cost. The top 10 % items in stock in terms of annual purchase cost are categorized as “A” items, the next 20% as B items and the final 70% as C items. If we assume that at KAMPALA CITY COUNCIL there are 10,000 stock items then the top 1000 items in terms of annual purchase costs will be classified as A items, and so on. In practice, it will be unnecessary to estimate the value of many of the 7000 C items, since their annual purchase cost will be so small that they will fall into the C category.

Drury (1996), observed that 10% of all stock items in the “A” items represents 73% of the total 20% of the items (B items) represent 19% of the total cost and 70% of the items (C items) represent 8% of the total cost. It follows that the greatest degree of control should be exerted on the “A” items, which account for the high investment costs, and it is the “A” category items that are most appropriate for the quantitative techniques. For these items, an attempt should be made to maintain low safety stocks consistent with avoiding high stock out costs. Large orders and safety stocks are likely to be a feature of the C category items.

Normally, re-order points for these items at Kampala City Council are determined on subjective basis rather than using quantitative methods, the objective being to minimize the expense in controlling these items. The control of the B category items is likely to be based on quantitative methods, but they are unlikely to be as sophisticated as for “A” category items.

Leenders *et al* (1997) quote the Italian vilfredo Pareto observing that regardless of the country studied; a small portion of the population controlled most of the wealth. This observation led to the Pareto curve whose general principles hold in a wide range of situations. In materials management for example, the Pareto curve usually holds for items

purchased, a number of suppliers, items held in inventory and many other aspects. The Pareto curve is often called the 80/20 rule or more usually, ABC analysis, which results in three classes A, B, and C as follows

Class	Percentage of total items purchased	Percentage of total purchase dollars
A items	10	70-80
B items	10-20	10-15
C items	70-80	10-20

These percentages may somewhat vary from organization to organization and some organizations may use more classes. But Kampala City Council uses the above percentages. According to Kampala City Council, it pays to spend far more managerial time and effort on A and B items than C items. Because supply assurance and availability are usually equally important for all items, it is common to manage C items by carrying inventories. By concentrating a wide variety of requirements with one or a few suppliers by stockless buying agreements or systems contracting, by procurement cards, by placing transaction responsibility with the end user and by reviewing the items frequently, This technique reduces paper work and managerial effort (for most items) but maintains high service coverage. “A” items are particularly critical in financial terms and are; therefore barring other considerations normally carried in small quantities and ordered and reviewed frequently. “B” falls between the “A” and “C” items or categories and are well suited to a systematic approach with less frequent reviews than “A” items. It should be noted that “B” or “C” items may require “A” care because of their special nature, perishability or other considerations.

THE ISSUANCE FUNCTION

If an organization lacks a well – set issue function, it will end up losing most of its investments in inventory due to misuse by the responsible staff. Since stock items constitute 50% of a company’s expenditure, there is need to control the turnover rate.

The issue function of supplies management is the process of reacting to users demands for goods and services held within the organization. The success of this function is often taken as the measure of efficiency of stores operations; materials held by a company represent a great deal of organizational money and resources. Control issue of stock is therefore vital if losses are to be avoided (Morrison *et al*, 1994).

Eskew *et al* (1996) stated that internal controls for stock are intended to prevent theft, fraud, and to ensure that accounting records and financial statements are correct as security systems to prevent the theft of inventory. They further pointed out that keys and various electronic devices are frequently used to limit access to inventory storage areas and to discourage unauthorized removal of goods. Physical stock should be counted supported by regular and perpetual inventory records signaling undetected misappropriation of inventory, focused investigations hence leading to improved controls and also discourage phony transactions designed to cover up inventory fraud.

Morrison (1981) further asserts that, issuance is the process of receiving demands, selecting the items required and handing them over to users. The services given by the stores departments become effective at the point where a storekeeper makes issues of goods and users will naturally judge the efficiency of the stores organization by the standard of service provided to them.

Jessop *et al* (1994), observed that stores in stock represent money and should not be misappropriated, wasted or improperly used. For this reason, issues cannot be made indiscriminately before goods can be withdrawn from a storehouse. There must be some authority for the transaction. This may be in the form of a signed document, verbal instruction or a routine arrangement. The normal method is to use an issue note signed in the appropriate box by an authorized person.

Roger *et al* (1999) observed that the regular monitoring ensures that all staff adhere to systems and procedures and any irregularities can be quickly spotted and rectified. The

improved control will aid the efficiency of production and profitability of the enterprise and in case of perpetual inventory systems, stock levels at any time are known without having to conduct physical take and this information improves managerial control and decision making.

Mearns (1981), states that items of stock only are issued against a properly authorized material requisition, sometimes referred to as a stores requisition. The chief storekeeper should possess a list of those persons authorized to counter sign material requisitions. Denials of the material requisition are entered on the bin card, the requisition is then sent to the cost department where it is priced, valued, and entered in the cost accounts.

Mearns (1998) observed that discrepancies are discovered earlier and can be investigated, no factory close down which leads to production hold ups and its related costs, stocks are checked by personnel from the cost department who check all items and become experienced on the activity.

Storekeepers should follow details of the names, designation and specimen signatures of all persons empowered to approve issue notes. In some circumstances, it is desirable to restrict the authority of different levels of management within certain financial limits for example, at Kampala City Council, foremen may be permitted to sign for goods up to the value of 100 pounds, shop attendants up to pound 100, the signature of the works manager being required above that figure. Whatever the method of authorization, it should be appropriate to the every day needs of the organization. If there are too few authorized signatories, a workman requiring materials may have to spend an unreasonable time looking for the supervisor to approve his demand, and a similar situation is likely to arise if more than one signature is required.

TIMING OF ISSUES

Jessop *et al* (1994), further stated that so as to avoid delay in a busy storehouse, there will be routine to provide for smooth and even flow of work. Arrangements may be made for issues to some department to handle in the morning and some in the afternoon.

Workmen requiring stores may be instructed to attend at the storehouse only during certain hours and so on. The storekeeper should try to meet the convenience of users' issues on request; this is the simplest method and here are three variations immediate issue on presentation of an issue one by hand, issue made after the receipt of an issue note by post, immediate on verbal request only.

Issue on request method 1; the orthodox form of issue procedure is where the user comes to the storehouse and presents a properly authorized issue note or similar voucher giving details of what is required. The storekeeper then selects the items wanted and hands them over in exchange of document. Issue notes may be prepared in any number of copies to suit individuals' needs, but the following are typical;

Copy No 1: [original] handed to storekeeper, then passed to the stock record section for entering the quantity records, then to stores accounts section to credit the stock control accounts and debit the stock code chargeable.

Copy No 2: handed to the storekeeper and retained by him as his evidence of having made the issue.

Copy No 3: retained by the user department as evidence of the demand.

Issue on request, method 2, under this arrangement, the issue note is sent in by hand or post by the demanding department and the physical handing over of stores takes place later, either when the user calls for them at a pre- arrangement time or when they are loaded by the storekeeper for delivery. The storehouse staffs have adequate time available for selection and marshalling of the materials, and receipts have the advantage that they don't have to wait while the storekeeper finds and assembles whatever is required. The method is most convenient when the consumer is at some distance from the storehouse. It is also useful where the list of requirements is lengthy or complicated as for example, with spares for machinery overhauls. Jessop *et al* (1994).

Scheduled issues to production; in mass production concerns, with the cooperation of the production control department or some other technical planning office, Kampala City

Council production materials are issued in quantities and at times to correspond the with manufacturing programme. The goods concerned are usually collected into a marshalling area in the first place thereafter they may be dealt with in a different way. Morrison (1994)

Assemblies and kits; there are instances where composite issues of a standard nature are required at frequent intervals. This is most commonly encountered in the assembly stores of production factories where balanced sets of parts are required for assemblies or sub assemblies included in the manufacturing programme.

For instance, the piston assembly for a diesel engine might consist of the following list of separate parts

Number	Name of part	Store code number
4	Piston head	25/02/3410
8	Compression ring	25/02/3411
4	Scraper ring	25/02/3412
8	Small end bush	25/02/3413
4	Small end pinion	25/02/3414
4	Connection rod	25/02/3415
4	Big end bearing	25/02/3416
8	Big end nut and bolt	25/02/3417
8	Tab washer	25/02/3418

In the practice, the document presented to the storehouse by the production department quotes simply the required number of piston assemblies and it is the duty of the storekeeper to see that all individual parts are forthcoming in appropriate number (Jessop *et al*)

Imprest issues; imprest system is one whereby a list of certain types of materials in a given quantity approved to be held either in sub- store or on a production line or else where at the end of a given period say a week or month. The user concerned prepares a list of the materials consumed during that time, and presents an appropriate issue

document at the main storehouse for replacement of the goods to bring the imprest stock up to the same level as it was at the beginning of the period.

The arrangement is often used for supplying parts and materials to technicians who travel about in vans providing after sales service or repair facilities to customers (Morrison 1981)

Loan issue as general rule articles on loan from storehouse should not be encouraged but it is some times unavoidable. For example, at Kampala City Council in the maintenance department, a number of comparatively expensive tools or pieces of equipment are required for short periods of use at frequent intervals. Such items are; ammeters, surveyors, chains, instrument, electric hand lamps, taps and diesets, special tools, extra. These may not be on stores charge, but are controlled by the storekeeper and kept in the storehouse when not in use.

It is necessary to keep stock records for equipment concerned and to maintain a register showing all loans made in date order. Workmen sign the register for everything issued to them and sign again when items are returned to the store (Jessop *et al*, 1994)

Replacement issues; for certain items, for example, tools and gauges, operators may be required to present a used article to the storekeeper before a new one can be issued. This can be done with or without issued notes (Morrison, 1981).

Issues on employees on repayment; At Kampala City Council, sales employees from stock are often encountered in respect of tools, protective clothing, firewood. Kampala City Council storekeepers concerned with these sales are instructed in writing as to the articles permitted and persons to whom they may be sold. Payments are made either in cash or by deduction from wages, but storekeepers do not normally handle cash. Lists of sales are kept showing the date of transactions, the employees name and number, and the vocabulary number, description and quantity of goods sold. The Kampala City Council purchaser then signs for the items and the original list are sent to the cashier to collect the money or to the wages office to arrange deduction from wages, as the case may have been (Jessop *et al* 1994).

Allocated issues: in accordance with manufacturing schedules, some materials may be received on a programmed delivery basis and kept for use only along the production line for which they have been purchased. This is done to make sure that there will be no interruptions in production and the storekeeper must be informed of all allocations and enter appropriate particulars on his records, and issue notes relating to allocated materials indicating the purpose for which these items were acquired.

Capital issues: where the replacement of capital goods is a normal day to day or where a capital development or reconstruction programme is in operation, special attention is usually given to the control and recording of the issues of capital material from storehouses. Instructions are given about the authorization of such issues and stock records including bin cards, if any are marked to show that the items concerned are reserved for a particular project. Kampala City Council storekeeper ensures that when issue documents are presented to him, the capital project number quoted thereon for cost allocation purposes corresponds with the project number, which appears in his own records

In respect to all internal store issues, the instructions should make it clear whether goods are to be delivered by the storehouse staff, collected by the user, or handled by some third party such as transport department. If there are any restrictions about stores opening hours or particular times for issues, or if any advance notice was required by storehouses before issues could be made, the circumstances should be made known to all concerned.

CHAPTER THREE

METHODOLOGY

INTRODUCTION

This chapter presents the methodology of the study in which the research design, procedures, instruments, study variables, data collection, data processing and data analysis used in the study are explained.

RESEARCH DESIGN

The research was carried out using cross sectional survey design, using both quantitative and qualitative methods which were used to collect data from various categories of respondents and at the same time to generate a representative sample size in the target population, Sarantakos (1997).

AREA OF THE STUDY

The study covered Kawempe, Central division, Makindye, Nakawa and Rubaga divisions which constitute the five political divisions of Kampala City Council on how stock control impact on organizational operations

STUDY POPULATION

Respondents included the staff from supplies, and accounts departments and other categories of officers associated with stock control of the organization as they were thought to possess knowledge on how stock control impacts on organizational operations

SAMPLE SELECTION

Respondents were randomly selected from the strata, specifically from supplies and accounts departments to participate in the study as it was thought that stock control impacts on their operations. Simple random technique was used to minimize bias and error in selecting the respondents.

SAMPLE SIZE

The sample size was of 30 respondents

STUDY VARIABLES

The independent variable was stock control. Stock control involves the pre-determination of the required materials of the organization with due regard to economy. It also involves continuous arrangement of receipts and issues so that stock balances are adequate to support the current rate of consumption. While organizational operations was the dependent variable, this refers to all the activity (ies) being carried out in the entire organization

INSTRUMENT OF DATA COLLECTION

Data was collected using structured questionnaires, observations and face- to- face interviews.

SOURCES OF DATA

Primary data was solicited from the executive and office employees working in the supplies and Accounts departments plus other categories of officers associated with stock control of the organization. Secondary data was obtained from magazines, newspapers, chippings and reports of workshops proceedings in relation to the study objectives

PROCEDURES OF DATA COLLECTION

The researcher received an introductory letter from the Dean Faculty of Business and Management, Kampala International University. The researcher then proceeded to Kampala city council to seek permission to conduct the research, distributed self administered questionnaires, conducted face-to- face interviews and reviewed related literature

DATA PROCESSING AND PRESENTATION

Data collected was edited and coded. Editing was done to ensure completeness of the questionnaires and discover any misunderstanding of the questions. Coding was done to give numbers to responses. The data was presented as per research hypotheses by tables were presented to show frequencies and percentages because they are easy to be interpreted.

PRE- TESTING

The self-administered questionnaires were pre- tested for validity and clarity in order to reduce on the ambiguity of the questionnaires. A total of 10 staff members were randomly selected to fill out the self – administered questionnaires.

LIMITATIONS OF THE STUDY

Since research involves procedures to undertake which make it a lengthy exercise, the researcher faced the following limitations;

1. Financial problems related to stationery expenses and transport while commuting to the city council every now and then.
2. Lack of cooperation from some respondents who were suspicious of the study thinking it was aimed at exploring their weakness that limited the provision of reliable data.
3. Some respondents misplaced the questionnaires. This resulted in the research printing more and more questionnaires over a period of time.

CHAPTER FOUR

INTRODUCTION

This chapter presents the data on the findings, tables and statistical analysis and interpretation of the findings according to the study objectives.

RESULTS AND INTERPRETATION

Table 1: Age of Respondents and Organizational Operations

Details	Frequency	%
0-20 years	-	-
21-40 years	10	33
41- 60 years	20	67
Total	30	100

Most of the respondents 20 (67%) were between 41- 60 years, followed by 21-40 years (33%) indicating that such personnel had experience in stock control issues

Table 2: Sex of Respondents and Organizational Operations

Details	Frequency	%
Male	18	60
Female	12	40
Total	30	100

Majority of the respondents 18 (60%) were male, while 12 (40%) were female

Table 3: Whether There Are Enough Materials Requirements

Details	Frequency	%
Yes	10	33
No	20	67
total	30	100

Majority of the respondents 20 (67%), agreed that there are no adequate materials required in the day to day running of the organization, while 10 (33%) believed that materials are just enough

Table 4: Capacity of Stores to Accommodate Items and Organizational Operations

Details	Frequency	%
Yes	26	87
No	04	13
total	30	100

Most of the respondents 26 (87%), agreed that stores were big enough to accommodate all the required materials, while 04 (13%) believed that the stores are not big enough for the purpose.

Table 5: Established Standards of Stock Level and Organizational Operations

Details	Frequency	%
Yes	06	20
No	23	77
I don't know	01	3
total	30	100

Majority of the respondents 23 (77%) conceded that there are no established standard stock levels in the organization, 06 (20%) agreed that stock levels do exist while 01 (3%) did not no about the existence of stock levels.

Table 6: Frequency of Stock out and Organizational Operations

Details	Frequency	%
Very often	15	50
Often	11	37
Less often	-	-
Not often	4	13
Total	30	100

Majority of the respondents 15 (50%) very often experienced stock- outs, while 11 (37%) often experienced stock- out and 04 (13%), did not experience stock outs.

Table 7: Strict Stock Control Procedures and Organizational Operations

Details	Frequency	%
YES	23	77
NO	07	23
Total	30	100

Most respondents 23 (77%) believed that there are strict stock control procedures regarding internal issuing of stock, while 07 (23%) didn't agree.

Table 8: Arrangement According to Usage Value of Item(s) and Organisational Operations

Details	Frequency	%
Yes	04	13
No	24	80
I don't know	02	07
Total	30	100

Majority of the respondents 24 (80%) consented that items are not arranged according to their usage value, while 04 (13%) said that items follow a logical order according to usage and 02 (7%) didn't know.

Table 9: Issue of High Value Items in the Organization and Organisational operations

Details	Frequency	%
Stock Controller	-	-
Director	-	-
Department Manager	30	100
Total	30	100

Majority of the respondents revealed that issue of high value items is upon the authority of the department manager in the organization.

Table 10: Specific Times of Material Issue and Organisational operations

Details	Frequency	%
Yes	28	93
No	02	7
Total	30	100

Majority of the respondents 28 (93%) observed that there are specific times of issuing materials while 02 (7%) reported that there are no specific times of issuing materials.

Table 11: Materials Issued Out and User Demands

Details	Frequency	%
Yes	06	20
No	24	80
Total	30	100

Most of the respondents 24 (80%) reported that materials issued out are not enough to meet the demands of users while 06 (20%), believed that materials issued are just enough to meet user demands.

TABLE 12: Issuing Procedure on Organizational Operations

Details	Frequency	%
Very effective	14	47
Effective	16	53
Less effective	-	-
Not effective	-	-
Total	30	100

Majority of the respondents 16 (53%), observed that the issuing procedure is effective while 14 (47%) reported that the issuing procedure is very effective. Hence most or all responses from the selected respondents indicated effectiveness in the issuing procedure.

CHAPTER FIVE

DISCUSSION, SUMMARY, CONCLUSION AND RECOMMENDATION

INTRODUCTION

This chapter presents a discussion of research findings on the impact of stock levels, differential control and issuance of materials on organizational performance.

DISCUSSION OF THE FINDINGS

As per the results of the tested items, the following could be said. The result on table 5 revealed that 77% of the respondents said that there are no established standards of stock levels. This is contrally to Morrison (1981), who observed that stock levels are important in the operations of an organization since they help in the availability of required materials at all times.

This means that setting of stock levels has an impact on organizational operations. Therefore, the research question that setting of stock levels has no impact on organizational operations was rejected.

Results in table 7 showed that there is a significant relationship between strict stock control procedures regarding internal issue of stock with organizational operations. This is in agreement with Jessop *et al* (1994), who stated that materials held by a company represent a great deal of organizational money and resources. Control of issues of stock was therefore vital if losses were to be avoided.

It further discovered that the result in table 8 showed that 80% of the respondents said that the items in the council are not arranged according to their usage value. This is contrary to Bailey (1987), who observed that it is essential for stocks be classified into categories of importance so that the firm can apply the most elaborate procedures of controlling stocks.

This means that ABC analysis has an impact on organizational operations. Therefore the hypothesis that ABC analysis has no impact on organizational operations was rejected.

Results in table 9 showed that there is a significant relationship between Issue of high value items in the Organization with organizational operations. This is in agreement with Richard B. *et al* (1990), who observed that sometimes an item may be critical to a system if its absence creates a sizable loss. They further urge that regardless of the item's classification, sufficiently large amounts should be issued and that one way to ensure close control is to designate this item an A or a B even if its dollar volume does not warrant its inclusion.

Results from table 10 revealed that 93% of the respondents observed that there are specific times of issuing materials. This is supported by Mearns (1998), who stated that items of stock should only be issued against properly authorized material requisition, sometimes referred to as a stores requisition.

This means that issuance of material has an impact on organization operations. Therefore, the hypothesis that issuance of materials has no impact on organizational operations was highly rejected.

SUMMARY

The study was about the impact of stock control on organizational operations. The following were the key findings of the study:-

1. There are not enough materials required in the day-to-day running of the organization
2. There are no established standard stock levels in the organization
3. Respondents usually experience stock outs
4. There are strict control procedures in the organization
5. The items in the organization are not arranged according to their usage value
6. The issuing procedure is very effective on the organizational operation
7. There are specific times of issuing materials

CONCLUSION

Results indicate that stock control has a bearing on organizational operations

Issuance of material has a significant impact on organizational operations. This is because, as per the findings, majority of respondents observed that there was strict internal control of issuance of materials.

Stock being a synergy in organizational operations, results indicated that keeping optimal levels of stock ensures continued operations of the entity. Thus low and/or stock outs would result in lost sales and customer goodwill. The findings showed a significant relationship between stock levels and organizational operations.

The researcher infers that differential control (ABC analysis) has a significant impact on organizational operations. This is based on the findings that classification of items on the basis of ABC analysis establish an appropriate degree of control over each item and provides a basis of when, what to order and in which quantities.

RECOMMENDATIONS

Basing on the above findings, the following are recommended.

- a) Before organizations could begin their operations, research about stock control should be carried out.
- b) Stock levels should be established in order to have stocks at all times and overcome the constant problem of stock outs. For better control of the organizations find items to be arranged according to their usage value
- c) Strict control measures for internal issues of stock should be confirmed in order to maintain a very effective issuing procedure. Having specific times of issuing materials provides convenience to both the issuing and receiving officers and therefore, should be encouraged

REFERENCES

Bailey P.J.H (1987), Purchasing and supply management by Pub. International, Thomson business press 5th Edition

Drury C. (1996), Management and Cost accounting. Pub International Thomson business press.

Eskew .R. & Jensen (1996), Financial Accounting 4th Edition McGraw Hill – New York

Gary zenz (1994), Purchasing and Material Managemt 11TH Edition. International Thormson Publishing Inc, UK.

Gill & Rogers (1999), Business and Intermediate Accounting 4th Edition. Thornes Publisher Ltd. Great Britain

Jessop D. & A. Morrison (1991), Storage and supply of materials, 6th Edition Pub rubzwettler

Mearns I. (1996), Fundamentals of Cost Management Accounting. Pub Theneaum Press Gateshead Lyne and Wean

Morrison A. (1981), Storage and Control of Materials, 6th Edition

Richard B, Nicholas J. &F. Robert Jacobs (1990), Operations Management for Competitive Advantage 9th Edition McGraw Hill.

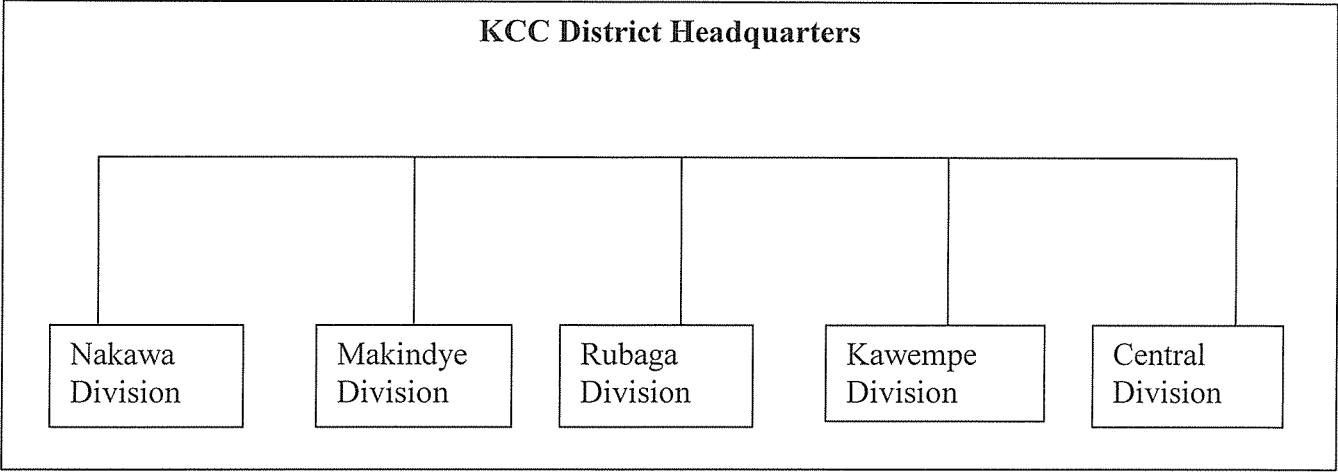
Robbins S. & Coulter (1996), Management 5th Edition. Pub. Prentice Hall Inter.Inc

Storey R. (1995), Cost and Management Accounting

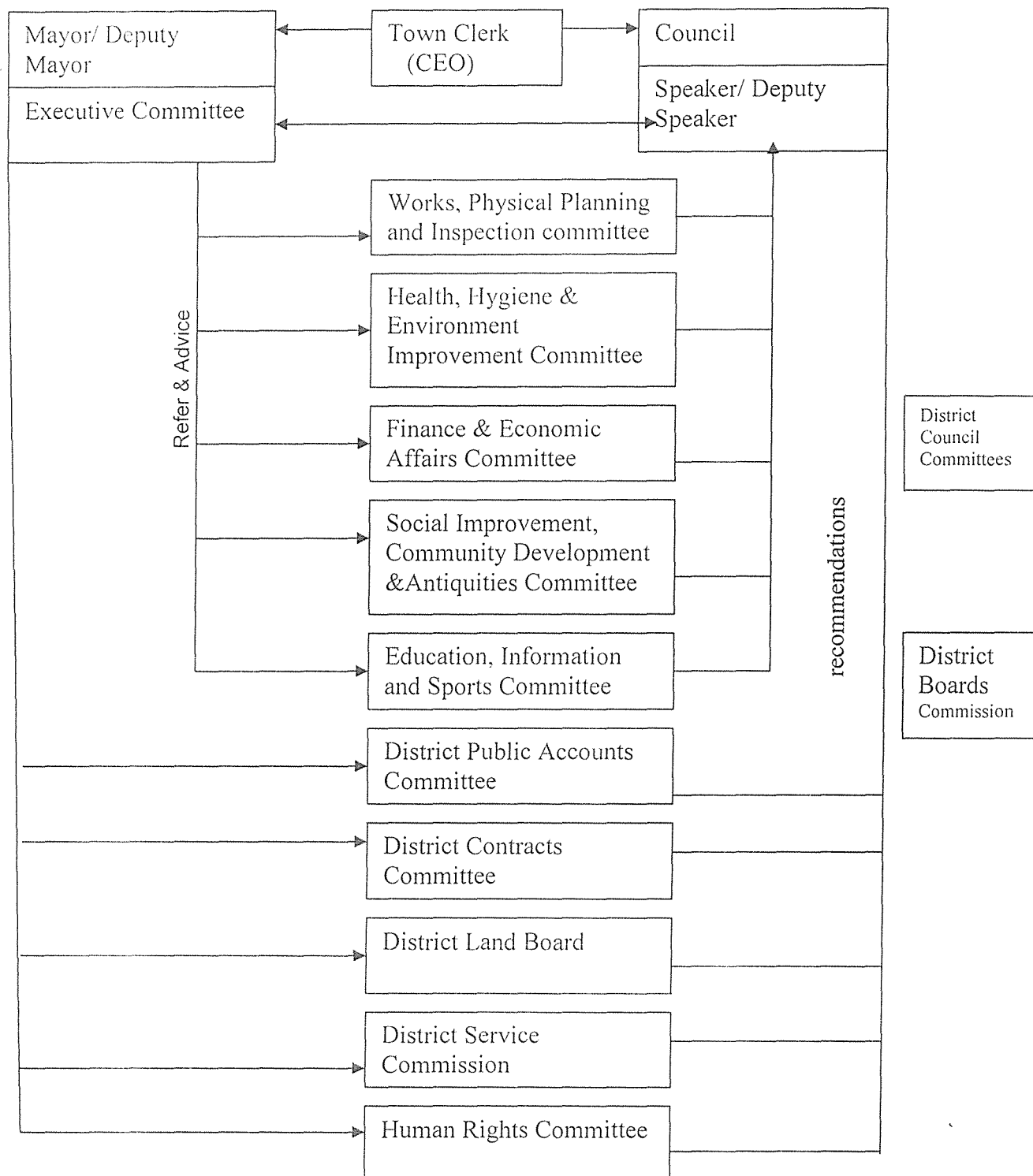
APPENDICES.

APPENDIX A: INTRODUCTORY LETTER

APPENDIX B: Kampala City Council and its Divisions.



APPENDIX C: Management Structure Of Kampala City Council



APPENDIX D: QUESTIONNAIRE

Dear Respondents,

I am undertaking research on the impact of stock control in organizational operations in Kampala City Council. The information sought is needed for this academic research only; the information will therefore be treated with confidentiality. Hence the researcher requests you to fill out all the questionnaires correctly by putting a tick on the right box to indicate your response.

Please tick ☐ or give brief answers where necessary on several questions.

1. I) Sex a) Male ☐ b) Female ☐

ii) Age a) 0-20 ☐ b) 21-40 ☐ c) 40-60 ☐

iii) Designation (optional).....

iv) Marital Status a) Married ☐ b) Single ☐

v) Educational level

a) primary ☐

b) O'level ☐

c) A' level ☐

d) Diploma ☐

e) Degree ☐

2. As an urban organization, do you have enough materials required in the day-to-day running of the organization?

a) Yes ☐ b) No ☐

3. With limited space within Kampala, are your stores big enough to accommodate all the items used in the organization

a) Yes ☐ b) No ☐ c) I don't know

4. As a fast growing organization serving very many clients, are there established standards of stock level

a) Yes ☐ b) No ☐ c) I don't know ☐

5. If yes what effects do these stock levels have on your day-to-day operations? They are;

a) Very effective ☐ b) Effective ☐
c) Less effective ☐ d) Not effective ☐

6. With limited resources, how often do you experience stock- outs?

a) Very often ☐ b) Often ☐ c) Less often ☐
d) Not often ☐

7. With the growing procurement in the day-to-day life, are there strict stock control procedures

a) Yes ☐ b) No ☐ c) I don't know ☐

8. As a big organization with a great number of employees, are the items in the organization arranged according to their usage value?

a) Yes ☐ b) No ☐ c) I don't know ☐

9. If yes to question No.8, if no, would you recommend the technique to be introduced? Give your view

10. What impact or effect does the stock control technique have on the organizational operations of such a big organization?

a) Very effective ☐ b) Effective ☐
c) Less effective ☐ d) Not effective ☐

11. With such a vital company in the country, are there control measures for internal issues of stock?

a) Yes ☐ b) No ☐

If yes, explain

.....
.....
12. With the developing procurement techniques who authorize in the organization

a) Stock controller ☐

b) director ☐

c) Department manager

d) others ☐

Specify.....

13. Are there specific items of issuing materials to the workmen?

a) Yes ☐

b) No ☐

14. Are there materials issued to the workmen enough to meet the demand of the users?

a) Yes ☐

b) No ☐

15. What effect does the issuing procedure have on the organizational performance/operations?

b) Very effective ☐

b) Effective ☐

c) Less effective ☐

d) Not effective ☐

Thank you for your cooperation