

DETERMINANTS OF PROCUREMENT PERFORMANCE AMONG PHARMACEUTICAL MANUFACTURING FIRMS IN NAIROBI COUNTY, KENYA

Vol. 4, Iss. 3 (42), pp 648 - 663, Sept 23, 2017, www.strategicjournals.com, @strategic Journals

DETERMINANTS OF PROCUREMENT PERFORMANCE AMONG PHARMACEUTICAL MANUFACTURING FIRMS IN NAIROBI COUNTY, KENYA

Teresa Njeri Mutinda*1, Dr. Makori Moronge2

*1Msc Candidate, Jomo Kenyatta University of Agriculture & Technology [JKUAT] Nairobi, Kenya Lecturer, Jomo Kenyatta University of Agriculture & Technology [JKUAT] Nairobi, Kenya

Accepted: September 20, 2017

ABSTRACT

This study sought to examine the determinants of procurement performance in pharmaceutical manufacturing firms based in Nairobi City County, Kenya. The specific objectives of the study were to assess the effect of purchasing process and financial capacity. The study involved 150 employees. Questionnaires were used as the main data collection instruments. Descriptive statistics was used and aided by Statistical Package for Social Scientists (SPSS) to compute percentages of respondents' answers. It was notable that there existed a strong positive relationship between the indepedent variables and depedent variable. This implied that these variables were very significant and they therefore needed to be considered in any effort to boost procurement perfomanace among pharmaceutical manufacturing firms. Based on the study findings, the study concluded that procurement performance among pharmaceutical manufacturing firms was affected by purchasing process and financial capacity as major factors that mostly affect procurement performance among pharmaceutical manufacturing firms in Kenya. The study was a milestone for further research in the field of procurement performance in pharmaceutical manufacturing firms in Africa and particularly in Kenya. The findings demonstrated the important factors to procurement performance in pharmaceutical manufacturing firms to include; purchasing process and financial capacity. The current study should therefore be expanded further in future in order to establish the determinants of procurement performance in pharmaceutical manufacturing firms. Existing literature indicates that as a future avenue of research, there is need to undertake similar research in other manufacturing firms in Kenya and other countries in order to establish whether the explored factors can be generalized to affect procurement performance in pharmaceutical manufacturing firms.

Key Words: Purchasing Process, Financial Capacity, Procurement Performance

INTRODUCTION

Advances in pharmaceuticals have transformed health care over the last several decades. Today, many health problems are prevented, cured, or managed effectively for years through the use of prescription drugs. In some cases, the use of prescription medicines keeps people from needing other expensive health care such as being hospitalized or having surgery (Lwamba & Bwisa, 2013). Furthermore, the drug industry's profit margins have raised considerable attention. Pharmaceutical manufacturing was the most profitable industry in the U.S. from 2011 to 2015, and in 2016 it ranked third with profits after taxes of about 19 percent (US, 2017). Several factors have contributed to this growth in spending on pharmaceuticals, including: Increased utilization and demand for prescription drugs. From 1999 to 2009, the number of prescriptions purchased in the United States increased 39% (Kaiser, 2008).

Most pharmaceutical manufacturing firms have made it key to ensure that their procurement functions are getting better over the last ten years. This is because the function has proven to be a strategic unit for many organizations Because huge costs can be cut down through prudent procurement hence increase in profitability, (Mahadeven & Matawie, 2010). Since a number of costs can be cut down through procurement procedures, The association of low costs with procurement has induced the pharmaceutical industry to embrace best procurement practices. The costs that can be lowered generally target contract compliance through unit pricing and reduced transactional costs. While organizations work towards this goal, they at the same time pay little attention to quality, overall cost and productivity which result in extremely low gain in the name of cutting down procurement costs (Wolfe, 2012)

Procurement performance in pharmaceutical firms is the extent to which the organization is able to meet its own needs and the needs of its stakeholders for survival (Griffin, 2003).

Procurement performance is characterized by four performance dimensions. These include: cost/productivity, time or speed, operations flexibility and quality (Wolfe, 2012). To achieve procurement performance, firms must consider all resources at its disposal for instance through employees, the organization must consider them as assets and they must be treated with great attention so that the employees become motivated and productive.

Procurement performance in pharmaceutical include;-customary measures separate performance measures such as; performance to schedule, preventive maintenance, productivity measures, lead-time measures, quality measures, measures and utilization(Birech, inventory 2011). The main objectives of performance measurement are to increase efficiency and effectiveness hence improving the ability of the firm to deliver goods or services and retain customer satisfaction (Lin, 2011). According to Gompers, Ishii and Metrick (2013), procurement performance is important to an organization because an organization's ability to perform financially is critical thus must be monitored both in the short and in the long run. Performance is a concept that is context-based and does not have a single means of measurement. Due to this, there is no common measure of financial performance. A thorough valuation of a firm's performance should consider diverse procedures.

Over the past 40 years or so the Indian pharmaceutical sector witnessed rapid growth and transformation. From a mere volume of just Rs. 10 core in 1947, the industry registered a sales turnover of about US \$ 5.5 billion in 2004 with an annual growth rate of about 17%. The flexible provisions of the Patent Act of 1970 and other supportive policies of the Government of India played an instrumental role in the growth and development of this industry. Given the importance of public policies in influencing the present structure of the industry this chapter, reviews in brief the important policy changes that

have taken place in this sector and also examines the current changes in the structure of the industry and the changing behavior of firms in responding to policy changes (Arrifin & Fontana, 2015).

In terms of production, contributions from Manufacturing Pharmaceutical Group Manufacturers' Association of Nigeria and United Nations Industrial Development Organization (UNIDO) affirm that the local pharmaceutical manufacturing industry in Nigeria is currently able to meet 25 per cent of local demand. The remaining 75 per cent has to be covered with imports from Asian companies, most especially China. According to UNIDO, **Nigerian** manufacturers' liquid preparations, tablets, capsules, ointments, lotions, creams ophthalmic preparations are done locally (UNIDO, 2011).

In Kenya, pharmaceutical manufacturing firms have experienced changes in their operating environment as a result, of intense international and local competition, from an enlightened customer base and demanding markets, as well as adoption of diverse and rapidly changing technologies. The operational cost, despite head option of modern manufacturing technologies, has been ballooning and this necessitates adoption of all necessary strategies to manage the same and serve the customer best. Procurement performance management of these organizations therefore becomes important. According to Mitra, Lakha and Abdulla (2000) one of the tools that firms can use to positively affect their procurement performance is adoption of the best procurement practices.

In the Common Market for Eastern and Southern Africa (COMESA) region, Kenya is presently the leading producer of pharmaceutical products (Kenya Pharm Expo, 2016). This is through supplying pharmaceutical products to about 50% of the regions' market. Approximately 30 of the 50 recognized pharmaceutical manufacturers in the region are based in Kenya (Kenya Pharm Expo,

2016). There are roughly 9,000 pharmaceutical products registered for sale in Kenya (Kenya National Bureau of Statistics (2012). These are classified according to levels of channel of dispensing, for example; over the counter, pharmacist dispensable or only by prescription. There are three segments of pharmaceutical industry, namely the manufacturers, distributors and retailers. An estimated of about 4,557 health facilities countrywide are supported majorly by the three segments(Kenya National Bureau of Statistics, 2012). The sector has about 50 licensed concerns include subsidiaries or joint ventures, local manufacturing companies and large Multi-National Corporations (MNCs). Nairobi and the surrounding have majority Pharmaceutical firms. Collectively, these firms employ about 65% which is over 2,000 people, of who work indirect production.

Statement of the Problem

Kenya is currently the largest producer of pharmaceutical products in the Common Market for Eastern and Southern Africa (COMESA) region, supplying about 50% of the region's market. Out of the region's estimate of 50 recognized pharmaceutical manufacturers; approximately 30 are based in Kenya. It is approximated that about 9,000 pharmaceutical products have registered for sale in Kenya (KEMSA, 2016). The market for pharmaceutical products in Kenya is estimated at Kenya shillings 8 billion per annum. The government, through Kenya Medical Supplies Agency (KEMSA) is the largest purchaser of drugs manufactured both locally and imported, in the country. It buys about 30% of the drugs in the Kenyan market through an open-tender system and distributes them to government medical institutions (Noah, 2015)

The pharmaceutical manufacturing firms in Kenya have not been performing as expected or projected, expressing declining performance in the sector and stagnating figures as in other sectors, in the recent past. According to the Kenya Economic Report (2013), the pharmaceutical manufacturing firms contribution to GDP has stagnated at about 2 per cent, with the sector's growth during the first Medium Term Plan being a mere 3.16 per cent. This slow growth and weak performance is attributed to high costs of production (mainly due to expensive inputs and poor coordination with support departments), stiff competition from imported goods, high costs of credit. Kenya's share of pharmaceutical manufacturing firms in total merchandise exports is 35 per cent compared to South Africa (47%), Malaysia (67%) and Singapore (73%). This indicates ample opportunities for Kenya to increase the share of pharmaceutical manufacturing firms' exports (KIPPRA, 2013).

The Kenya Medical Supplies Authority (KEMSA, 2014) attributes the exits to a host of factors, among them the high costs of procurement leading to the local market being flooded with cheap drug imports. Manufactures also decry procurement operational costs, other coupled with the high cost of capital, is discouraging investment in critical areas, for example, setting up manufacturing plants (Mohana). In light of this scenario, it has become inevitable for pharmaceutical manufacturing firms to focus closely on procurement performance to ensure that they are not eroded by the highly competitive global environment. This would enable pharmaceutical manufacturing firms' s to outsmart their competitors and manage better profitability and counter the extensive competition waged in the current liberalized economies scenario (Lwamba & Bwisa, 2013). It is on this premise that study sought to establish the determinants of procurement performance in pharmaceutical manufacturing firms based in Nairobi County, Kenya.

Objectives of the Study

The general objective of this study was to examine the determinants of procurement performance among pharmaceutical

manufacturing firms in Nairobi City County, Kenya. The specific objectives of the study were:-

- To assess how purchasing process affect procurement performance among pharmaceutical manufacturing firms in Nairobi County, Kenya.
- To find out how financial capacity affects procurement performance among pharmaceutical manufacturing firms in Nairobi County, Kenya.

LITERATURE REVIEW

Theoretical Review Contingency Theory

This theory relates to the purchasing processing variable. It is based on uncertainty, and the effect it has in ordering. According to this theory, when environmental conditions are stable, a high degree of formalization and centralization leads to greater organization effectiveness owing to the ability of the decision maker to plan, co-ordinate and control activities (Hall, 2016). In the context of buying, increasing levels of uncertainty lead to a buying decision process characterized by increasing participation by lower level members of the organizational hierarchy and less subject to the control of formalized rules and procedures. The purchasing decision process can be effectively prescribed by formal organizational rules under stable environmental conditions. This relies on interpretations of uncertainty associated with the objective characteristics of the product being purchased e.g. complexity, commercial uncertainty. According to the contingency theory, higher levels of product complexity and commercial uncertainty are associated with lower levels of formalization and centralization. At high levels of uncertainty, organizational decisionmaking processes are characterized by a constriction of authority. This means that decisions are made at higher levels of the organization by а smaller number organizational members with an increase in rulegoverned behavior as decision units act to minimize the errors often associated with decision making in uncertain situations (Donaldson, 2001).

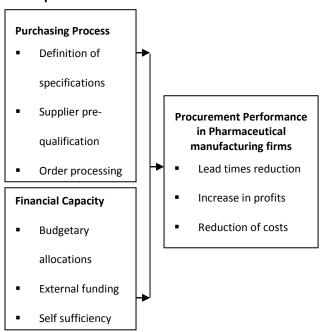
Financial Distress Theory

The financial distress theory seeks to look at the different factors that lead to a decline in a firm's performance (Brigham & Ehrhardt 2013). Beaver, Correia, & McNichols (2011), describe financial distress as the inability of an organization to pay its financial obligations as they mature. It is assess the probability important to organizations financial distress because it would determine the pay out distribution associated with an investment. An organizations investment decision and financing are separable and independent. However, not most organizations recognize this hence holding their balance sheets on debts and equity claims as one which then reduces their leverage on costs (Finnerty, 2013). The financial distress theory hence shows the relationship between an organizations financial cash flow and the ability to finance its investment opportunities. Each organization aiming at undertaking a procurement performance should ensure that its financial capability has been well planned for as well as procurement performance funding opportunities well planned, communicated and prepared for before making a decision on whether to carry out a project or not.

Organization should also consider the length of time required to release funds needed for a procurement performance or investment during the procurement performance preplanning stage before determining or agreeing on procurement performance start dates to ensure on time project funding release so as to prevent delays associated with late funds disbursements that may be influenced by several factors relating to the late release of fund. Organizations with high cost procurement performance are supposed to be able to be able to finance these projects and when this is not possible, projects are then delayed. This theory is therefore important when

addressing the financial factors influencing procurement performance sustainability. Procurement performance in the organizations experience financial constraints either due to late funding, poor financial estimations and late release of procurement performance funds. (Brigham & Ehrhardt 2013).

Conceptual Framework



Independent Variables Dependent variable Figure 1: Conceptual Framework

Purchasing Process

Purchasing has obtained a considerable amount of attention in current uncertain business environment as a key function in adding value and to support and sustain a firm's successful manufacturing performance (Cousins, 2005). This means it is important to study the purchasing process in an organization and its effects on the organization's business strategy and firm's performance because every business is striving hard to reduce its cost of delivering most unique products and services to their customers and at meantime to protect the interests of stake holders (Monczka, Trent & Handfield, 2004).

It follows that productivity in the manufacturing industries is also positively related to growth in that sector. They also argue that the productivity of the non-manufacturing sector, especially the services sector is associated with, and depends on growth in the manufacturing sector. Economies therefore should focus on the structural transformation of the traditional economy dominated by primary activities into a modern economy where high-productivity activities in manufacturing assume an important role, and remains a defining feature of economic development. This requires a keen analysis and understanding of the pillars which manufacturing depends on, and a concerted effort to support, develop and help improve them, so as to help the success and performance of the manufacturing sector (Zailani, 2011).

Purchasing is a key support activity in the manufacturing process of an organization, and creates value through purchase of inputs, services and facilities needed to produce a firm's product and same time key up the maintenance of manufacturing facilities. In past 150 years, the purchasing function has achieved notable milestones which can be divided into seven golden periods in organizations from 1850's up to beginning of twenty-first century (Zailani, 2011). The evolution begins with emerging of purchasing as a separate cooperate function, followed by the development of basic purchasing procedures and ideas. Third was the recognition purchasing function as determining sources of supply, then after came the sustaining purchasing role to reduce overall product cost. Fifth came the revival of material management as a solution to material problem inclusive sourcing, followed globalization era where it's observed the development of supply chain management (SCM). Finally, the effect on purchasing structure and behavior followed. Zailani (2011) argues that, the evolution of purchasing has exposed the way of the purchasing process to reshape from traditional clerical function to a strategic focal point in an organization by exchanging information with top management to attain best products and services through total cost, value and risk analyzing.

Financial Capacity

According to Johnson (2009), performance of a distribution function in the public sector is strongly based on capacity and management of the finance function. Suitable and strong financial controls have to be maintained to ensure good financial management. Additionally, there must be capacity to prepare regular and reliable financial statements which have a system in place to safeguard programme assets. Computerized financial systems such as quick books and Business Vision Software can be useful in this regard. Another important aspect of financial capacity that is relevant to distribution systems is the flow of funds. This relates to timeliness of receipt of funds for meeting various requirements in distribution processes.

Signing of agreements with donors or governments can be useful both as a regulatory mechanism and as the means of guaranteeing the timeliness of receipt of funds. Distribution is an expensive undertaking, and requires careful channeling and management of funds. Fleet maintenance, dispatch personnel emoluments and other costs should be well handled to ensure continued performance (Stern & Heskett 2009). Cooper (2006) argues that there can never be an effective distribution if an organization is challenged financially. Finances are used to modernize fleet, to compensate drivers, to buy enough stock for distribution and more importantly, to implement and maintain a robust information system. In view of the discussion, the following research question is proposed for testing: How does financial capacity affect procurement performance in pharmaceutical manufacturing firms?

Procurement Performance

For decades procurement performance has been attracting great attention from practitioners due to poor performance resulting from non-

adherence to power processes and procedures especially in physical distribution management of enterprises. This could be deliberate or sheer ignorance on the value the supply chain function could contribute to any organization (Thomas & Neeson, 2014). According to Zaheed, Abdullahil & Choudhury(2010), supply chain performance is defined as "the degree to which a manufacturer strategically collaborates with its supply chain partners and collaboratively manages intra-and inter-organizational processes in order to achieve effective and efficient flows of product and services, information, money and decisions to provide maximum value to the customer". A business process can be defined as structured and measured set of activities with specified business out comes for customers. Building on the process concept we can understand the connection between supply chain management procurement performance.

Korosec (2009), suitable procurement performance metrics are important for a successful company. Here viewed numerous literatures of supply chain performance measurement

techniquesandsuggestedseveralissuesthatfurthero fprocurementperformancemeasurement metrics, the forces shaping the revolution over time studies should address. The issues include success factors that influence the actual implementation and problems related to their continuous improvement.

According Hasapidis(2011), stressed to the importance of procurement performance measurement for a successful SCM. Using customer satisfaction measurement has enabled a business to compete more effectively in its targeted mission. Customer feedback provides a platform for the strategic alignment of organizational resources to meet customer expectations. The four (4) indicators used in the supply chain performance such as parts quality, responsiveness, efficiency & flexibility. Flexibility means the agility of a supply chain in responding to market place changes to gain or maintain competitive advantage (Sumetal, 2015). Otieno, (2011) established that companies which are able to manage their long term business relationship by crafting mutually beneficial supply chains normally have high global volume, regular and standardized (predictable) demand, supply requirements and low switching costs. This reinforces long term business relationship and brand building. The primary objective of supply chain management is to fulfill order demands through the most efficient use of resources, including distribution capacity, inventory, labour and by companies carefully selecting among all the options (rapid response, capacity adjustments, least cost approach and combination of all these), a supply chain can be tailored to 'fit' the physical and market needs of the specific products it moves and prevent supply disruptions. Companies can easily choose the location of their facilities but they cannot choose the location of their customers (Otieno, 2011).

Empirical Review Procurement Process

This research was made to establish the factors that affected consistency in supply pharmaceutical products in government hospitals in Kenya. In most cases, the government run hospitals have had inconsistency in supply of pharmaceutical and previous researchers have not identified the reasons culminating to such situations regardless of the huge amounts of budget allocations. The study was carried out in Maragua district hospital with a sample size of 150 individuals comprising of management, procurement department, nursing department and the pharmacy department personnel. The researcher used stratified random sampling. Structured questionnaires were given out to the respondents to fill and the researcher conducted unstructured interviews. Data collected was analysed and it was clear that the procurement process and its management, legal requirements and internal tools used for enhancing procurement greatly determined the timely availability of supplies following. The researcher identified that the procurement department was understaffed and procurement process was at times not observed. Financing was a major problem. Legal requirements were bureaucratic and lengthened the procurement process leading to inconsistency in obtaining supplies. The hospital had no core tool for enhancing procurement performance. The legal framework needed review to reduce bureaucracy and shorten the process and training on procurement issues to all hospital procurement players was required to boost their knowledge. The hospital faced several challenges, which included shortage of staff in the procurement department and financial constrains.

Kotteaku, Laios, & Moschuris., (2005) used four parameters to describe the purchasing function process. These parameters are articulation (i.e. degree to which purchasing activities are specialized conducted by departments, committees and skilled personnel), formalization (i.e. extent to which purchasing tasks are defined by formal documents), centralization (i.e. extent to which purchasing responsibilities are delegated among several lower managerial levels), and depth of analysis (i.e. application of state-of-the art technical and financial tools to improve the performance of the purchasing function). In both of their papers they defined four purchasing phases (i.e. initiation, search, selection, and completion). Each phase includes discrete and directly observable tasks. For example, initiation includes the design of specifications, whereas selection includes evaluation of suppliers (Laios & Xideas, 2004).

Financial Capacity

Achuora, Arasa, Nzioki and Ochiri (2012) examined the factors that affect distribution performance of pharmaceutical products in public sector in Kenya. The study investigated the effect of financial capacity, transport outsourcing, third party relations and use of information technology

on the distribution performance of KEMSA. The study used sample survey for data collection through stratified random procedure for ensuring representativeness of the sample. quantitative and qualitative methods of data analysis were used. Descriptive statistics as well as correlation analysis were used for examining the relationship between variables of interest. The findings indicated that relations that financial capacity have the greatest influence distribution performance respectively. The finding of the study implies that financial capacity should be given due attention.

RESEARCH METHODOLOGY

The study employed descriptive survey design where data was collected at one point in time. The Kenya Medical Supplies Agency had 50 registered member pharmaceutical manufacturing firms distributed across Nairobi City County, Kenya. The managers, supply chain officers and their deputies were used for the study. The actual population in this study was made up of the 150 staff of the pharmaceutical manufacturing firms. A census technique was used implying that all the 150 staff were included in the study. This study used structured questionnaires to obtain information from study respondents. Data was analyzed using statistical package for social science (SPSS) version 21 and Excel.

DATA ANALYSIS, PRESENTATIONS AND DISCUSSIONS

A total 150 questionnaire were administered and 123 questionnaires were returned translating to 82.00% response rate. The study sought to establish the gender distribution of the respondents 50% were male, 30% were female and 20% of the respondents did not indicate their gender. The results indicated that the two genders were adequately represented in the study since there was none which was more than the two-thirds. In order to establish the ages of the respondents who participated in this study 35% of the respondents were aged between 18 to 35

years, 60% were more than 35 years old while 5% did not indicate their age. The study determined the working experience held by the respondents in order to ascertain the extent to which their responses could be relied upon to make conclusions on the study problem using their working experience. From the findings, (26%) indicated to have a working experience of less than 5 years, 45% had a working experience of 6-10 years, 25 % had a working experience of 11-15 years and 4% had a working experience of 16 years and above.

Purchasing Process

The study sought to assess the influence of purchasing process on procurement performance among pharmaceutical manufacturing firms in the study area. This section presents findings to statements posed in this regard with responses given on a five-point likert scale (where 5 = Very Great Extent; 4 = Great Extent; 3 = Moderate Extent; 2 = Small Extent; 1= Very Small Extent). Table 4.5 presents the findings. The scores of 'Very Great Extent' and 'Great Extent' have been taken to represent a statement not agreed upon, equivalent to mean score of 3.5 to 5.0. The score of 'Moderate Extent' has been taken to represent a statement agreed upon moderately, equivalent to a mean score of 2.6 to 3.4. The score of 'Small Extent' and 'Very Small Extent' have been taken to represent a statement highly agreed upon equivalent to a mean score of 1.0 to 2.5.

The study findings in Table 1 indicated that the respondents indicated to a great extent that the

organization specify quality standards in terms of customer demands, market surveys, internal user departments, production manuals, benchmarking, international Standards and external bodies (Mean of 3.954); There is preparation of prepared by the production specifications department, laboratory, quality control department, marketing department and purchasing Department and external bodies (Mean of 3.834); There is packing and presentation specifications done in batches, whole lots as per order, based on demand and based on material type (Mean of 3.998); The organization source the suppliers from the existing supplier data base, reference from sister firms, reference from other firms, trade fairs and internet (Mean of 3.912); There is test supplier samples against specifications through in house laboratory, Kenya Bureau of statistics, other local quality assurance firms and international firms (Mean of 3.901); They participate in material order negotiations through the purchasing department, quality control department, manufacturing department, representative team (Mean of 3.823). The organization manage the supplier base through the entry/exit, quality based entry/exit, delivery efficiency entry/exit, dependability entry/exit, periodic overhaul and open door entry/exit(Mean of 3.982) The study findings corroborates with literature review by Okafor (2005) who observed that purchasing process play a key role on the procurement performance of the manufacturing firms.

Table 1: Purchasing Process

Statement	Mean	Std
Describes a second attack and the second and the second attack and the second attacks at the second attacks at the second attacks at the second attacks at the second at t	3.954	.234

Does the organization specify quality standards in terms of customer demands, market surveys, internal user departments, production manuals, benchmarking, international Standards and external bodies?

Is the preparation of specifications prepared by the production department, laboratory, quality control department, marketing department and purchasing Department and external bodies?	3.834	.233
Do the packing and presentation specifications done in batches, whole lots as per order, based on demand and based on material type?	3.998	.431
Does the organization source the suppliers from the existing supplier data base, reference from sister firms, reference from other firms, trade fairs and internet?	3.912	.169
Do you do test supplier samples against specifications through in house laboratory, Kenya Bureau of statistics, other local quality assurance firms and international firms?	3.901	.832
Do you participate in material order negotiations through the purchasing department, quality control department, manufacturing department, representative team?	3.823	.032
Do you manage the supplier base through the entry/exit, quality based entry/exit, delivery efficiency entry/exit, dependability entry/exit, periodic overhaul and open door entry/exit?	3.982	.215
Composite Mean	3.845	

Financial Capacity

The study sought to assess the influence of financial capacity on procurement performance among pharmaceutical manufacturing firms in the study area. This section presents findings to statements posed in this regard with responses given on a five-point likert scale (where 5 = Very Great Extent; 4 = Great Extent; 3 = Moderate Extent; 2 = Small Extent; 1= Very Small Extent). Table 4.8 presents the findings. The scores of 'Very Great Extent' and 'Great Extent' have been taken to represent a statement not agreed upon, equivalent to mean score of 3.5 to 5.0. The score of 'Moderate Extent' has been taken to represent a statement agreed upon moderately, equivalent to a mean score of 2.6 to 3.4. The score of 'Small Extent' and 'Very Small Extent' have been taken to represent a statement highly agreed upon equivalent to a mean score of 1.0 to 2.5

The study findings in Table 2 indicate that the respondents indicated to a great extent that there is sufficient and qualified financial management personnel (Mean of 3.666); There is adequate financial training and simulation for key stakeholders (Mean of 3.467); There is provision competitive wages and benefits procurement personnel (Mean of 3.812); There is adequate funding for procurement processes (Mean of 3.669. All activities get captured in the planned budget (Mean of 3.583); There is fund disbursement for procurement processes timely (Mean of 3.981). There is timely processing of payment to contractors (Mean of 3.771) Achuora, Arasa, Nzioki and Ochiri (2012) established thatt performance of pharmaceutical products is affected financial by capacity of the manufacturing firms.

Table 2: Financial Capacity

Statem	ent				Mean	Std
		1.6. 1.6.		10	3.666	.214

Is there adequate financial training and simulation for key stakeholders?	3.467	.203
There is provision of competitive wages and benefits for procurement personnel	3.812	.471
Is there adequate funding for procurement processes?	3.669	.769
Do all activities get captured in the planned budget?	3.583	.532
Is there fund disbursement for procurement processes timely?	3.981	.632
Is there timely processing of payment to contractors?	3.771	.815
Composite Mean	3.772	

Procurement Performance

On the extent to which procurement performance in the organization, respondents were asked to indicate the extent to which the factors determined the procurement performance. The data was collected from the different indicators of the variable Procurement performance which was ordinal categorical. The data was therefore presented in frequency tables with the median being used as the appropriate measure of central tendency. The results were presented in table 3 the first indicator for the dependent variable required to know what the organizations level procurement performance was lead reduction was, 0% of the respondents had 0-20%, 3% had 20-30%, 11% had 30-40%, 17% had 40-50%, 69% had had over 50%. The modal class is of the respondents who had over 50% compliance. The median was found to be 5 which imply that on average the lead time reduction is over 50%.

The next indicator required the respondents to state the level of increase of profits in the organization, 3% of the respondents had 0-20%, 3% had 20-30%, 14% had 30-40%, 26% had 40-50%, 49% had over 50%. The modal class is of the respondents who had over 50%. This implies that

on average firm's increase of profits was by over 50%. When the respondents were asked what the level of reduction of costs was, 0% of the respondents 0-20%, 3% had 20-30%, 3% had 30-40%, 34% had 40-50%, and 60% had over 50%. The modal class is of the respondents who had over 50% level of reduction of costs. These imply that on average the level of level of reduction of costs in the organizations is over 50%.

Finally, the respondents were asked what the level of Quality of procured goods and services offered was, 0% of the respondents 0-20%, 3% had 20-30%, 20% had 30-40%, 43% had 40-50%, 34% had over 50% The modal class is of the respondents who had between 40-50% quality level. The median was found to be 4 which imply that on average the level of Quality of procured goods and services offered is between 40-50%. When the respondents were asked what the level of order processing was, 0% of the respondents 0-20%, 3% had 20-30%, 3% had 30-40%, 34% had 40-50%, 60% had over 50%. The modal class is of the respondents who had over 50% level of order processing. These imply that on average the level of level of order processing in the organizations is over 50%.

Table 3: Procurement Performance

Statement	0-20%	20-	30-	40-50%	Over	Mode
		30%	40%		50%	
What is the level of Lead time reduction in the organization	0%	3%	11%	17%	69%	5
What is the level of increase in profits in your organization?	3%	3%	14%	26%	49%	5
What is the level of reduction of costs in procurement?	0%	3%	3%	34%	60%	5
What is the level of quality or service of procured goods and services offered?	0%	3%	20%	43%	34%	4
What is the level of increased order processing in your organization?	0%	3%	3%	34%	60%	5

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The study established to a great extent that the respondents indicated the organization specify quality standards in terms of customer demands, market surveys, internal user departments, production manuals, benchmarking, international Standards and external bodies. There is preparation of specifications prepared by the production department, laboratory, quality control department, marketing department and purchasing Department and external bodies. There are packing and presentation specifications done in batches, whole lots as per order, based on demand and based on material type. The organization source the suppliers from the existing supplier data base, reference from sister firms, reference from other firms, trade fairs and internet. There is a test supplier sample against specifications through in house laboratory, Kenya Bureau of statistics, other local quality assurance firms and international firms. They participate in order material negotiations through the purchasing department, quality control department, manufacturing department, representative team. The organization manage

the supplier base through the entry/exit, quality based entry/exit, delivery efficiency entry/exit, dependability entry/exit, periodic overhaul and open door entry/exit.

The study findings show that respondents indicated to a great extent that there is sufficient and qualified financial management personnel. There is adequate financial training simulation for key stakeholders. There is provision of competitive wages and benefits procurement personnel. There is adequate funding for procurement processes. All activities get captured in the planned budget. They participate in material order negotiations through the purchasing department, quality control department, manufacturing department, representative team. There is fund disbursement for procurement processes timely and payment to contractors.

The study sought to determine procurement performance among the pharmaceutical manaufacturing firms in Nairobi City County, Kenya attributed to the influence of purchasing process and financial capacity. The strongest correlation was established between purchasing

process and procurement performance both independent variables were found to have a statistically significant association with the dependent variable at ninety-five level of confidence.

Conclusions of the Study

Based on the study findings, the study concluded that procurement performance among pharmaceutical manufacturing firms was affected by purchasing process and financial capacity, the major factors that mostly affected procurement performance among pharmaceutical manufacturing firms in Kenya.

The study concluded that purchasing process were the first important factor that affected procurement performance among pharmaceutical manufacturing firms. The regression coefficients of the study show that purchasing process had a significant influence on procurement performance among pharmaceutical manufacturing firms. This implies that increasing levels of purchasing process would increase the levels of procurement performance among pharmaceutical manufacturing firms. This shows that purchasing process has a positive influence on procurement performance among pharmaceutical manufacturing firms.

The study concluded that financial capacities were the second important factor that affected procurement performance among pharmaceutical manufacturing firms. The regression coefficients of the study showed that financial capacity had a significant influence on procurement performance among pharmaceutical manufacturing firms. This implied that increasing levels of financial capacity would increase the levels of procurement performance among pharmaceutical manufacturing firms. This shows that financial capacity has a positive influence on procurement performance among pharmaceutical manufacturing firms.

Recommendations of the Study

The study recommends that the purchasing process should specify quality standards in terms of customer demands, market surveys, internal user departments, production manuals, benchmarking, international Standards external bodies. There is need for proper preparation of specifications prepared by the production department, laboratory, quality control department, marketing department and purchasing. The manufacturing firms should source the suppliers from the existing supplier data base, reference from sister firms, reference from other firms, trade fairs and internet to enhance their procurement performance

The study recommends that there should be sufficient and qualified financial management personnel to enhance procurement performance in the firms. There should be adequate financial training and provision of competitive wages and benefits for procurement personnel. There is need for adequate funding for procurement processes. All activities should get captured in the planned budget. They participate in material order negotiations through the purchasing department, quality control department, manufacturing department, representative team. There should be fund disbursement for procurement processes timely and payment to contractors to enhance procurement performance in the firms.

Suggestions for Further Studies

The study was a milestone for further research in the field of procurement performance in pharmaceutical manufacturing firms in Africa and particularly in Kenya. The findings demonstrated the important factors to procurement performance in pharmaceutical manufacturing firms to include; purchasing process and financial capacity. The current study should therefore be expanded further in future in order to determine the effect of public procurement legal framework

on procurement performance in pharmaceutical manufacturing firms. Existing literature indicates that as a future avenue of research, there was need to undertake similar research in other manufacturing firms in Kenya and other countries in order to establish whether the explored factors can be generalized to affect procurement performance in pharmaceutical manufacturing firms.

REFERENCES

Abor, J., & Biekpe, N. (2006). Small business financing initiatives in Ghana. *Problems and Perspectives in Management*, 4(3), 69-77.

Abor, J., & Quartey, P. (2010). Issues in SME development in Ghana and South Africa. *International Research Journal of Finance and Economics*, 39(6), 215-228.

Arifin, Z., & Fontana, A. (2015, August). The determinant factors of technology adoption for improving firm's performance. In *Technology Management and Emerging Technologies (ISTMET), 2015 International Symposium on* (pp. 181-186). IEEE.

Aramyan, L. H. (2007). *Measuring supply chain performance in the agri-food sector*.

Bailey, A. (2010). Qualitative research methods. Sage.

Bartlett, C. A., & Ghoshal, S. (1998). Beyond strategic planning to organization learning: Lifeblood of the individualized corporation. *Strategy & Leadership*, *26*(1), 34-39.

Babbie, E. R. (2013). *The basics of social research*. Cengage Learning.

Beaver, W. H., Correia, M., & McNichols, M. F. (2011). Financial statement analysis and the prediction of financial distress. *Foundations and Trends® in Accounting*, *5*(2), 99-173.

Bishara, R. H. (2006). Cold chain management—an essential component of the global pharmaceutical supply chain. *American Pharmaceutical Review*, *9*(1), 105-109.

Birech, K. (2011). The effect of performance contracting strategy on the performance of state corporations in the energy sector in Kenya. *Nairobi University of Nairobi*.

Braxton, J. M., Jones, W. A., Hirschy, A. S., & Hartley III, H. V. (2008). The role of active learning in college student persistence. *New Directions for Teaching and Learning*, *2008*(115), 71-83.

Brigham, E. F., & Ehrhardt, M. C. (2013). Financial management: Theory & practice. Cengage Learning.

Bitok, P. K. (2013). Business Process Re-Engineering And Process Time Among Selected Large Manufacturing Firms In Nairobi, Kenya. *Unpublished MBA Project), University of Nairobi*.

Crompton, J. (2007). The roles of quality and intermediary constructs in determining festival attendees' behavioral intention. *Journal of Travel Research*, 45(4), 402-412.

Donaldson, L. (2001). The contingency theory of organizations. Sage.

DeSanctis, G., Poole (2008). The Minnesota GDSS Research Project: Group support systems, group processes, and outcomes. *Journal of the Association for Information Systems*, *9*(10/11), 551.

Fugate, B. S., Mentzer, J. T., & Stank, T. P. (2010). Logistics performance: efficiency, effectiveness, and differentiation. *Journal of Business Logistics*, *31*(1), 43-62.

Hall, M. (2016). Conclusion. In *The Lived Sentence* (pp. 251-268). Springer International Publishing.

Hinson, R., & Sorensen, O. (2006). E-business and small Ghanaian exporters: Preliminary micro firm explorations in the light of a digital divide. *Online Information Review*, *30*(2), 116-138.

Kanda, M. K., & Iravo, M. A. (2015). Access Factors Affecting Supply Chain Efficiency of Medical Supplies in public Health Centres in kenya: A Case Study of Public Health Centres in Elgeyo Marakwet Count. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, *5*(2), 32-41.

Katua, P. A. (2014). The Impact of Supply Integration on the Supply Chain Performance in the Manufacturing Firms in Kenya (Doctoral dissertation, School Of Business, University Of Nairobi).

KIPPRA, K. (2013). Savings patterns and performance in Colombia, Ghana, Kenya, and Nepal (No. 13-18). YouthSave Research Report.

Konje, J. A. (2016). *Effects of Print Media Coverage on the Performance of Pharmaceutical Industry in Kenya* (Doctoral dissertation, United States International University-Africa).

Kothari, C. R. (2004). Research methodology: Methods and techniques. New Age International.

Koul, L. (2009). Methodology Of Educational Research, 4Enew E. Vikas publishing house PVT Ltd.

Lin, H. F. (2007). The impact of website quality dimensions on customer satisfaction in the B2C e-commerce context. *Total Quality Management and Business Excellence*, *18*(4), 363-378.

Lwamba, N. M., Bwisa, H., & Sakwa, M. (2013). Exploring innovativeness dimension of corporate entrepreneurship on financial performance of manufacturing firms in Kenya. *International Journal of Business and Social Science*, *4*(17).

Mahadevan, K., Samaranayake, P., & Matawie, K. (2010, October). Supply chain integration, information sharing and supply chain visibility-the remedy for supply chain uncertainty in australian organisations. In *Supply Chain Management and Information Systems (SCMIS), 2010 8th International Conference on* (pp. 1-9). IEEE.

McKinney, K. D. (2013). Being white: Stories of race and racism. Routledge.

Mose, J. M., Njihia, J. M., & Magutu, P. O. (2013). The critical success factors and challenges in e-procurement adoption among large scale manufacturing firms in Nairobi, Kenya. *European Scientific Journal, ESJ*, *9*(13).

Moharana, H. S., Murty, J. S., Senapati, S. K., & Khuntia, K. (2011). Importance of Information Technology for Effective Supply Chain Management. *International Journal of Modern Engineering Research (IJMER)*, 1(2), 747-751.

Monczka, R. M., Trent, R. J., & Callahan, T. J. (1993). Supply base strategies to maximize supplier performance. *International Journal of Physical Distribution & Logistics Management*, 23(4), 42-54.

Mugenda, A. G., & Mugenda, A. G. (2012). Research methods dictionary. *Nairobi, Kenya: Applied Research & Training Services*.

Mutinda, K. (2015). Category Management and Procurement Performance among Commercial Banks in Kenya. *Unpublished Masters Project, University of Nairobi, Nairobi*.

Nayak, N. C., & Ray, P. K. (2010). Flexibility and performance relationships: evidence from Indian bearing manufacturing firm. *International Journal of Modelling in Operations Management*, 1(1), 67-83.

Mutia, J. N. (2015). School based factors influencing level of implementation of national school health strategic plan in public secondary schools in Kitui West Sub County Kitui County, Kenya (Doctoral dissertation).

Ngeera, L. N., & Chirchir, M. (2016). E-Procurement And Operational Performance Of Pharmaceutical Firms In Nairobi, Kenya.

Nyanamba, S., & Okibo, W. (2013). Effect of E-Procurement Practices Effective Procurement In Public Hospitals: A Case Of Kisii Level 5 Hospital. *Unpublished MBA Report, Jomo Kenyatta University of Agriculture and Technology, Kenya*.

Nzioki, W., Arasa, R. M., & Achuora, J. O. (2013). Factors affecting distribution performance for pharmaceutical products in Kenya public sector.

Orodho, A. J. (2009). Techniques of Data Analysis Using Statistical Package for Social Sciences (SPSS) Computer Package. *Maseno, Kenya: Kanezja Publishers*.

Rambo, C. M. (2013). Influence of the capital markets authority's corporate governance guidelines on financial performance of commercial banks in Kenya.

Seiter, A. (2010). A practical approach to pharmaceutical policy. World Bank Publications.

Seiter, A., & World Bank. (2010). *Practical Approach to Pharmaceutical Policy (Directions in development)*. World Bank Group.

Wolfe, C. J. (2012). *Dimensions of Purchasing Social Responsibility in Sustainable Supply Chain Organizations*. Northcentral University.

Zailani, S., & Ramayah, T. (2011). Green supply chain initiatives among certified companies in Malaysia and environmental sustainability: Investigating the outcomes. *Resources, conservation and recycling*, *55*(5), 495-506.