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**FACTORS AFFECTING STORES MANAGEMENT IN THE PUBLIC SECTOR IN KENYA: A CASE STUDY OF
ADMINISTRATION POLICE SERVICE**

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ADMINISTRATION POLICE SERVICE**

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ABSTRACT

The study's main objective was to evaluate factors affecting stores management in the public sector in Administration Police Service in Kenya. The study was guided by the following specific objectives to determine how information technology affect stores management in Administration Police Service stores in Kenya, and to evaluate how procurement staff's training affects stores management in Administration Police Service stores in Kenya. This study used a case study design and qualitative analysis for the systematic content description. The study used stratified random sampling design, the researcher selected 160 respondents on whom he conducted the study. The researcher used questionnaires to collect primary data. Data collected was sorted, classified and coded then tabulated for ease of analysis. The data was summarized and categorized according to common themes by the use of the SPSS (version 17) computer software aided analysis. Descriptive statistics was employed to analyze the data affecting stores management in the public sector, the Administration Police Service. The study targeted a sample size of 160 respondents from which 150 filled in and returned the questionnaires making a response rate of 94%. From the findings, majority of the respondents agreed that procurement staffs training influences motivation of staffs in stores management in public sector, as shown by a mean of 4.03. The study therefore recommends that in order to ensure that the institutions remain sustainable; they should embrace information technology and procurement staffs training.

Key Words: Stores Management, Public Sector

INTRODUCTION

1.1 Background of the Study

Stores play a vital role in the operations of an organisation. It is in direct touch with the user departments in its day-to-day activities. The most important purpose served by the stores is to provide uninterrupted service to the manufacturing divisions. Further, stores are often equated directly with money, as money is locked up in the stores (Frazelle, 2012). Some of the functions attributed to stores include: to receive raw materials, components, tools, equipment's and other items and account for them; to provide adequate and proper storage and preservation to the various items to meet the demands of the consuming departments by proper issues and account for the consumption; to minimise obsolescence, surplus and scrap through proper codification, preservation and handling; to highlight stock accumulation, discrepancies and abnormal consumption and effect control measures; to ensure good housekeeping so that material handling, material preservation, stocking, receipt and issue can be done adequately and to assist in verification and provide supporting information for effective purchase action (Toomey, 2010).

Stores management is a critical management issue for most public sector. Logistics is all about managing stores, whether the inventory is moving or staying, whether it is in a raw state, in manufacturing, or finished goods (Goldsby & Martichenko, 2005). Logistics and stores management are embedded in each other and tied up closely. The "Bill of 'Rights'" that logistics professionals often repeat is to deliver the right product to the right place, at the right time, in the right quantity and condition, and at the right cost (Goldsby & Martichenko 2005). To make it happen, effective stores management is a cornerstone. Stores management also becomes a fundamental part of supply chain management (SCM) now. A lot of research in SCM over the last two decades can be characterized as so called "multi-echelon stores

theory" (Quayle, 2013). SCM has in recent years become an important way to enhance the public sector competitive strength and therefore an important issue for most public sector.

According to Lam and Postle, (2006), a summary definition of the supply chain can be stated as: All the activities involved in delivering a product from raw material through to the customer including sourcing raw materials and parts, manufacturing and assembly, warehousing and inventory tracking, order entry and order management, distribution across all channels, delivery to the customer and the information systems necessary to monitor all of these activities.

Stores management is ever the means of conducting public sector around the world and it facilitate continued flow of production (Quayle, 2013). Globalization of institutions requires efficient Supply Chain Management. The science of supply chain further connects with management to efficiently deliver the goods in a regular base. Many management functions are being hypothesize and eventually use as the bases for the institution operations. Today, institutions are integrating their supply chain formulation with the help of the internet infrastructure. Certainly, stores Management considers some important elements that public sector must consider.

Their early success led to an exciting boom in cross-institutions coordination based on supply-chain-management concepts. Today, such approaches are applied widely by managers in diverse sector and are a focus for public institutions. Yet as the field has broadened and shifted over time and as the term has been co-opted and redefined by various interests, many views of supply-chain management have emerged. Some are detailed and operational; many focus on information technology. Executives are often uncertain about what falls within the field and how to use the key concepts to enhance their management. There have been numerous attempts to explain stores

management of institution in the fields of strategic management, accounting, finance, marketing and management science. In the US, Narasimhan (2000) studied the effect of excess inventory on long term stock price performance. Although stores management is not highly pronounced in the Kenya government, ministries, public sector and manufacturing public sector, the use on stores management can be felt through reduced costs, maintaining production, continuous supply and reduced loss. If you walk into their stores, chances are that the managed institution has a clean, well-organized building while the struggling institution operates out of a messy, disorganized space. This is because the effect of inventory systems can be felt throughout an institution, (Goldsby & Martichenko, 2005).

Stores control is no easy task, and yet once your institution has employed best practices, maintenance is far simpler in an organized space than a cramped, messy one. If one can't find inventory put away in their warehouse they can't sell it. Paying for inventory that will simply sit unused in the warehouse is a waste of resources. The ERP software is designed to include inventory systems, but it's up to the sector to put them to good use. One can take advantage of the planning modules to organize the store in an efficient manner; putting inventory away properly and in the right place reduces the risk of damage and loss, (Toomey, 2010). The same logic needs to be applied to outgoing shipments. It's one thing to misplace stock at own facility, and quite another to send the wrong order to your customers. Outgoing shipments should be correct, as the cost of a replacement order is significant.

The Administration Police Service is one of the department in the National Police Service under the Ministry of Interior and Co-ordination of National Government, its headquarters is located at Jogoo House "A" Nairobi. The National Police Service was established in the constitution under section 243. The established National Police Service consists of the Kenya

Police Service and the Administration Police Service. The National Police Service is a national service and shall function throughout Kenya. Under section 245 (3); The Kenya Police Service and the Administration Police Service shall each be headed by a Deputy Inspector General appointed by the President. The roles of police is to safeguard public security, to prevent, detect and investigate crime and arrest offenders, to aid the general public and to maintain general peace, public order and the rule of law. The Administration Police Service has various activities like procurement of security equipment, foods stuff, uniforms (cloths and shoes), fleet management, housing, general office supplies and supply chain management.

Statement of the Problem

Over many decades public sector have been facing challenges in stores management (Oke & Gopalakrishnan, 2009). Lack of use ICT system has led to delayed stock taking and poor stock control methods. This study will explain the importance using IT in stores management. In public sector there is lack of training procurement staffs on how to use automated machines which has led to employee's to work manually leading to prolonged delay, increased damages, increased handling cost and long operation cycles (Melville, Kraemer, & Gurbaxani, 2014).

Also lack of procurement staffs training has led to employee's resistance to change in adoption of new technology; this is because employees in procurement department lack skills on how to use procurement system like ERP and MRP (Beer, 2003). Lyson, (2006) in their study stated that IT in stores management led to accuracy and reliability and effective management of stores operation in public sector.

Invariably, the Administration Police Service 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 stores control affects virtually the public sector objectives necessitates this type of research work (Dobler & Burt 2010). Efficient stores management process in the public sector would enhance minimized ordering costs (Silver, Pyke, & Peterson, 2008). However, from the evaluation of other research previously done, no study was found covering factors affecting stores management activities in in the Administration Police Service stores. This study therefore was intended to fill in this research gap.

Objectives of the Study

The main objective of the study was to investigate the factors affecting stores management in the public sector in Kenya. This was supported by the specific objectives which were to determine the effects of information technology and staffs training on stores management in Administration Police Service, Kenya.

Research Questions

The study was guided by the following research questions:

1. To what extent does information technology influence stores management in Administration Police Service, Kenya?
2. How does procurement staffs' training influence stores management in Administration Police Service, Kenya?

Scope of the Study

The study was sought to investigate the factors affecting stores management in the Administration Police Service stores based at APTC (Administration Police Training College - Embakasi). The study collected data from the employees at Administration Police Service stores based at APTC (Administration Police Training College - Embakasi).

THEORETICAL FRAMEWORK

a) Scientific Management Theory

To investigate the influence of staff training on stores management, the study was based on scientific management theory. The theory basically consists of the works of Fredrick Taylor. Fredrick Taylor started the era of modern management in the late nineteenth and early twentieth centuries; Taylor consistently sought to overthrow management by rule of thumb and replace it with actual timed observations leading to the one best practice (Watson, 2002).

He advocated for the systematic training of workers in the one best practice rather than allowing them personal discretion in their tasks. He further believed that the workload would be evenly distributed between the workers and management with management performing the science and instruction and the workers performing the labour, each group doing the work for which it was best suited. Taylors strongest positive legacy was the concept of breaking a complex task down into a number of subtasks, and optimizing the performance of the subtasks, hence, his stopwatch measured time trials (Osdorne & Rubinstein, 2000). As a result, he proposed four underlying principles of management.

b) Adaptive Structuration Theory

Based on Structuration theory, the study intends to determine the effects of information technology on stores management. Structuration theory was first proposed by Anthony Giddens in his Constitution of Society in 1984, which was an attempt to reconcile social systems and the micro/macro perspectives of organizational structure. DeSanctis and Poole (2004) borrowed from Giddens in order to propose AST and the rise of group decision support systems. AST provides the model whereby the interaction between advancing information technologies, social structures, and human interaction is described, and which focuses on the social structures, rules, and resources provided by information technologies as the basis for human activity.

AST is a viable approach in studying how information technology affects stores management in the public sector because it examines the change from distinct perspectives. Wild, (2012) reported inventories are the merchandise owned by the company or institution and held for resale to customers or use. Pandey (2008) concurred and added that inventories are classified as current assets because typically they will be sold within the year or during a firm's normal operating cycle if it should be longer than a year for retailing firms, inventories are often the largest and most valuable current assets.

Dobler and Burt (2010) define stores management as being comprised of two major activities namely the control of stores and the planning of inventories. The purpose of stores management being to satisfy customer demands and minimization of stock handling costs in order to achieve higher stock turnover rate. Stores control involves managing the inventory that is already in one's warehouse, knowing what products are in stock, their quantities, cost and location. Stores planning involves determining when to order items, how much to order forecasting demand and stock replenishment, identifying the most effective source of supply, inventory information management and inventory monitoring. Kenneth Lysons (2000) by definition inventory is assets that are intended for sale, are in process of being produced for sale or are to be used in producing goods. For many public sector inventory represents a large portion of assets and as such makes up an important part of balance sheet. Inventory can also be defined as the consumables, work in progress (WIP) and finished goods stock that are kept or stored for use as need arises.

Ballard, (2010) cites three inventory- costing methods that a public sector can use to determine the costs of inventory and argues that they impact directly on the balance sheet,

income statement and statement of cash flow. However the concern with determining the value of closing stock inventory or any quantity of inventory held at a particular point in time cannot be justified by only these three methods.

This area of stores management involves receiving of purchased goods, storage, stock movement, cycle counting, order processing and dispatching to customers (Krejewski & Ritzman, 2009). The primary objective of stores management is to ensure that the public sector is supplied with the right places (Ballou, 2008) This objective can only be achieved if appropriate management and control system which is efficiently and effectively operated; stores control is affected by a number of factors including characteristics of demand order cycle time, replenishment lead time, it mix, institution objectives and cost structure of the public sector.

Conceptual Framework

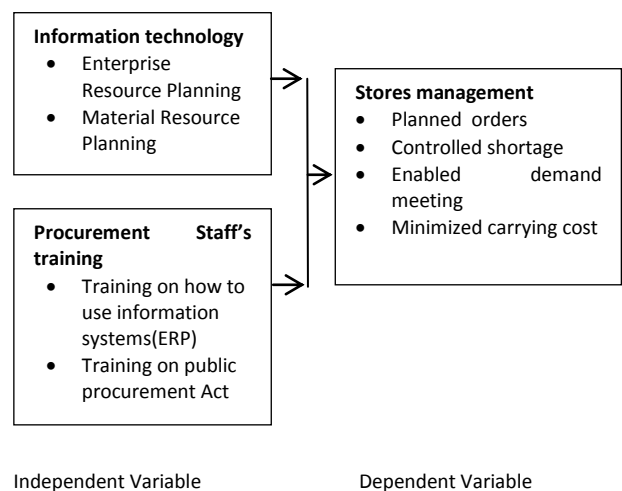


Figure 1: Conceptual Framework.

Review of Literature on Variables

a) Information technology

Information technologies are a vital component of successful institution and organizations. Information technologies, including Internet-based, are playing a vital and expanding role in store management (Lyson (2006). IT can help all

kinds of institutions carried out in the store improve their efficiency and effectiveness of work and their processes, managerial decision making, and workgroup collaboration, thus strengthening their competitive positions in a rapidly changing marketplace. This is true whether IT is used to support product development teams, customer support processes, electronic commerce transactions, or any other institution activity. Internet based information technologies and systems have become necessary ingredients for institution success in today's dynamic global environment (Marakas, 2006).

Executive managers are expected to be able to depict the advantages of IT as a key factor enabling organizations to achieve their goals. The objective of this study is to introduce executive managers to the significant role played by IT in organizations' achievement of their plans (Lefebvre, 2001). IT is considered an essential new strategy for organizations to gain competitive advantage over rivals in the same line of institution. Organizations resulting from the application of IT can ensure organizations' accomplishment and the improvement of customer services. Therefore, both organizations and their customers will definitely enjoy the benefits of IT. IT developments can affect strategy. The growth of the Internet is a classic illustration. It has profoundly affected the way many value chain activities are performed (Dobler & Burt, 2010). For example, the Internet enables organizations to significantly streamline their inbound and outbound logistics activities for products that can be digitized.

The Internet dramatically cut costs, thereby helping public sector to implement a low-cost strategy. Moreover, because every public sector can use the Internet to streamline its value chain primary a low-cost strategy toward adopting some form of product differentiate strategy (Cox, 2010).

In an organization's IT plays an important role in helping it adopt and maintain a strategic

position (Romney & Steinbart 2006). Information technologies support efficient sector operations, workgroup and enterprise collaboration, or effective sector decision making. IT can change the way public sector operate (O'Brien & Marakas 2006). One area of concern deals with whether gender is an influence when it comes to proficiency in management information technology, (Inderfurth, 2010).

b) Procurement Staff's training

To investigate the influence of staff training on stores management, the study will be based on scientific management theory. The theory basically consists of the works of Fredrick Taylor, (1993). Fredrick Taylor started the era of modern management in the late nineteenth and early twentieth centuries; Taylor consistently sought to overthrow management by rule of thumb and replace it with actual timed observations leading to the one best practice. He advocated for the systematic training of workers is the one best practice rather than allowing them personal discretion in their tasks. He further believed that the workload would be evenly distributed between the workers and management with management performing the science and instruction and the workers performing the labor, each group doing the work for which it was best suited. Taylors' strongest positive legacy was the concept of breaking a complex task down into a number of subtasks, and optimizing the performance of the subtasks, hence, his stopwatch measured time trials (Osdorne & Rubinstein, 2000).

As a result, he proposed four underlying principles of management. A training program is more than just a series of unrelated workshops. It should reflect a way of looking at what your organization does, as well as the needs of the staff. Some organizations plan training a year at a time, choosing to focus on one or a small number of topics, and scheduling discussions or presentations months in advance. Others see a training program as a progression as staff

members build their skills and knowledge from the initial training throughout their time in the organization. Still others see a program as covering the areas that staff members need to do their jobs well, which often means responding to immediate concerns (We're getting a lot of participants who are using heroin. What's necessary is that your staff training plan end up with a program that has some reason behind its structure. An unrelated series of presentations or activities might have some value, but it will benefit neither the staff nor the organization as much as a training program that forms big impact to the management of store.

c) Stores Management

Inventory' and 'stock' are often used to relate to the same thing (Wild, 2002); yet when stores management is mentioned, there is however a slight difference with stock. Stock is usually an amount of goods that is being kept at a specific place (in a warehouse for example), sometimes referred to as inventory. Conversely, stores management is primarily about specifying the size and placement of stocked goods. Stores management is necessary at different locations within an institution or within multiple locations of a supply chain, to protect (the production) from running out of materials or goods.

Basically stores management can be defined as the "management of materials in motion *and* at rest" (Coyle, Bardi, & Langley, 2003). The following activities all fall within the range of stores management (Waters, 2003) control of lead times, carrying costs of inventory, asset management, inventory forecasting, inventory valuation, inventory visibility, future inventory price forecasting, physical inventory, available physical space for inventory, quality management, replenishment, returns and defective goods and demand forecasting.

Stores management basically serves two main goals (Silver, Pyke & Peterson, 2008). First of all good stores management is responsible for the availability of goods. It is important for running

operations that the required materials are present in the right quantities, quality and at the right time in order to deliver a specific level of service. The second goal is to achieve this service level against optimal costs. Not all items can be held in stock against every cost, therefore choices have to be made.

Narasimhan, (2000) in their text also stated that the major objective of stores management and control is to inform manager show much of a good to re-order, when to re-order the good, how frequently orders should be placed and what the appropriate safety stock is, for minimizing stock outs. Thus, the overall goal of stores is to have what is needed, and to minimize the number of times one is out of stock. Dobler and Burt. (2006) defined inventory as a stock of goods that is maintained by a institution in anticipation of some future demand. This definition was also supported by Schroeder (2000) who stressed that stores management has an impact on all institution functions, particularly operations, marketing, accounting, and finance. He for established that there are three motives holding inventories, which are transaction, precautionary and speculative motives.

Empirical review

IT is an important tool in stores management since it is used to store, retrieve, transmit and manipulate data, often in the context of a public sector or other institutions (Subramani, 2004). The implementation of ERP and MRP is important since it helps in minimizing error, increasing accuracy and efficiency. Procurement training is generally important since it provide workers with information, new skills, or professional development opportunities on how to operate in their place of work (Phillips, 2003).

Critique of Existing Literature Relevant to the Study

For the past two decades, there has been uproar over the rise and fall of the stores management in public sector. The greatest critique of this literature was brought by Silver, 2011) who

argued that information technology and procurement staffs training are important keys in stores management.

Further, they elude that significant change in the information technology systems in stores management, is rapidly changing and the sector have to keep upgrading the systems to be able to integrate with the suppliers and other sector. Further, existing literature faces enormous issues, omitted variable bias, and had difficulties accurately

The study found out that the role of stores management is maintaining production, cost control, reduced loss, and continuous supply. However the study failed to explain how stores management strategy affects organization performance and hence further studies are required to explore the influence of stores management on organization performance. However, the study drew much emphasis on the impact of stores management on performance of Police Administration service but failed to explore the key factors that influence realization of increased efficiency in public sector. Silver, (2001), conducted a study on the relationship between information technology and staff training in stores management. The study found out that there is no doubt that many institutions have embraced stores management as way to increase efficiency and reduce cost. The study narrowed its research undertakings on reduced loss and hence failed to establish how technology adaption influences realization of increased efficiency in public sector (Subramani, 2004).

Research Gaps

Studies that have been reviewed previously have not adequately indicated extensively the role played by stores management in public sector in Kenya. Most of these previous studies are limited to small and medium enterprises in Kenya. The previous studies they have not indicated the importance of IT and procurement staffs training in public sector in Kenya. Further, Toomey, (2010) conducted a survey on

procurement staffs training in SMEs broadly but did not extensively discuss the effects on public sector. Stores management has adversely affected the public sector in Kenya and contributed to poor operations performance as indicated by (Waters, 2013). There is therefore great need to investigate further to get a solution.

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 stores 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 stores practices (Wagner, 2002). This has led many to suggest a gap exists between inventory theory and practice (Lenard & Roy, 2005). While the varied solutions offered to bridge this gap represent valuable research, input from practitioners is noticeably absent (Patton & Steele, 2000). 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 affecting stores management in the public sector and hence this study intend to fill those gaps.

RESEARCH METHODOLOGY

Research Design

This study employed a case study design to investigate the factors affecting stores management in public sector in Kenya; a case study of Administration police service. The study adopted a research a case study design (Yin, 2004) as it allows for in-depth contextual analysis.

Target Population

The target population of this study comprised 532 employees in public sector in Administration Police Service stores based at APTC.

Sampling frame

The sampling frame for this study was a list of all the employees working in the public sector seven departments namely, administration, finance, human resource, ICT, internal audit, procurement and operating staffs. The list containing the names of the employees formed the basis of sampling frame and it was obtained from public sector human resource department.

Sample and Sampling Technique

Since the population of interest to the researcher is too large and the time for the study was not enough, the researcher chose a sample and sampling technique. A total of 160 respondents were involved in the study. This sample is 30% of the entire population and is representative as it is drawn from all the departments. In order to select appropriate sample size the study employed probability sampling technique and in particular stratified sampling.

Table 1: Sample size

Department	No of Staff	Sample Size	% of staffs
Administration	39	12	30%
Finance	18	5	30%
Human Resources	87	26	30%
ICT	25	8	30%
Internal Audit	29	9	30%
Procurement	244	73	30%
Operating staff	90	27	30%
Total	532	160	30%

Data Collection Instruments

Data was collected using structured questioners. Likert type of scale was used which are often used in matrix questions and compose of 5-7 categories. Questionnaires were mainly administered to the respondent to complete the questions themselves, the questioners were hand-delivered to them. Secondary data was collected through reviews of both empirical and theoretical data from books, journals, magazine and the internet.

Data collection procedure

Primary data present the actual information that was obtained for the purpose of the research study. This type of data was gathered using questionnaire and it was collected first then analysed to get the important information. Secondary data is the data collected for other purpose but was still usable in this type of research study

Data Analysis and Presentation

The questionnaires were checked for completeness and consistency of information at the end of every field data collection day and before storage. Data capturing was done using SPSS computer aided software. The data from the questionnaire was recorded and entered into the computer using stratified packages for social science (SPSS) version 17 for analysis.

Data was presented in the form of frequency distribution, tables, graph and pie charts that facilitate in the description and explanation of the findings. Finally inferential statistics using correlation analysis was carried out to establish the relationship between the research variables.

FINDINGS AND DISCUSSIONS

Response Rate

The study targeted a sample size of 160 respondents from which 150 filled in and returned the questionnaires making a response rate of 94%.

Reliability Analysis

Reliability of the questionnaire was evaluated through Cronbach's Alpha which measures the internal consistency. Cronbach's alpha was calculated by application of SPSS version 17 for reliability analysis. Table 2 shows that Procurement training had the highest reliability ($\alpha=0.820$) and followed by Information technology ($\alpha=0.805$). This illustrates that all the two scales were reliable as their reliability values exceeded the prescribed threshold of 0.7 (Mugenda & Mugenda, 2008).

Table 2: Reliability Coefficients

Scale	Cronbach's Alpha
Procurement staffs training	0.820
Information technology	0.805

Profile of the respondents**Gender of the respondents**

This section shows the gender disparity in the respondents. From the findings as indicated in Figure 4.2, majority (70%) were male respondents with (30%) being females respondents. This implies there were more males than female respondents in the selected Administration Police Service.

Table 3 Gender Case Processing Summary

		Cases		Missing	Total	Percent
		Valid	Percent			
Gender of respondents	Information	150	100.0%	0	150	100.0%
Gender of respondents	Technology	150	100.0%	0	150	100.0%
Gender of respondents	Procurement staffs training	150	100.0%	0	150	100.0%
Gender of respondents	* Stores Management	150	100.0%	0	150	100.0%

From the above table of the cross tabulation between gender and the three variable case processing summary shows the valid number was 150, and the percentage was 100%, this shows that all the males and females participated

Age brackets of the respondents

This section sought to determine the ages of the respondents in the Administration Police Service. From the findings, it was noted that most respondents were between the ages of 30-35years old, this age bracket was noted to have the highest percentage of 50% respondents. This was closely followed by respondents who stated that they were aged between 36 and above years old. Respondents who stated this were noted to be approximately 25%. Following closely after were the respondents who stated that they were aged between 24-29 years old.

Respondents who stated this were noted to have a 15%. Closely after were the respondents who stated that they were aged between the ages of 18-23 years old and this group was noted to be 10% of the respondents. From the findings, it can be inferred that the respondents were old enough to provide reliable insights relevant to the study.

Table 4: Age Case Processing Summary

		Cases		Missing	Total	Percent
		Valid	Percent			
Age of respondents	* Information	150	100.0%	0	150	100.0%
Age of respondents	* Procurement staffs training	150	100.0%	0	150	100.0%
Age of respondents	* Stores Management	150	100.0%	0	150	100.0%

From the above table of the cross tabulation between age and the three variable case processing summary shows the valid number was 150, and the percentage was 100%, this shows that all the age levels participated

Level of Education of the respondents

The study sought to seek the level of education of the respondents taken in Administration Police Service. From the responses in the questionnaires it was noted that majority of the respondents (50%) were undergraduates. This was closely followed by respondents who stated that they had done a diploma as their highest level of education, this covered a 20% of respondents. Respondents who stated that they had gone up to a masters level closely followed next with a 15% of the total respondents. Respondents who had a postgraduate followed closely after being only 10% of the total respondents. Lastly, respondents who had a PHD followed closely after being only 5% of the total respondents. The study, from this findings could generally infer that most respondents were well educated and knowledgeable and would therefore provide relevant information on the factors affecting stores management in the public sector in Kenya: A case study of the Administration Police Service.

Education Level Case Processing Summary

From the cross tabulation between education level and the three variable case processing summary shows the valid number was 150, and the percentage was 100%, this shows that all the education level in the study participated.

Years of Working experience of the respondents

The study sought to determine the years of experience of the respondents. From the study it was noted that majority of the respondents (45%) of the respondents had a work experience of 6-10 years. This was closely followed by respondents who stated that they had a work experience of over 1-5 years selected in the Administration Police Service and covered 35% of the total respondents. It was noted from the findings that 5% of the respondents stated that they had a work experience of less than one year. The findings indicated therefore that majority of the respondents had a long working experience with the Administration Police Service.

Study Variables

a) Information Technology

Effects of information technology on store management in the public sector with specific reference to Administration Police Service stores in Kenya.

According to the respondent information technology has a critical role in store management in the public sector. Respondent stressed that information technology the public sector should adopt Electronic Data Interchange which is for the transfer of data from one computer system to another by standardized message formatting, without the need for human intervention. Information technologies are a vital component of successful institution and organizations. Information technologies, including Internet-based, are playing a vital and expanding role in store management (Lyson, 2006). In a progressively more spirited worldwide atmosphere, Information System

plays the role as 'enabler and facilitator', which endows with tactical values to the officialdom and considerable step up to the excellence of administration. The in stores management coordination and control, information systems may also help managers and workers investigate problems, envisage complex subjects and generate new merchandise or services (Davenport, 2013). The respondents added that Information Technology has a significant in the management of various inventories. It helps the managers in adapting to the new management processes, and also for predicting the possible impacts of newer technologies.

The extents to which the respondents agree with the statements about information technology effect on stores management in Administration Police Service stores in Kenya

The study sought to determine the level at which the respondents agreed or disagree with the some statements relating to effects of Information Technology on the procurement process at stores management in the public sector with specific reference to Administration Police Service. The findings are as shown in table below:

Table 5: Information Technology

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard Deviation
To what extent does Material Resource Planning influence store management public sector?	1 0	1 5	2 0	4 5	6 0	4. 2 6	0.24
Indicate the extent does Enterprise Resource Planning influences store management in public sector?	1 0	1 5	4 5	6 0	2 0	3. 8 9	0.22
To what extent does barcoding influence store management public sector?	5	2 0	1 0	5 5	6 0	4. 1 8	0.22
To what extent do you agree that Electronic Data Interchange influence store management public sector?	1 0	1 0	1 5	5 5	6 5	4. 0 9	0.29

From the findings a majority of the respondents agreed that Information Technology variable affect procurement process at stores management in the public sector with specific

reference to Administration Police Service as shown by the high mean values calculated in the SPSS analysis. For instance, the statement; Material Resource Planning influence store management in public sector was noted to have a mean of 4.26, Enterprise Resource Planning influences store management in public sector was shown by mean of 3.89. barcoding influence store management in public sector was shown by a mean of 4.18 while the statement; Electronic Data Interchange influence store management in public sector had a mean of 4.09. The mean calculated in the analysis indicated that most respondents generally agreed or strongly agreed on the effect of the selected statement to the independent variable. The standard deviation calculated in the analysis was noted to range between 0.20 and 0.30.

The managers can benefit from the efficiently prepared computer packages and the electronically stored confidential information. With just a single click of the mouse, they can have the relevant information in front of their screen (McFarlane, 2004). However, to be able to handle these software packages in a better way, the managers have to undergo quality training in the use of information technology. Taking this need into consideration, many corporate organizations can be seen taking special efforts for the development of these skills, via training programs prepared by experienced software professionals (Henderson, & Venkatraman, 2003).

b) Procurement Staffs Training

Explanation on the effect of procurement staffs training on store management in the Administration Police Service

The respondents advised that procurement staffs training plays a significant role in store management in the public sector. The respondent stressed that public sector should be training their staffs to equip them with knowledge; they added that training helps on how to use information systems (ERP) and

understanding on public procurement Act. Other respondent see training program as a progression as staff members build their skills and knowledge from the initial training throughout their time in the organization. Still others see a training program as covering the areas that staff members need to do their jobs well, which often means responding to immediate concerns. Employee training generally refers to programs that provide workers with information, new skills, or professional development opportunities (Phillips, 2003).

Training presents a prime opportunity to expand the knowledge base of all employees, but many employers find the development opportunities expensive (Gertz, 2000). Employees also miss out on work time while attending training sessions, which may delay the completion of projects. Despite the potential drawbacks, training and development provides both the company as a whole and the individual employees with benefits that make the cost and time a worthwhile investment (Lavie, & Sturmey, 2002).

Most employees have some weaknesses in their workplace skills. A training program allows you to strengthen those skills that each employee needs to improve (Kulak, 2005). A development program brings all employees to a higher level so they all have similar skills and knowledge. This helps reduce any weak links within the company who rely heavily on others to complete basic work tasks. Providing the necessary training creates an overall knowledgeable staff with employees who can take over for one another as needed, work on teams or work independently without constant help and supervision from others (Heyward, 2006).

The extent to which respondents agree with the statements about the influence of procurement staffs training in stores management in Administration Police Service stores in Kenya

Respondents were asked to rate their responses in regard to some statements relating to influence of Procurement Staffs Training in regard to the stores management in public sector on a Likert scale of 1 to 5; where 1 represented strong disagreement and 5 represented strong agreement. The results are as shown in table below

Table 6: Procurement Staffs Training

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard deviation
Indicate the extent to which you agree that procurement staffs training have an effect on maximizing productivity in stores management in public sector?	1	1	20	45	6	4.0	0.3
To what extent do you agree that procurement staffs training influences use of automated equipment in stores management in public sector?	5	2	10	55	6	3.8	0.2
Indicate the extent to which you agree that procurement staffs training influences use of IT systems in stores management in public sector?	1	1	10	35	5	4.5	0.2
Indicate the extent to which you agree that procurement staffs training influences motivation of staffs in stores management in public sector?	0	2	14	54	4	3.9	0.2

From the findings, majority of the respondents agreed that procurement staffs training influences motivation of staffs in stores management in public sector, as shown by a mean of 3.9; procurement staffs training have an effect on maximizing productivity in stores management in public sector as shown by mean 4.03; procurement staffs training influences use of IT systems in stores management in public sector as shown by mean of 4.50.; procurement staffs training influences use of automated equipments in stores management in public sector was shown by a mean of 3.88. The high mean values indicated that majority of the respondents generally agreed or strongly agreed on the statements relating with the

independent variable on procurement staffs training influences stores management in public sector. The standard deviation calculated in the analysis was noted to range between 0.20 and 0.30 which indicated that there was uniformity in the responses from the respondents.

Employees with access to training and development programs have the advantage over employees in other companies who are left to seek out training opportunities on their own (Taylor, 1914). The investment in training that a company makes shows the employees they are valued. The training creates a supportive workplace. Employees may gain access to training they wouldn't have otherwise known about or sought out themselves. Employees who feel appreciated and challenged through training opportunities may feel more satisfaction toward their jobs (Infantino & Musingo, 2005).

An employee who receives the necessary training is better able to perform her job. She becomes more aware of safety practices and proper procedures for basic tasks (Infantino & Musingo, 2005). The training may also build the employee's confidence because she has a stronger understanding of the industry and the responsibilities of her job. This confidence may push her to perform even better and think of new ideas that help her excel. Continuous training also keeps your employees on the cutting edge of industry developments. Employees who are competent and on top of changing industry standards help your company hold a position as a leader and strong competitor within the industry (Burgio, & Burgio, 2010).

Most employees have some weaknesses in their workplace skills. A training program allows you to strengthen those skills that each employee needs to improve (Kulak, 2005). A development program brings all employees to a higher level so they all have similar skills and knowledge. This helps reduce any weak links within the company who rely heavily on others to

complete basic work tasks. Providing the necessary training creates an overall knowledgeable staff with employees who can take over for one another as needed, work on teams or work independently without constant help and supervision from others (Heyward, 2006).

c) Store Management

Respondents were asked to rate their responses in regard to some statements relating to stores management on a Likert scale of 1 to 5; where 1 represented Strong disagreement and 5 represented strong agreement. The results are as shown in table below;

Table 7: Store Management

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard deviation
Indicate the extent to which planned orders is influenced by stores management in public sector	15	1 0	1 0	5 5	6 5	3.88	0.28
Indicate the extent to which controlled shortage is influence by stores management in public sector	15	1 0	2 0	3 5	6 5	3.94	0.23
Indicate the extent to which enabled demand meetings is influenced by stores management in public sector	0	3 0	1 5	4 5	6 0	4.06	0.21
To what extent does stores management influence minimized carrying cost in public sector	20	1 0	1 5	6 5	4 0	4.33	0.20

From table 7, a majority of the respondents were in agreement with the statements that review of the enabled demand meetings is influenced by stores management in public sector as shown by a mean of 4.06 and Standard deviation of 0.21. A majority of the respondents also agreed with the statement that stores management influence minimized carrying cost in public sector as shown by mean of 4.33. The respondents also agreed with the statement; controlled shortage is influence by stores management in public sector as shown by mean of 3.94. All the cases were supported by a standard deviation calculated in the study implies that majority of the respondents were of similar opinion.

Inferential Statistics

Correlation Statistics

The Pearson product-moment correlation coefficient (or Pearson correlation coefficient for short) is a measure of the strength of a linear association between two variables and is denoted by r . Pearson correlation was used to measure the degree of association between variables under consideration that is independent variables and the dependent variables. Pearson correlation coefficients range from -1 to +1. Negative values indicates negative correlation and positive values indicates positive correlation where Pearson coefficient <0.3 indicates weak correlation, Pearson coefficient $>0.3<0.5$ indicates moderate correlation and Pearson coefficient >0.5 indicates strong correlation. The Pearson moment correlation coefficient was used to establish the correlations between the independent variables that were used in the model.

The study findings showed that all the predictor variables were shown to have a positive association between them at a significant level of 0.05 and hence included in the analysis. There was strong positive relationship between Information technology and Procurement staffs training (correlation coefficient 0.8345).

Qualitative Analysis

a) Information Technology

The study sought to determine how information technologies affect stores management in public sectors in Kenya. As mentioned by the respondent information technology equipment influences on store management in the Administration Police Service, The findings established that enterprise resource planning and material resource planning are necessary in stores management in public sectors in Kenya. According to Subramani, (2004) information technology is the application of computers and telecommunications equipment to retrieve, transmit and manipulate data, often in the context of a public sector or other institutions.

Romney and Steinbart, (2006) stated that in an organization's IT plays an important role in helping it adopt and maintain a strategic position. Information technologies support efficient sector operations, workgroup and enterprise collaboration, or effective sector decision making. IT can change the way public sector operate (O'Brien & Marakas 2006).

The managers can benefit from the efficiently prepared computer packages and the electronically stored confidential information. With just a single click of the mouse, they can have the relevant information in front of their screen (McFarlane, 2004).

b) Procurement Staffs Training

The study sought to determine whether procurement staffs training influences stores management in public sectors in Kenya. The findings established that procurement staffs training is significance since there is training on how to use information systems, and training on public procurement act. Phillips, (2003) defined staffs training as programs that provide workers with information, new skills, or professional development opportunities.

Taylor, (2002) argued that to investigate the influence of staff training on stores management, the study will be based on scientific management theory. The theory basically consists of the works of Taylor. Taylor started the era of modern management in the late nineteenth and early twentieth centuries; Taylor consistently sought to overthrow management by rule of thumb and replace it with actual timed observations leading to the one best practice. He advocated for the systematic training of workers in the one best practice rather than allowing them personal discretion in their tasks.

A structured training and development program ensures that employees have a consistent experience and background knowledge (Lavie, & Sturme, 2002). The consistency is particularly relevant for the company's basic policies and procedures. All employees need to be aware of

the expectations and procedures within the company. This includes safety, discrimination and administrative tasks. Putting all employees through regular training in these areas ensures that all staff members at least have exposure to the information (Gertz, 2000).

SUMMARY OF THE FINDING

From the findings, it was noted that most respondents were between the ages of 30-35 years old. This age bracket was noted to have the highest frequency of 45 respondents which was calculated to about 50% of the total respondents. This was closely followed by respondents who stated that they were aged between 24 and 29 years old. Respondents who stated this were noted to be approximately 20% of all the respondents. From the findings, it can be inferred that the respondents were old enough to provide reliable insights relevant to the study. From the responses in the questionnaires it was noted that majority of the respondents (50%) had an undergraduate degree. The study, from this findings could generally inferred that most respondents were well educated and knowledgeable.

From the study it was noted that majority of the respondents (45%) of the respondents had a work experience of 6-10 years. The findings indicated therefore that majority of the respondents had a long working experience with the Administration Police Service. The study sought to determine the level at which the respondents agreed or disagree with the some statements relating to effects of Information Technology on stores management in public sector. From the findings a majority of the respondents agreed that Information Technology variables affect the stores management in public sector as shown by the high mean values calculated in the SPSS analysis. For instance, the statement; Material Resource Planning in store management in public sector was noted to have a mean of 4.26. Generally, the mean calculated in the analysis indicated that most respondents generally agreed or strongly agreed on the effect of the selected

statement to the independent variable which was performance of stores management in public sector. The standard deviation calculated in the analysis was noted to range between 0.20 and 0.30.

Correlation analysis was used to measure the strength of the relationship between the independent variables i.e. the relationship between information technology, procurement staffs training and materials handling equipment. Regression analysis established the relative significance of each of the variables on Stores management in public sector. There was strong positive relationship between Information technology and Procurement staff's training (correlation coefficient 0.8345), the statistics helped in determining the relative importance of each variable in the model. In this case, the most important variable was information technology followed by staff's training.

Conclusion

The study provided an understanding of the factors affecting stores management in public sector, as discussed below;

a) Information Technology

The study sought to determine how information technologies affect stores management in public sectors in Kenya. The findings established that enterprise resource planning and material resource planning are necessary in stores management in public sectors in Kenya. Romney and Steinbart, (2006) stated that in an organization's IT plays an important role in helping it adopt and maintain a strategic position. Information technologies support efficient sector operations, workgroup and enterprise collaboration, or effective sector decision making.

b) Procurement Staffs Training

The findings established that procurement staffs training is significance since there is training on how to use information systems, and training on public procurement act. Phillips, (2003) defined

staffs training as programs that provide workers with information, new skills, or professional development opportunities.

Recommendations

The study recommends that globalization should be well articulated and there should be increased support for training, embrace technology, and adopt innovation in organization to influence performance. It is also recommended that government should be part of the store management in public sector. The study therefore recommends that in order to ensure that the institutions remain sustainable; they should embrace information technology and procurement staffs training.

The study also recommends that stores management should be observed well and proper training should be encouraged to improve the current used methods. The study also recommended that modern technology should be used which is more efficient and effective to the organization and enhance operation stores management (Dobler & Burt 2010)

Areas for further Research

A further study should be done on factors affecting stores management in public sector in Kenya. Study need to be carried out or conducted that would investigate interaction of other variables that influence stores management in public sector e.g. management support, automated stores equipment, manager's competency, and management style (Dobler & Burt 2010). Areas of further research that were identified include a similar study to be carried out on other sectors of public and private institutions. Lastly the challenges faced in stores management in the other sectors of public and private institutions. Crucially further research should be done to determine how stores management can contribute to institution performance and customer satisfaction and to what extent can the benefits if any be quantified by the institutions.

REFERENCES

- Ballard R.L., (2000), Methods of stores monitoring and measurements, logistics information management. *Journal of operations management*, 22(2), 119-150.
- Ballou R.H. (2000), Evaluating stores management performance using turnover curve. *International journal of physical Distribution & Logistics management*
- Beer, M. (2003). Why total quality management programs do not persist: the role of management quality and implications for leading a TQM transformation*. *Decision Sciences*, 34(4), 623-642.
- Chen, I. J., & Paulraj, A. (2004). Towards a theory of supply chain management: the constructs and measurements. *Journal of operations management*, 22(2), 119-150.
- Chow, H. K., Choy, K. L., Lee, W. B., & Lau, K. C. (2006). Design of a RFID case-based resource management system for warehouse operations. *Expert Systems with Applications*, 30(4), 561-576.
- Chun, R., & Davies, G. (2006). The influence of corporate character on customers and employees: exploring similarities and differences. *Journal of the Academy of Marketing Science*, 34(2), 138-146.
- Cooke, R. A., & Szumal, J. L. (2003). Measuring normative beliefs and shared behavioral expectations in organizations: The reliability and validity of the Organizational Culture stores management. *Psychological reports*, 72(3c), 1299-1330.
- Cox, S. (2010). *Research Methodology*. Third Edition. Pearson Publishers.
- Coyle, J. J., Bardi, E. J., & Langley, C. J. Jr. (2003). *The Management of Business Logistic: A Supply Chain Perspective* (7th ed.). Mason: South-Western.
- Coyle, J.J., Bardi, E.J. & Langley Jr., C.J., 2003. *The Management of Business Logistics: A Supply Chain Perspective 7th edition*. Ohio: South-Western.
- Davenport, T. H. (2013). *Process innovation: reengineering work through information technology*. Harvard Business Press.
- DeSanctis, G. & M. S. Poole (2004) "Capturing the Complexity in Advanced Technology Use: Adaptive Structuration Theory," *Organization Science* (5) 2, pp. 121-147.
- European Logistics Association/A.T. Kearney (2004). *Differentiation for Performance*. Deutscher Verkehrs-Verlag GmbH, Hamburg.
- Frazelle, E. H. (2002). *Supply Chain Strategy: The Logistics of Supply Chain Management*. New York: McGraw-Hill.
- Gall, M. D., Borg, W. R., & Gall, J. P. (2006). *Educational research: An introduction*. White Plains, NY: Longman.
- Ganesan, S., George, M., Jap, S., Palmatier, R. W., & Weitz, B. (2009). Supply chain management and retailer performance: emerging trends, issues, and implications for research and practice. *Journal of Retailing*, 85(1), 84-94.
- Gertz, B. (2000). Training for prevention of assaultive behavior in a psychiatric setting. *Psychiatric Services*, 31(9), 628-630.

- Goldsby, T., & Martichenko, R. (2005). *Lean Six Sigma Logistics: Strategic Development to Operational Success*. Boca Raton: J. Ross Publishing, Inc.
- Henderson, J. C., & Venkatraman, N. (2003). Strategic alignment: Leveraging information technology for transforming organizations. *IBM systems journal*, 32(1), 4-16.
- Kelle, P. (2014). Safety stock planning in a multi-stage production-stores system. *Engineering Costs and Production Economics*, 9(1), 231-237.
- Krajewski, L.J., Ritzman, L.P., (2009). *Operations Management: Strategy and Analysis* (6th ed.). Prentice Hall: Upper Saddle River, NJ.
- Krautter, J. (1999), "Stores theory: new perspectives for corporate management", *International Journal of Production Economics*, Vol. 59, pp. 129–134
- Lavie, T., & Sturmey, P. (2002). Training staff to conduct a paired-stimulus preference assessment. *Journal of Applied Behavior Analysis*, 35(2), 209-211.
- Lefebvre, H. (2001). *The production of space* (Vol. 142). Blackwell: Oxford.
- Lenard & Roy (1995), Multi-product stores Situations with One Restriction. *Operational Research Quarterly* 27, 815-834.
- Lenard, J. D., & Roy, B. (2005). Multi-item stores control: A multi criteria view. *European Journal of Operational Research*, 87, 685-692.
- Lim, A. C., Egerton, I. B., See, A., & Shumack, S. P. (2011). Accuracy and reliability of store-and-forward teledermatology: Preliminary results from the St George Teledermatology Project. *Australasian Journal of Dermatology*, 42(4), 247-251.
- Lyson K (2006). *Purchasing and Chartered Institute of Purchasing and Supply*, London: Pitman Publishing.
- Mugenda, A. G., & Mugenda, O. M. (2012). *Research methods dictionary*.
- Mugenda, O. M., & Mugenda, G., A.(1999). *Research Methods: Quantitative and Qualitative Approaches*.
- Mugenda, O. Mugenda (2003) *Research Methods: Quantitative and Qualitative Approaches*. *Nairobi: ACTS*.
- Narasimhan (2000) Generalized stores control. *International Journal of Operations & Production Management*, 15(2), 51–62
- Nevill, Steven J., David G. Rush & Dorothy W. Sadd (2008), "Real-World Examples of Stores Effectiveness," *Supply Chain Management Review*, 2(3), 39-46.
- Novak, A., & Tolman, J. (1977). *Store planning and design*. Lebharr-Friedman Books.
- Oke, A., & Gopalakrishnan, M. (2009). Managing disruptions in supply chains: a case study of a retail supply chain. *International Journal of Production Economics*, 118(1), 168-174.
- Orodho, A. J., & Kombo, D. K. (1999). *Research methods*. Nairobi.
- Orodho, A. J., & Kombo, D. K. (2002). *Research methods*. *Nairobi: Kenyatta University, Institute of Open Learning*.
- Orodho, J. A. (2004). *Techniques of writing research proposals and reports in education and social sciences*. *Nairobi: Masola Publishers*.
- Orodho, J. A. (2004). *Techniques of writing research proposals and reports in education and*

- Phillips, J. J. (2003). *Return on investment in training and performance improvement programs*. Routledge.
- Quayle, M. (2003). A study of supply chain management practice in UK industrial SMEs. *Supply Chain Management: An International Journal*, 8(1), 79-86.
- Reid, R. & Sanders, N.R., 2007. *Operations Management: an integrated approach 3rd edition*. New York: John Wiley & Sons.
- Schroeder (2010) *Operations management - Contemporary Concepts and Cases*. USA: International Edition.
- Scott, C., & Westbrook, R. (2001). New strategic tools for supply chain management. *International Journal of Physical Distribution & Logistics Management*, 21(1), 23-33.
- Shephard, R. W. (2003). *Cost and production functions*. Princeton Univ NJ.
- Silver E A (2011) *Operations Research in Stores Management: A Review and Critique*. *Oper Res* 29:628-646
- Sunil B., & Sameer, P. (2008), "International purchasing, stores management and logistics research: An assessment and agenda", *International Journal of Physical Distribution & Logistics Management*, Vol. 28 Iss: 6 pp. 403 – 433.
- Tam, J. M., Razi, M. A., Wen, J. H., & Perez Jr., A. A. (2003). E-Fulfillment: The Strategy and Operational Apartments. *Logistics Information Management*, 16, 350-362
- Taylor, F. W. (1914). *The principles of scientific management*. Harper.
- Taylor, J. B. (1993). Discretion versus policy rules in practice. In Carnegie-Rochester conference series on public policy (Vol. 39, pp. 195-214). North-Holland.
- Taylor, S., & Todd, P. A. (2005). Understanding information technology usage: A test of competing models. *Information systems research*, 6(2), 144-176.
- Teizer, J., Venugopal, M., & Walia, A. (2008). Ultrawideband for automated real-time three-dimensional location sensing for workforce, equipment, and material positioning and tracking. *Transportation Research Record: Journal of the Transportation Research Board*, 2081(1), 56-64.
- Watson, T. J. (2002). *Organizing and Managing Work*, Financial Times Prentice Hall
- Watts, C. A., Hahn, C. K., & Sohn, B. K. H. (2004), Monitoring the performance of a reorder point system: A control chart approach, *International Journal of Operations & Production Management*, 14(2), 51–62
- Widom, J. (2004). Trio: A system for integrated management of data, accuracy, and lineage. *Technical Report*.
- Wiersma, W. (2005). *Research methods in education: An introduction* (6th ed.). Boston: Allyn and Bacon.
- Wild, T., (2012). *Best Practice in Stores Management 2nd edition*. Oxford: Butterworth-Heinemann (imprint of Elsevier).
- Yin, L. (1994) *Research Methodology*. First edition. McGraw-Hill Publishers
- Zanakis, S.H., Austin, L.M., Nowading, D.C., and E.A. Silver (2000). "From Teaching to Implementing Stores Management: Problems of Translation," *Interfaces*, 10(6), 103–110.