

**An Assessment of the Factors Influencing Effectiveness of Inventory Control;
Ministry of State for Provincial Administration and Internal Security,
Nairobi - Kenya**

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Abstract

The study was an assessment of the factors influencing effectiveness of inventory control; Ministry of State for Provincial Administration and Internal Security; Nairobi. The key findings from the study revealed that: delays in procurement of goods, frequent stock-outs and uncertain change of prices were some of the effects of long bureaucratic procurement procedure. According to the study inadequate and untimely dispatch of funds has an effect in inventory control. The study also revealed that unavailability of stationeries/stores records, lack of specific time or date for both posting stores records, lack of adequate qualified and well trained staff hinders effective performance. The researcher recommends that too much red tape and rigid rules and policies should be avoided; current inventory control practices and procedure need to be reviewed and redesigned. Only qualified and adequate personnel should be are involved in stock control while adequate funds should be dispatched on timely manner.

Key words: Assessment, effectiveness, inventory, inventory control, bureaucracy, funding, stock records

1. Introduction

This chapter contains the background of the study, statement of the problem, objective to the study, research questions, research justification, scope and definitions of terms.

1.1 Background to the Study

In the past, inventory control was not seen to be necessary. In fact excess inventories were considered as indication of wealth. Management by then considered over stocking beneficial. But today firms have started to embrace effective inventory control (Susan & Michael, 2000). Managers, now more than ever before, need reliable and effective inventory control in order to reduce costs and remain competitive (Closs, 1989). According to Dobler and Burt (2006), inventory alone account for as much as 30% of the organization invested capital. It's for this reason that the Government of Kenya through its Supplies manual (2007) have instituted procedures and techniques for the purpose of proper inventory control.

Lyson (1996) posits that inventory control enhances profitability by reducing costs associated with storage and handling of materials.

According to Buffa and Salin (1987) there are several reasons for keeping inventory. Too much stock could result in funds being tied down, increase in holding cost, deterioration of materials, obsolescence and theft. On the other hand, shortage of materials can lead to interruption of products for sales; poor customer relations and underutilized machines and equipments. The problem of inventory control exists in the Ministry of State for Provincial Administration and Internal Security which is organized into five main departments. Inventory control of goods is decentralized, where the ministry has deployed some Supplies Officers in each of the department to coordinate the inventory control activities on the behalf of Head of Procurement.

1.2 Statement of the Problem

Inventory constitutes the most significant part of current assets in the Ministry of State for Provincial Administration and Internal Security. Because of the relative largeness of inventories maintained by the Ministry, a considerable sum of an organization's fund is being committed to them. It thus becomes absolutely imperative to manage inventories effectively so as to avoid unnecessary cost and ensure high level of customer service.

According to annual stock taking conducted on August, 2011 in the Ministry, the stock taking report revealed that some critical items were out of stock, leading to hasty buying because of low stock levels. The annual stock taking report claimed that the problem might have been attributed to poor funding and long bureaucratic procedure. The report also revealed the cases of inaccurate recording or poor entering of some data information, which was a good indication of poor inventory control.

Auditors from the Kenya National Audit Office on August, 2011 highlighted various observations in the Ministry of State for Provincial Administration and Internal Security. According to the Audit report stock out of some crucial items was identified, there was discrepancy between the information provided by stock control ledger card (S_{13}) and the actual physical stock balance, most of the goods received and issued during the month of June and July, 2011 had not been posted in stock Control ledger card while stock Control functions were being conducted by the same officer involved in receiving and issuing functions whose capability and qualification need to be reviewed.

Invariably, the Ministry must neither keep excess inventories to avoid an unnecessary tying down of funds as well as loss in fund due to pilferage, spoilage and obsolescence nor maintain too low inventories so as to meet users demand as at when needed. Therefore, the mere fact that ineffective inventory control affects virtually the organizational objectives necessitates this type of research work. According to Sunil and Sameer (1998), to compete more effectively in a global marketplace, it is important that firms understand the issue of inventory control and align their purchasing to the diverse environments in which they operate. It is a paradox to note that the Ministries are complaining of the non-availability of some items to meet their requirement and finance department is facing the problem of increasing locked up capital in assorted inventory.

1.3 Objectives of the Study

1.3.1 General Objective

To assess the factors influencing effectiveness of inventory control; Ministry of State for Provincial Administration and Internal Security, Nairobi.

1.3.2 Specific Objectives

- i) To determine the effect of bureaucratic procurement procedure to the effectiveness of inventory control.
- ii) To determine the effect of poor documentation to the effectiveness inventory control.
- iii) To find out the effect of funding to the effectiveness inventory control.
- iv) To establish the effect of staff skills to the effectiveness inventory control.

1.4 Research Questions

- i) What is the effect of bureaucratic procurement procedure to the effectiveness of inventory control?
- ii) What is the effect of poor documentation to the effectiveness of inventory control?
- iii) What is the effect of funding to the effectiveness of inventory control?
- iv) What is the effect of staff skills to the effectiveness of inventory control?

1.5 Justification of the Study

The Ministry of State for Provincial Administration and Internal Security is one of key Government Ministries, which receive a substantial amount of Money allocated to it through the yearly budget for its daily expenditure. More than 50% of this allocation is used in procurement of goods which are usually not dispatched to the users immediately. As a result Inventory usually accounts for as much as 30% of the organization invested capital, and thus an effective inventory control is paramount to ensuring that money collected from Tax payers is utilized appropriately.

The researcher wished to assess various factors that might have been in existence in the Ministry that may be influencing effectiveness of inventory control in the organization. The finding will assist the management in ensuring effective inventory control at all times as it will aid those entrusted with decision making to formulate strategies of combating the persistent problem of inventory control in the Ministry. Effective inventory control will result to prudent utilization of resources resulting in improved services to the citizens. This will result to improved Economy of the Country in general and also improve the standard of living of the citizens. Lastly for the Researcher, the study will not only fulfill the partial requirement for the award of the Degree of Masters of Science in Procurement and Logistics but will also serve as a basis for further research in the field of inventory control.

1.6 Scope of the Study

Inventory control varies from one organization to another. This implies that nature of the firm and the nature of the business determine the size and types of inventory control system and techniques to adopt. The research focuses on the assessment of factors influencing effectiveness of inventory control in Public Sector; Ministry of State for Provincial Administration and Internal Security, Nairobi. The study will involve all personnel of the Ministry of State for Provincial Administration and Internal Security, Nairobi. The respondents will include all personnel who have been assigned to carry out stock control functions and related activities in the Nairobi.

1.7 Limitation of the Study

The study was limited by lack of adequate finance for the whole project. The Researcher had to ensure maximum utilization of available limited fund within the budget. The study was faced with a problem of getting all the information from the respondent because of potential suspicion that the researcher may be an investigator in disguise. The researcher overcame this problem by guaranteeing the respondents that

secret of the Organization will be preserved. The researcher was denied access to some important documents which were relevant to the study. The researcher overcame this by obtaining information from the Official concerned in preparation of the document through discussion.

Poor keeping of Ministry records caused some data not to be available to the Researcher. This was overcome by the researcher by exchanging views with staffs concerned in preparation of those records. There was little time available to the researcher to conduct the research study but the researcher tried to overcome this by working over the weekend to ensure the study is completed within the work plan. Finally some respondent were not able to give the desired responses as they were not well equipped with adequate knowledge on inventory management.

2. Literature Review

2.1 Introduction

This chapter gives an extensive review of the available theoretical and empirical literature to the problem being investigated, critique of the existing literature relevant to the study, summary of the literature review and finally the research gaps.

2.2 Theoretical Review

2.2.1 Bureaucratic Procurement Procedures

As organization become large and more complex, the authoritarian- paternalistic patten gave way to increased functional specialization with many layers of middle and lower management for coordinating organization effort (Kenneth & Kenneth, 2005). According to Osborne and Plastrik (1997), the advantages of bureaucracy are many folds. Apart from consistent employee's behavior, it eliminates overlapping or conflicting jobs or duties and behavior of the system is predicable. Despite the above advantages, bureaucratic organization has some significant negative and side effect. Too much red tapes and paper work not only lead to unpleasant experiences but also to inefficient operations (Osborne et al., 1997). Since employees are treated impersonality and they are expected to rely on rules and policies, they are unwilling to experience individual judgment and avoid risks (Osborne et al., 1997). Bureaucracy expects conformity in behavior rather than performance (Kenneth & Kenneth, 2005).

During the financial year 2011 -2012 various Government Ministries and department in Kenya returned billions of money meant for critical projects to Treasury (The Standard Newspaper, 2012, July 26).The head of Public Service blamed it on bureaucratic procurement procedure while the Prime Minister on the other hand, blamed Procurement rules for slow implementation of the projects.

2.2.2 Documentation /Stores Record

According to Susan & Michael, (2000) accuracy of inventory records is necessary to provide satisfactory customer service, determine replenishment of individual items; ensure that material availability meets repair or project demand, analyze inventory levels and dispose of excess inventory. Bailey and Farmer (1982) state that stock recording are expected to maintain particulars of receipt, issues and balances remaining in stock for each individual item held in the storehouse daily

According to Susan & Michael (2003), Stock records provide the management with the information which is used to ensure accountability through stocktaking and stock audit exercise. Jessop and Morrison (1994) states that records can be posted manually but, where the volume and complexity of the documents handled is of major proportion mechanical methods are often to be more effective. Manual posting is

comparatively slow, there is high risk of filling the wrong detail, and it can be easily misplaced or lost due to multiple handling as compared to Computer posting system.

2.2.3 Funding

With enough funds the organization can run its activities efficiently and effectively while with inadequate funds an organization may have difficulties in running its activities (Carter & Price, 1993). According to Dobler and Burt (2006), Funds can be a constraining factor to effective inventory control when funds allocated cannot cater wholly for the organizations material requirements within the budget period. According to Burton (1981), other factors that may affect allocated funds include the variability in user demand patterns and frequent price variations. The stature of financial management in the organization can affect adversely its effectiveness and in the finance resource application in various activities.

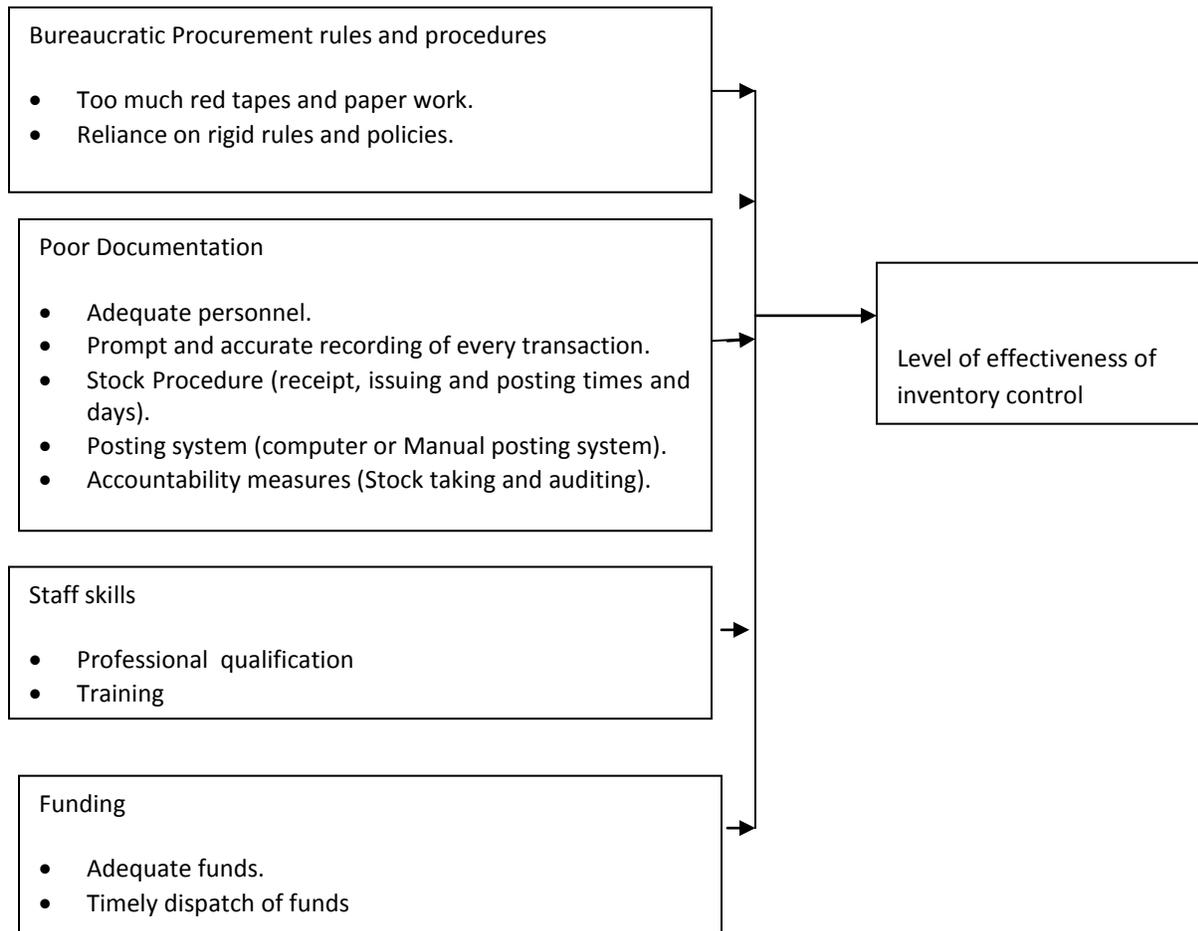
The 2005/2006 government financial settlement meant that many government institutions were forced to make substantial cuts in their services. Staffing levels have also been affected and many government institutions have had to make staffing cuts. Although this has meant that redundancies have been made, many authorities have chosen to leave positions vacant rather than choose this option. The loss of staff has resulted in the loss of specialist staffs with most institution employing clerks, and this has affected the individual services.

2.2.4 Knowledge and Skills possessed by staff

Stock Control is no longer considered a clerical function performed independently by untrained individuals within a governmental agency (National Institute of Governmental Purchasing, 2001). Qualified staff that is competent and skilled will help the organization to achieve its goals and objectives by being efficient and effective when carrying out their various functions. For an organization to succeed, qualification is therefore a pre-requisite and must be matched with job requirement, hence the need to hire and develop ambitious personnel.

If staff involved in stock control is not qualified and competent, then there will be ineffectiveness in inventory control. Bailey and Farmer (1982) says that for Stock control function to achieve a superior performance, it's necessary to recruit, train and develop personnel with the capacity and motivation to do better job. Carter and price (1993) indicate that training of staff is vital if full use is to be made of their abilities and talents. Coe (1989) says that it's important to ensure that sufficient number of the appropriate caliber is available to the organization in pursuit of its objectives. Incompetent employees can render stock control virtually ineffective.

2.3 Conceptual framework



Independent Variables variable

Dependent

Figure 2.2: Conceptual framework

Source: Author (2012)

2.4 Critique of past studies/Empirical review

Studies have been conducted by various researchers concerning the effectiveness of inventory control in both public and private body with the aim of identifying the causes of the ineffectiveness. Several have embarked on the problem of inadequate funds, long procurement procedure, inadequate qualified personnel, and inadequate stock control procedure.

2.5 Summary of the literature review

Schroeder (2000) established that there are three motives for holding inventories, which are transaction, precautionary and speculative motives. Lyson (1996) states that inventory serves as an insurance policy against the unexpected breakthrough, delays and other disturbance that could disrupt ongoing activities. According to review poor documentation/records keeping, bureaucratic procedure, poor funding are some of the factors that limit effective inventory control. Dobler and Burt (2006) emphasized that stock

represents money and similar control measures should be taken on stock as it the case of cash. It's important to have a good stock record system as it help in preventing stock out, overstocking, deterioration, obsolescence and high carrying cost. A sound stores record system is therefore vital for procurement decision making. Effective stock records are important to an organization which expects to operate profitably or offer quality services. Late posting have undesirable effects.

2.6 Research gap

One might expect the seemingly infinite stream of inventory theory related research to be a key resource for managers seeking to gain a competitive advantage through inventory control. However, some have suggested that managers who turn to inventory theory research may find it to be of little significance (Krautter, 2009) or that it has little to offer in terms of enhancing inventory practices (Wagner, 2002). This has led many to suggest a gap exists between inventory theory and practice (Lenard & Roy, 1995; Silver, 1981; Wagner, 2002; Zanakis et al., 1980). While the varied solutions offered to bridge this gap represent valuable research, input from practitioners is noticeably absent (Patton & Steele, 1990). Therefore, an empirically derived agenda founded on practitioner-identified issues, is needed (Vigoroso, 2005). There is no study that have been comprehensively been done on factors influencing effective inventory control in public sector and hence the study intend to fill those gaps.

3. Research Methodology

3.1 Introduction

This chapter describes the procedures that were used in carrying out this research. This chapter deals with research design, population of study, sampling frame, sample and sampling techniques, research instruments, data collection procedure and pre-testing of questionnaire and data processing and analysis.

3.2 Research design

The study used descriptive survey design. According to Mugenda and Mugenda (2003) descriptive survey design is appropriate because it involves collecting data in order to answer questions concerning the current status of subjects of the study. Kothari (1995) notes that descriptive design is concerned with describing, recording, analyzing and reporting conditions that exist or existed.

3.3 Population of the study

The study targeted staff in all the five departments of the Ministry of State for Provincial Administration and Internal Security, Nairobi. The target population from which the information was solicited by the researcher was three hundred and fourteen (314) staff involved in controlling inventory or any other related activities in Nairobi.

3.4. Sample size

Scholars do not agree on the exact proportion of the accessible population that should form the sample size. Mugenda and Mugenda (2003) suggest that in descriptive studies ten percent (10%) of the survey population is representative enough to generalize characteristics being observed. In this study therefore ten percent of the accessible population constitutes the sample size.

Table: 3.1 Sample Size

Department Target	Population in Nairobi	Sample Size (10%)
Administration	60	6
Kenya Police	90	9
ADM Police	68	7
Government press	50	5
NACADA	46	5
Total	314	32

Source: Author (2012)

3.5. Sampling technique

The study used stratified random sampling techniques. Stratified was used to group the samples in strata having similar characteristics. Stratified sampling was used to achieve representation of the main respondents as the population to be studied is heterogeneous. The main respondents were stratified on the basis of their departments. Table 3.1 above shows the total sample to be used in the study.

3.6 Instruments

The researcher used the questionnaire to collect primary data. The researcher issued questionnaires to staff in five (5) departments: Administration services, Kenya Police, Administration Police, Government Press, and National Agency for the Campaign against Drug Abuse (NACADA) departments. This instrument was used due to its suitability of having an ample time for the officers concerned to adequately fill the form.

3.7 Data Collection Procedures

These were the steps/process used by the researcher while collecting data using the collection instrument. Structured and unstructured questionnaires were administered to the main respondents. These questionnaires were delivered by hand to the respondents at their duty stations during working hours personally. They were issued and collected after a week to give respondents enough time to answer the questions.

3.8 Pre-Testing of Questionnaire

Once the questionnaire was developed by the researcher it was tested in staff of the Ministry. The testing of questionnaire was carried out to confirm the suitability for the intended purpose. This helped the researcher in redesigning it better and estimates the amount of time and money that was required to collect and process the data effectively.

3.9 Data processing and analysis

Data from questionnaires was summarized, edited, coded, tabulated and analyzed. Editing was done to improve the quality of data for coding. Descriptive statistics was used where distribution (frequencies, percentages) was used. Data was analyzed using a statistical package for social sciences (SPSS). Editing involved going through the questionnaires to see if respondents responded to questions and see if there are blank responses. A simple tabulation was used which involved counting the number of cases that fall into various categories. The study adopted qualitative data analysis. Information about the scores in a sample was presented in tables and charts to make it easier for people to understand what had been found. All

tables and charts was clearly labeled and presented so that the reader could rapidly make sense of the information contained in them.

4. Research findings and Discussion

4.1 Introduction

This chapter presents data collected and discussion of the findings. The findings are based on data collected by use of questionnaire so as to assess factors influencing the effectiveness of inventory control in Ministry of State for Provincial Administration and Internal Security.

4.2 Response rate

The researcher made every effort to reach all the relevant respondents in all the five departments. As stated under methodology, a total of thirty two (32) copies of questionnaires were distributed, and all copies retrieved as correctly filled which were subsequently used in the analysis. The table below shows the number of respondents who were available from the targeted population.

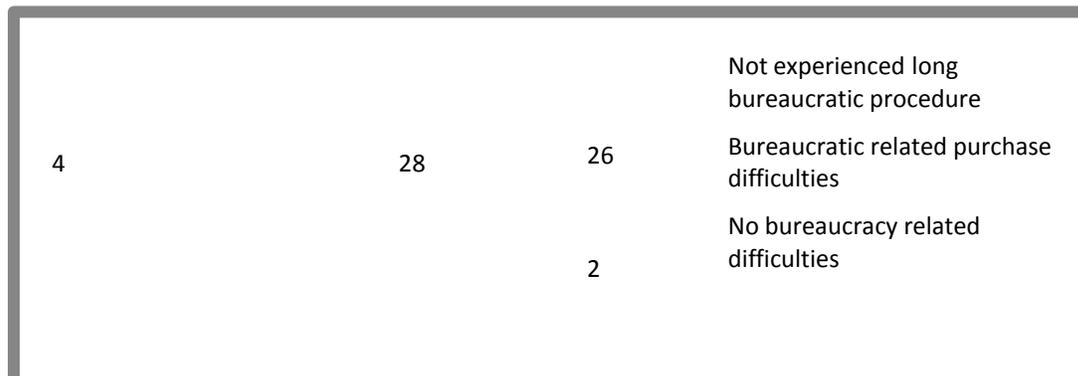
Table 4.1 Response rate

Respondents	Questionnaires Distributed	Questionnaires Responded	Percentage of response (%)
Administration Service	6	6	100
Kenya Police service	9	9	100
Administration Police	7	7	100
Government Press	5	5	100
NACADA Officers	5	5	100
Total	32	32	100

The table 4.1 above shows that 18.75% of the respondents were from Administration Service Department, 15.6% from NACADA and 15.6% from the Government Press. The uniformed forces contributed the remaining observation with the Kenya Police service and Administration Police Service providing 28.1% and 21.9% responses, respectively. The response rate was 100%, an indication that the response was high. The positive response was as a result of measures taken by the researcher to overcome various limitations faced during the study such as: maximum utilization of available limited fund within the budget, guaranteeing the respondents that secret of the Organization will be preserved in order to get the required information, working over the weekend to ensure the study is completed within the work plan little time available.

4.3 Bureaucratic Procurement Procedure

Long bureaucratic procurement procedures in the Ministry of State for Provincial Administration and internal security were reported by 28 of the respondents. Twenty-six out of the 28 respondents who experience bureaucratic procurement procedures indicated that these procedures made the purchase of goods difficult as shown in Figure 4.1 below.

**Figure**

4.1: Bureaucratic procurement delays and its effects

The result is similar to the news published on The Standard Newspaper (2012, July 26) where various Government Ministries and department in Kenya were blamed for returned billions of money meant for critical projects to Treasury during the financial year 2011 -2012. According to that published news the head of Public Service blamed it on bureaucratic procurement procedure while the Prime Minister on the other hand blamed Procurement rules for slow implementation of the projects.

4.3.1 Causes of these long bureaucratic delays

When respondents were asked to elaborate on the perceived causes of these long bureaucratic delays in their respective departments they attributed this to complex intra-departmental communication, planning, and decision making processes. Certain departments were also noted to have very elaborate procurement procedures.

The failure to adopt recent technology such as E-procurement/ purchasing was also identified as a consequence and cause of the long bureaucratic delays in the departments. The results of the finding are similar with other scholars. According to Burton (1981) the long procedures in procurement have made the purchase of goods and services difficult, as all of them have to follow step by step making the process cumbersome and discouraging, resulting into a lot of inefficiencies and irregularities.

4.3.2 Effects of long bureaucratic delays

The effects of long bureaucratic delays on the effectiveness of inventory control as outlined by the respondents were: delays in procurement of goods, frequent stock-outs /under-stocking, poor inventory management, inconsistent and delayed posting and uncertainties on prices of goods The finding agrees with the Osborne et al. (2007) finding who indicated that bureaucratic organization has some significant negative and side effect. According those Scholars, too much red tapes and paper work not only lead to unpleasant experiences but also to inefficient operations.

4.4 Documentation

The respondents indicated that none of the departments has a fully computerized system for posting inventory data.

Table 4.2: Inventory control documentation

Content	Frequency	Percentage (%)
Type of inventory control record posting system in use		
Fully Manual	23	71.9
Both Manual and computerized	9	28.1
Fully Computerized	0	0
Satisfied with current system		
Satisfied with current system	4	12.5
Unsatisfied with current system	28	87.5
Current System challenges		
Slow	16	50
High risk of incorrect entries	8	25
Inadequate data security	15	46.9

In deed as shown in Table 4.1 above, 71.9% of respondents indicated that inventory control posting systems within their respective departments were manual with the remaining 28.1% implementing systems with both a manual and computerized component. The level of satisfaction with these systems was low with only 12.5% of respondents reporting that they were satisfied with system performance. The results of the finding agree with Carter and price (1993) who emphasized on the use of modern technology, arguing that computer have the ability to store and recall information.

Significant challenges were reported with the systems and this most commonly concern the slow operations of the inventory control systems. Other concerns with the currently available systems were with data integrity and security and accuracy of inventory data capture; 46.9% of respondents felt that data could be easily misplaced or lost while 25% considered the systems to allow a high risk of incorrect inventory entries (Table 4.1). The results of this finding is also similar with Jessop and Morrison (1994) who urges that Manual posting is comparatively slow, there is high risk of filling the wrong detail, and it can be easily misplaced or lost due to multiple handling as compared to Computer posting system.

4.4.1 Stationeries and Stores Records Used in Stock Control

Lack of stock control cards, counter receipt voucher, counter requisition and issue voucher among other stationary was a concern of 75% of the respondents. A research done on this area agree with the result of the finding as Jessop and Morrison (1994) had also found availability of Office facilities to be one of the major factors that influence the effectiveness of stock record. According to the scholars stock control personnel should be provided with appropriate materials/stationery to enable them carry out their work efficiently. Sufficient should be availed at all times to replace the completed one.

4.4.2 Posting of Stores Records

The figure below reveals that there was no specific time or date for posting stores records.



Figure 4.2: Frequency of posting store records

Most respondents (71.9%) indicated that stores records in their respective departments were posted on a daily basis (figure 4.2). However, 75% of those respondents said that there was no specified time and date for posting of the store records. Seventy five percent of these twenty four personnel felt that the absence of a specific time or date for posting stores records had an effect on posting of records. Jessop and Morrison (1994) share the same idea as they had emphasized on the important to design receipt and issuing times and days for good to and from the warehouse in order to give time stock control staff adequate time to do the posting of records.

4.4.3 Stock Recording - Receipt and Issuing of Goods

Seventy eight point one percent of the respondents reported that the stock recording roles are performed by different individuals and these respondents felt that this practice had an effect on effective stock control records. Involvement of several personnel in stock recording was reported to have a negative effect on: poor stock control recording, misappropriation of stock, discrepancies during reconciliation of stock balances, and lack of responsibility for actions related to stock control. The results are similar with the finding of other Scholars. Jessop and Morrison (1994) was on opinion that Stock recording (issuing and receiving) should be done by different personnel to avoid colluding in the store.

4.4.4 Adequacy of Staff Involved in Stock Control Activities

Over half (53.1%) of respondents reported that number of staff involved in stock control activities are inadequate. All the 17 personnel reporting inadequate staffing felt that this shortage had an effect on posting of stock control records. When asked to elaborate the respondents indicated that staff shortages effected on posting of stock control records slowing down the entire inventory control process, and increase errors due to volume of work and fatigue among staff undertaking the posting roles. According to Jessop and Morrison (1994), adequate staff should be employed in the organization to help in proper stock recording system. This is similar with the result of the finding.

4.4.5 Stock taking

The figure below reveals that there is no specific time in which the stock taking exercise should be conducted.

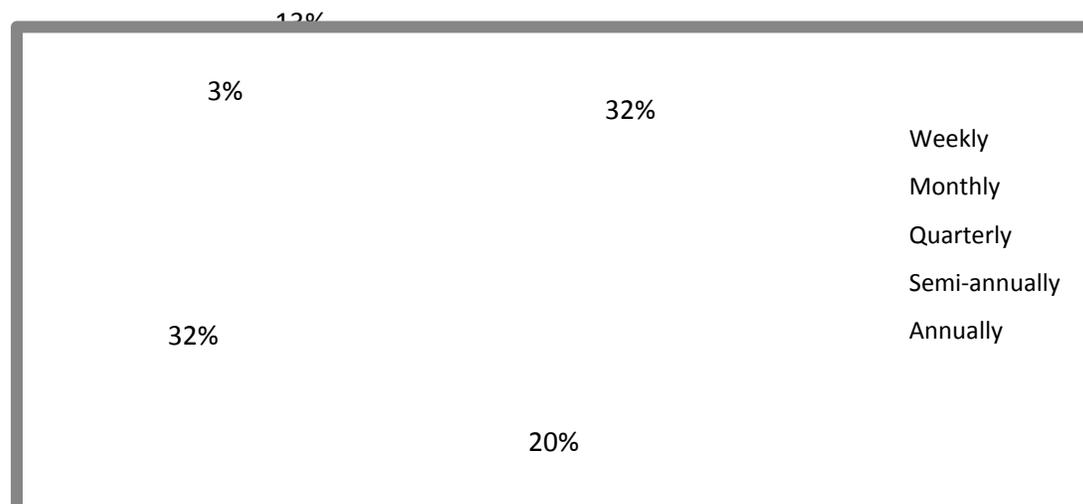


Figure 4.3: Frequency of Stock taking exercise

Figure 4.3 shows that most respondents reported that stock taking was conducted either weekly (32%) or quarterly (32%) in their departments. Thirteen percent (13%) of the responses personnel indicated that their departments conducted annual stock taking exercises. Fifty nine point four percent (59.4%) of the respondents reported that they were satisfied with stock taking. Satisfaction was more commonly reported among respondents in departments that conducted stock taking more frequently. Eighty percent (80%) of personnel in departments conducting weekly stock taking were satisfied with stock taking exercise compared to 30% and 50% of staff in departments conducting quarterly and annual stock taking, respectively. This concurs with Jessop and Morrison (1994) findings. According to Jessop and Morrison (2008), there must be a regular stock taking to check on surplus, obsolete and obsolescence stock from the warehouse to assist in matching the physical and record balances for efficient working condition and also in harmonizing the discrepancies to reflect the actual position in the store.

4.4.6 Discrepancies between Actual and Physical Stock Balances

Seventy five percent (75%) of respondents reported that they experienced discrepancies between actual and physical stock balances. Discrepancies were less likely to occur in cases where stock tacking was done more frequently. Only 20% of respondents in departments doing weekly stock taking reported discrepancies compared to at least 50% in cases where longer stock taking frequencies were reported.

4.5 Funding

The finding establishes that funds allocated for procurement of various goods and services were not received on as and when required. It also establishes that funds allocated to various departments within the Ministry do not cover the entire budget period. The table 4.3 below reveals that Satisfaction with the way planning and control of financial resources is done is very low.

Table 4.3: Funding and inventory control

Content	Frequency	Percentage (%)
Adequacy and timeliness of procurement fund allocation		
Yes	8	25%
No	24	75%
Funds coverage during the entire budget period		
Yes	6	18.8%
No	26	81.2%
Satisfaction with planning and control of financial resources	20	62.5%

According to respondents, its only 25% of the respondents who felt that funds allocated for procurement of various goods and services were received on as and when required (Table 4.2). Seventy five percent (75%) of the respondent who were in an opinion that funds allocated for procurement of various goods and services were not received on as and when required, this failure leads to delays in completion of projects, return of unutilized funds to treasury by the end of financial year and poor planning. Eighty one point two percent (81.6%) of the respondents indicated that the funds allocated do not cover the entire budget period. According to them, this may have an effect in inventory control in that it may cause failure to achieve the set targets/ goals, under stocking leading to poor customer service; poor staff morale and poor utilization of both human and physical resources are some of the effects on effective inventory control.

The results of the finding are similar with what the other scholars have found. According to Carter & Price (1993) with enough funds the organization can run its activities efficiently and effectively while with inadequate funds an organization may have difficulties in running its activities. According to Dobler and Burt (2006), Funds can be a constraining factor to effective inventory control when funds allocated cannot cater wholly for the organizations material requirements within the budget period.

4.5.1 Factors Effecting on Fund Allocation

The finding establishes that there are various factors that effect on funds allocated to an establishment as shown in the figure below:

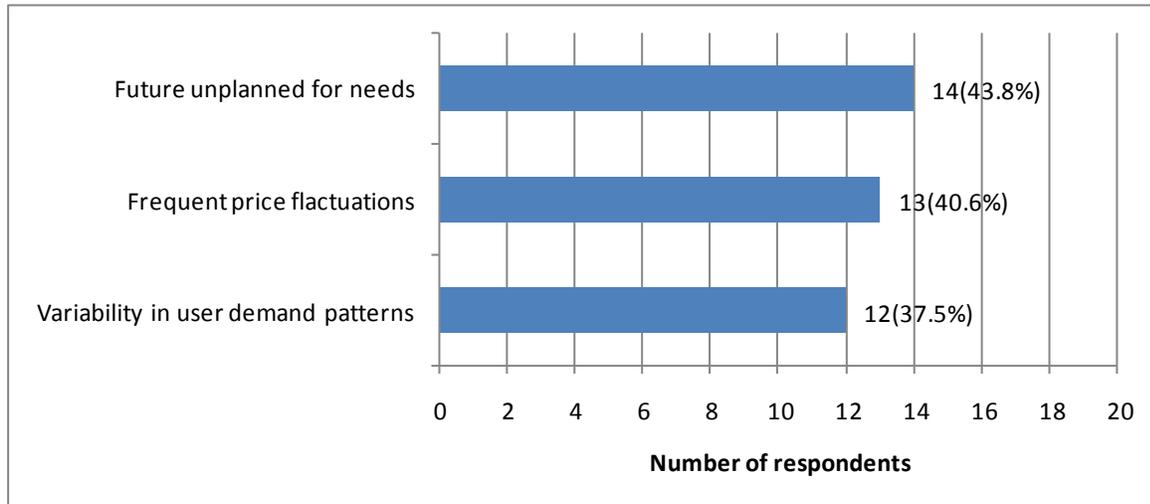


Figure 4.4: Factors that affect the allocation of funds

Sixty two point five percent (62.5%) of the respondents indicated that they were not satisfied with the way the Ministry carry out the planning and controlling of the financial resources in order to achieve the corporate goals. They attributed this with the fact that all stake holders are not involved in the planning and controlling process and also due to slow implementation of the planned.

This result of the finding agrees with other Scholars. User variability in user demand patterns and frequent price variations were highlighted by Burton (1981) as some of the factors that effect on allocated funds. The scholars stated that the rise in demand for items means there should be a corresponding increase in funds to procure the requirements. Burton (1981) also indicated that Funds may be a problem if there are frequent price variations due to price hikes of the budgeted stock items purchased in the organization.

4.6 Staff Skills

Table 1 shows the respondents' duration of employment in years.

Table 4.4: Duration of employment in Inventory control sections

Characteristic	Frequency	Percentage
1-5 years	14	45.2%
5-10 years	9	28.1%
10-15 years	4	12.5%
Over 15 years	5	15.6%

Forty five point two percent (45.2%) of the respondents had been performing inventory control functions for periods of between 1 to 5 years. Within the two Police Forces (Kenya Police service and Administration Police Service) most personnel reported having worked in inventory control for less than 5 years while respondents in NACADA, Administration Service Department and Government Press was more evenly distributed over the different durations of service. This shows that most of the Officers working in inventory control units have no much experience a factor that my influence the effectiveness of inventory control. Jessop and Morrison (1994) were on opinion that experienced personnel should be employed in the organization to help in proper stock recording system.

4.6.1 Highest Level of Education

Figure 4.5 show that all personnel had attended formal education but attained different level of educational qualifications.

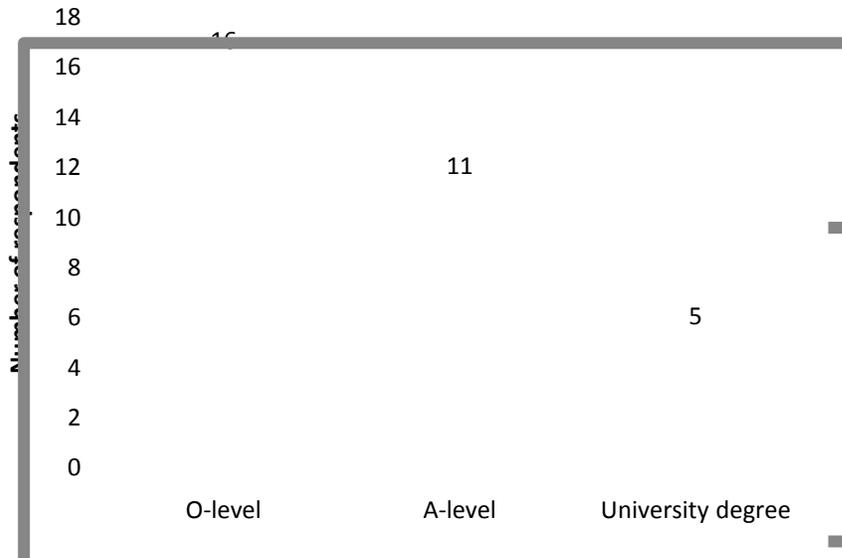


Figure 4.5: Formal education qualification

Most personnel had either O- level (50%) or A-level (15.6%) education. The respondents with university education were found within the Administration Service department (n = 3) and Government Press (n = 2). This indicates that most of the staff has only the basic education which might have an effect on efficiency of inventory control. Bailey and Farmer (1982) says that, if staff involved in stock control is not qualified and competent, then there will be ineffectiveness in inventory control.

4.6.2 Professional Qualification

Although most respondents indicated that they had attained formal education at secondary school level, it's only a half of respondents who indicated that they had additional professional qualifications in purchasing and Supplies.

Table 4.5: Professional qualification

Professional qualification	Frequency	Percentage (%)
Certificate (purchasing and supplies management)	6	18.8
Diploma (purchasing and supplies management)	5	15.6
Degree (purchasing and supplies management)	3	9.4
None	16	50
Others	2	6.3

Table 2 shows that it's only 9.4% of the respondent who had a Degree in purchasing and supplies, 15.6% of personnel who had diploma qualifications and 18.8% with certificates in purchasing and supplies management. Six point three percent (6.3%) of the respondents with a degree had professional qualification in different field despite being in inventory control section while 50% had no any

professional qualification. This shows that non professional staff are allowed to undertake inventory control task which might influence the efficiency of inventory control. According to Jessop and Morrison (1994), tendency of using subordinate staff to conduct stock control function should be discouraged.

4.6.3 Post Qualification Training

The response indicated that post employment training was not a common means for preparing staff before deployment to inventory control sections.

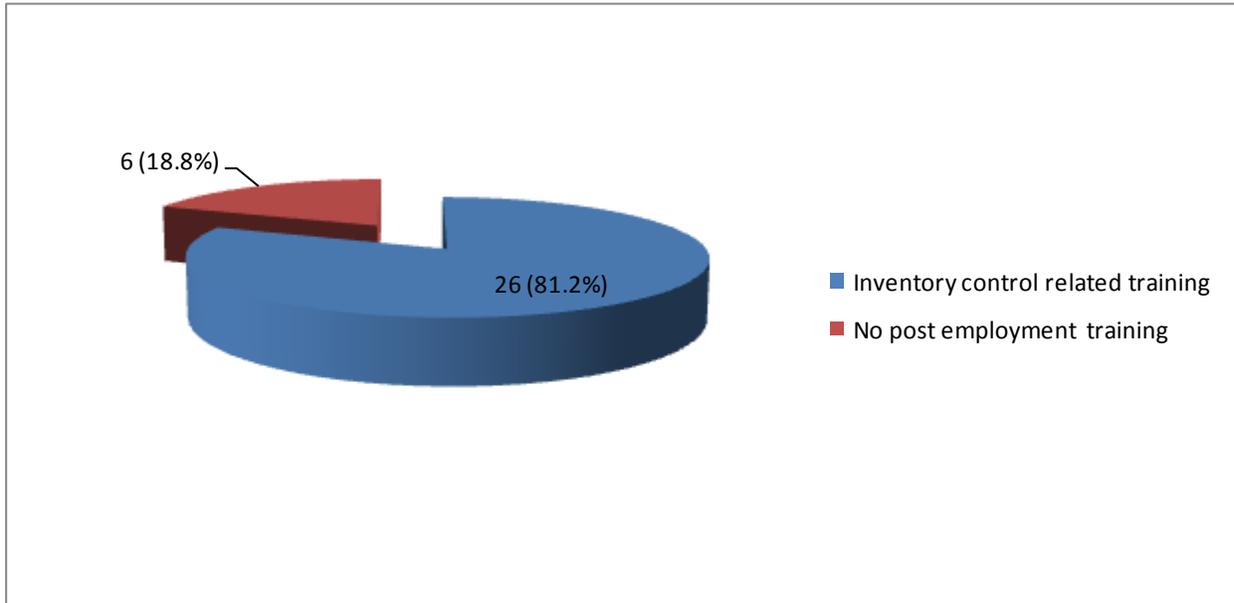


Figure 4.6: Post employment training in inventory control

Out of the 32 participants it's only 18.8% of them who had undertaken post employment training in different aspects of inventory control. According to those who have undergone the training; significant number of these trainings did not lead to formal certification. All the six respondents indicated that the training was very essential as have helped them to be more efficient and effective in performing their daily duties (figure 4.6). This is in agreement with to Jessop and Morrison (1994) finding, who were on opinion that well trained personnel, should be employed in the organization to help in proper stock recording system. Carter and price (1993) indicate that training of staff is vital if full use is to be made of their abilities and talents.

5. Summary, Conclusions and Recommendations

5.1 Introduction

This chapter present a summary of key data findings, conclusion drawn from the findings highlighted and recommendation made there-to. The conclusions and recommendations drawn were focused on assessing factors influencing the effectiveness of inventory control in Public Sector; Ministry of State for Provincial Administration and Internal Security.

5.2 Summary

The study sought to determine the effect of bureaucratic procurement procedure to the effectiveness of inventory control, to determine the effect of poor documentation to the effectiveness inventory control, to

find out the effect of funding to the effectiveness inventory control, to establish the effect of staff skills to the effectiveness inventory control. The four variables were found to have an effect on effectiveness of inventory control in public sector.

5.2.1 Bureaucratic Procurement Procedure

The study found that long bureaucratic procurement procedures are being experienced in the Ministry making the purchase of goods difficult. As a result, delays in procurement of goods cannot be avoided. The study found that decision making processes and complex intra-departmental communication and planning were some of the causes of long bureaucratic delays. Having very elaborated procurement procedures and failure to adopt recent technology such as E-procurement/ purchasing was also attributed to be another cause of long bureaucratic delays. The study also revealed that: delays in procurement of goods, frequent stock-outs /under-stocking, poor inventory management, uncertain change of prices were some of the effects of long bureaucratic procedure which have a negative effect on effectiveness of inventory control.

5.2.2 Documentation

The study found that lack of a fully computerized system for posting inventory data was one of the factors that affect the effectiveness of inventory control to a great extent. The study revealed that majority of the respondent was not satisfied with the current system used as it presented various challenges, among them being slowing the operations, compromising data integrity and security matters and non reliance on accuracy of inventory data captured in the system. The study also revealed that lack of adequate Stationeries and / stores records used in stock control, specific time or date for posting stores records had a direct effect on inventory control. In regard to issuing and receiving of goods, the study reveals that this activity was commonly done by different personnel , an activity that may have a negative effect on: poor stock control recording, misappropriation of stock, discrepancies during reconciliation of stock balances and lack of responsibility for actions related to stock control.

The study revealed that number of staff involved in stock control activities was not adequate, there was no specific time in which the stock taking exercise was set to take place, discrepancies between actual and physical stock balances is evident. The respondents attributed the discrepancy between the physical stock balance and balances reflected in stock control record to be attributing factor for theft and pilferage, frequent stock out of some crucial items and poor planning.

5.2.3 Funding and Effectiveness of Inventory Control

The findings showed funds allocated for procurement of various goods and services were not received on as and when required. The study reveals that this results to delays in procuring goods, works and services. In regard to whether the funds allocated the study revealed that the allocated funds are not enough to cover the whole financial year. According to the study this may have an effect in inventory control in that it may cause failure to achieve the set targets/ goals, under stocking of goods leading to poor customer service; poor staff morale and poor utilization of both human and physical resources.

The finding establishes that future unplanned needs, frequent price fluctuation and variation in future demand are some of factors that effect on funds allocated to an establishment. The study reveals that majority of the respondent were not satisfied with the way the Ministry carry out the planning and controlling of the financial resources in order to achieve the corporate goals, due to slow implementation

of the planned and also due to the fact that all stake holders are not usually involved in the planning and controlling process.

5.2.4 Staff Skills

The study establishes that, the skills mix and experience of respondents working in the inventory control sections within the ministry showed considerable variation. In effort to determine the highest level of education, the findings reveals that at all personnel had attended formal education but attained different level of educational qualifications. The findings showed that it's only a half of respondents that indicated that they had additional professional qualifications in purchasing and Supplies.

In regard to post qualification training, the study revealed that post employment training was not a common means for preparing staff before deployment to inventory control sections. The findings showed that it's only a few percentage of Staff involved in inventory control function have undertaken post employment training in different aspects of inventory control and when it happens significant number of these trainings does not lead to formal certification despite being reported to be very essential in ensuring efficient and effective performance.

5.3 Conclusions

Based on the findings the researcher draws the following conclusion on assessment of factors influencing effective inventory control in Public Sector;

5.3.1 Bureaucratic procurement procedures

There are long bureaucratic procurement procedures being experience in the Ministry arising as a result of intra-departmental communication and planning, decision making processes and having a very elaborate procurement procedure.

This can be avoided by adopting a recent technology such as E-procurement/ purchasing. The long bureaucratic procedure have various negative effects that include delays in procurement of goods, frequent stock-outs /under-stocking, poor inventory management and uncertain change of prices.

5.3.2 Documentation

The current documentation system is not effective in that: it slows down the daily operations; it's a threat to data integrity and security issues and; it lead to inaccuracy of captured data in the system. Having a fully computerized documentation system for posting inventory control data can help in avoiding this problem.

The following three factors greatly influence the effectiveness of stock record:

- i) Lack of adequate Stationeries and / stores records used in stock control Leading to an increased the likelihood of posting incorrect entries, inefficiencies in updating previously accumulated documentation work and finally indirect violation of inventory control regulations due to late entry.
- ii) Failure to have a specific time or date for posting stores records which have an effect on posting of records.
- iii) Delegating responsibility of issuing and receiving of goods to different personnel.
- iv) Inadequate number of staff involved in stock control activities.
- v) Lack of specific time in which the stock taking exercise should be conducted.

- vi) Manual recording systems, misplaced ledgers and vouchers, issuing without accompanying documentation and delays in posting causing discrepancies between actual and physical stock balances.

5.3.3 Funding

Lack of adequate and timely dispatch of funds to various Government Ministries is usually caused by:

- i) Poor Planning and control of financial resources.
- ii) Slow implementation of the planned.
- iii) Failure to involve all stake holders in the planning and controlling process.

Future unplanned needs, frequent price fluctuation and variation in future demand are some of factors that effect on funds allocated to an establishment, a factor that lead to:

- i) Failure to achieve the set targets/ goals.
- ii) Under stocking of goods leading to poor customer service;
- iii) Poor staff morale.
- iv) Poor utilization of both human and physical resources.

5.3.4 Staff Skills

Most of the Officers working in Inventory control section do not have the necessary professional qualifications in purchasing and Supplies. Post employment training is not common in inventory control sections.

5.4 Recommendations

Based on the findings, the researcher makes the following recommendation:

- i) Too much red tape and reliance on rigid rules and policies that slow down procurement process should be avoided by adopting a recent technology such as E-procurement/ purchasing.
- ii) The current inventory control practices and procedure need to be reviewed and redesigned while a fully computerized documentation system for posting inventory control data is adopted.
- iii) The Government should ensure that enough funds are allocated and dispatched in a timely manner to all the relevant institution to cater for organization requirement and ensure better customer service.
- iv) The Government should employ qualified and adequate personnel involved in stock control activities to curb the shortage and improve their skills of operation in order to meet user needs.
- v) The Government should ensure that inventory control function is only handled by a competent well trained supply chain Officers.
- vi) All stake holders should be involved in the planning and management of funds.

5.5 Areas for Further Research

From the study and related conclusions, the researcher recommends further research in the following areas:

- i) How to reduce the long bureaucratic procurement procedure in public sector.
- ii) Stock control practice and method that need to be eliminated in public Sector.

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