

FACTORS INFLUENCING PROCUREMENT EFFICIENCY AT THE NATIONAL HOSPITAL INSURANCE FUND IN KENYA

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ABSTRACT

Procurement process efficiency has been a subject of great concern in the public sector in Kenya for a while. It lies at the centre of prudent public financial management. Recently the National Hospital Insurance Fund departments have experienced delays in getting supplies which negatively affect their operations. The purpose of this study was to establish the influence of selected factors on procurement process efficiency. Specifically the study sought to establish the influence of staff competence, quality management and information technology on procurement process efficiency. The target population of the study was all employees of the procurement department of National Hospital Insurance Fund totaling 100 employees. The study employed a descriptive research design using quantitative approaches. The study used a questionnaire with closed-ended questions as a tool for collecting data. The collected data will be analyzed using SPSS Version 22.0 as an analytical tool while the results were presented in tables. The study used both descriptive and inferential statistics to analyze the collected data. A correlation analysis was carried out to ascertain the strength and direction of the independent variables on procurement process efficiency. The study established that staff competence plays a significant influence on the procurement process efficiency. Further, the study established that information technology use in the organization and quality management systems greatly influence procurement process efficiency. The study recommended further enhancement of these factors and further research to ascertain the influence of other factors on procurement process efficiency.

KEYWORDS: Procurement Efficiency, Staff Competence, Quality Management

INTRODUCTION

The world over, laws are drawn to make the public procurement more effective and cost efficient. It also improves the process of purchasing quality products and increases fair competition between different companies and organizations in the market. The main principles in public procurement include organizing the procurement operations in such a way that they produce the most cost efficient and well-planned results and taking into account the environmental issues (Maki, 2012). The procurement process has to be implemented on a fair basis openly without discriminating any of the participants. Framework agreements and joint procurement can be used as a tool for reducing administrative work. Procurement is the process of acquiring property, services and works by an agency upon identification of a need. An effective and efficient procurement system ensures that the public receives value for money. Kippra (2006) stated that sound public procurement policies and practices are among the essential elements of good governance. According to Otieno (2004), irregular procurement activities in public institutions provide the biggest loophole through which public resources are misappropriated. Any good procurement practice must however incorporate the basic principles of

accountability and competitive supply unless there are compelling reasons for sourcing from one supplier- which emphasizes equal treatment of all bidders irrespective of race, nationality or political affiliation. A World Bank report (2003) stated that an effective procurement process upholds integrity, responsive to needs of target society and transparent to enhance openness and clarity.

Public procurement system in Kenya has developed from a system without rules and regulations in the 1960's, 70's, 80's and 90's to one that is anchored in law through the Public Procurement and Disposal Act (PPDA) of 2005 and the Procurement Regulations of 2006 (PPOA, 2007). Some of the major weaknesses identified in a report by the Public Procurement Oversight Authority (PPOA) about procurement operations in Kenya are; inadequate expertise and knowledge, inadequate training, poor record keeping and a weak internal audit by the Procuring Entities (PE). This proposed study therefore intends to investigate these issues in the context of a state corporation, The National Hospital Insurance Fund (NHIF) in Kenya. The purpose will be to establish extent of weakness of these variables at the state corporation, relationships between them and effective functioning of the procurement process. In order for the fund to discharge its mandate as spelt out in its mission and vision statement, NHIF must strive to increase public confidence in its financial management activities. The fund is financed by the exchequer and the public to provide social health insurance in the country. Listed among its corporate values and principles is; to embrace accountability, transparency and good governance in its operations and dealing with the public. This is one area that NHIF's performance can be tested through its public procurement process. By being faithful to its core value of providing a world class social health insurance scheme, the fund's financial management process can be assessed partly through its procurement activities.

Complaints have been raised by NHIF employee's country wide about lack of clarity regarding the whole procurement process resulting in delays of supplies. So far procurement methods available for the fund have been: open tender, restricted tender, direct tender, request for proposals and request for quotations. The fund procures goods, services and works on an ongoing basis guided by its budgets and procurement plans. Therefore, being a state corporation, it is bound by procurement rules and guidelines contained in the Public Procurement and Disposal General Manual (PPDGM). Delays experienced by procuring units are to be investigated. It is hence timely to conduct this study because continuous improvement is part of a company's mission. The study findings will inform policy makers and management the strengths and weaknesses in the Fund's procurement activities. Its effectiveness and efficiency at providing these social health insurance service hinge on its ability to procure services, goods and works in a timely and cost effective manner. For example by procuring the right information, management system will ensure that it obtains, processes and delivers needed outputs for clients and stakeholders. This research is therefore designed as exploratory and applied meant to direct management effort and focus at the fund to promote best practices in procurement management.

STATEMENT OF THE PROBLEM

According to Juma (2010), procurement process efficiency is the backbone of a firm's success since it contributes to competitive purchase and acquisition of quality goods that puts its products or services in the competitive edge in the market. However, poor procurement performance has caused financial loss due to delivery of poor quality work materials, loss of value for money and inflated prices and thus has also contributed to decrease of profitability (Juma, 2010). Similar studies by Migai (2010), found poor procurement performance is a major hindrance to organizations growth since it causes the delay of delivery, increase of defects, delivery of low quality goods or non-delivery at all. The study attributed poor

procurement performance in government parastatals in Kenya to incompetent staff, traditional procurement procedures, and inability to embrace e-procurement, poor coordination of procurement activities, lack of quality assurance policies and lack of proper regulations. Another study by Canon (2000), pointed out that lack of established procurement laws in Kenya contribute to 61 percent of losses made in procurement bids. In addition, the study notes that procurement is a new field and issues such as training and ethical policies are yet to be fully developed in this field in Kenya which has worsened the situation especially in the public sector where the scarce resources are not used effectively to get the desired results. It is against this backdrop that the study undertook to establish the factors influencing procurement process efficiency at NHIF in Kenya with the view to improve procurement process efficiency.

OBJECTIVES OF THE STUDY

The general objective of the study was to establish the factors influencing procurement process efficiency at National hospital Insurance Fund in Kenya. The study was guided by the following objectives:

- To determine the influence of staff competence on procurement process efficiency at NHIF.
- To evaluate the influence of quality management on procurement process efficiency at NHIF.
- To establish the influence of information technology on procurement process efficiency at NHIF.

LITERATURE REVIEW

In this section empirical studies carried out in the area are presented. The empirical studies are analyzed based on the objectives of the study and an attempt is made to link the empirical studies and the concepts under the present study.

Employee Competence and Procurement Process Efficiency

According to Banda (2009), many procuring organizations do not have staff with the right competence critical to good procurement process management and therefore there is need for authorities to give much greater emphasis to developing such competence and to adopt best practice more widely. According to that study, for big projects the cost of employing advisers is very high and in many cases exceeded budgets by a substantial margin. It suggests that procuring organizations should drive down advisers' costs and ensure that sensible budgets are adhered to through staff competence development. The study further points out that monitoring and enforcement of quality standards is sometimes weak and failure can be traced back to problems in human resources capacity to monitor procurement process, poor determination of specifications, weak definition of requirements and/or inadequate budgets, and failure to enforce the conditions of the contract which arises due to inadequate supervision. The study further notes that regulatory agencies rarely manage to enforce standards due to lack of capacity. Another study by Berger & Humphrey (2007), noted that a procurement function that is carried out professionally is the heart of delivery of any service on value for money principle. In that study, it was noted that most of personnel carrying out procurement functions in the local authorities in Kenya have not been sensitized on procurement regulations. For example, the law requires that each procuring entity establishes a procurement unit manned by professionals in procurement. From the study, that was not the case in 15 out of 27 surveyed local authorities in Kenya. According to them, there are serious challenges in staffing of procurement professionals in the local government institutions. They point out that some of the personnel carrying out those duties do not have any certification in procurement and most have never been sensitized and have little knowledge if any of procurement function. Therefore, in

order to sustain economic growth and effective performance, it is important to optimize the contribution of employees to the aims and goals of the organizations. According to Sultana (2012), technological developments and organizational change have gradually led some employers to the realization that success relies on the skills and abilities of their employees, and this means considerable and continuous investment in training and development.

According to a study by Appiah (2010), current educational systems do not necessarily impart specific knowledge for specific job positions in organizations. As a result of this the labour force comprises of few people with the right skills, knowledge and competencies needed for positions in the job market. There is therefore the need for extensive external training for human resources to be able to improve and also contribute to the productivity of organizations. Another study by Seleim (2007), explained that training is a key element for improved organizational performance through the increasing level of individual competences which means that training would help employees to master knowledge, skills, behaviors, sense of self worth and confidence upon which they are able to perform efficiently to improve on the performance of the organization. Furthermore, Boyan (2003) noted that there are clear benefits in ensuring that staffs who handle suppliers are professionals and that approaches to supplier management are handled well. The study noted that competence can ensure that the benefits of new products and services are brought to the attention of the right person in the organization. It can protect the organization, keep work to a minimum, avoid souring relationships and add to the organization's reputation for efficiency and good management. The study further noted that for big projects the cost of employing advisers is very high and in many cases exceeded budgets by a substantial margin. Therefore, procuring organizations need to drive down advisers' costs and ensure that sensible budgets are adhered to. They also need to be mindful of costs to bidders. The study concludes that imposing excessive costs on bidders is likely to result in higher charges in the long run and risk deterring firms from bidding.

Quality Management and Procurement Process Efficiency

According to Berger and Humphrey (2007), quality management can be considered to have four main components: quality planning, quality control, quality assurance and quality improvement. Quality management is focused not only on product/service quality, but also the means to achieve it and whether motivation plays significant role in its achievement. Quality management therefore uses quality assurance and control of processes as well as products to achieve more consistent quality. In quality work, where consumer responsibilities are very important and non-negotiable, customers recognize that quality is an important attribute in products and services. Procurement employees therefore must be provided with all tools and motivated in order to deliver quality services (Berger & Humphrey, 2007). According to Zeithaml (2000), in the past two decades quality gap has been greatly reduced between competitive products and services in Africa. The study attributes this is partly due to cases where procurement employees have lost their lives after consuming some fake products from the market. As a result, countries amongst many others have raised their own standards of quality in order to meet international standards and customer demands. The study cites the ISO 9000 series of standards as being probably the best known international standards for quality management that some many countries associate with.

Another study by Armstrong (2001), noted that the most important functions of procurement management in quality work is being able to motivate procurement employees and promote their morale in organization. The study pointed out that to inspire extraordinary performance; one must foster a positive environment and discover what motivates

procurement employees in quality work. They noted that motivating yourself and others isn't easy and thus one must work on it daily or it won't last in procurement employees or you in organization. The study further noted that tangible ways in which job satisfaction benefits the organization in quality work include reduction in complaints and grievances, absenteeism, turnover, and termination; as well as improved punctuality and worker morale. Motivation is also linked to a healthier work force and has been found to be a good indicator of longevity. In the same study, they stated that although only little correlation has been found between job satisfaction and quality work, some employers have found that satisfying or delighting procurement employees is a prerequisite to satisfying or delighting customers, thus protecting the "bottom line". Locally, a number of organization use motivation to help procurement employees achieve organization targets and objectives. DHL limited for instance has cultivated the practice of procurement employees' motivation in order to help them achieve international quality standards. According to Waters (2004), products that consumer use must meet standard fitness of purpose and quality and thus the need for motivation in quality work, to ensure they achieve the threshold and standards required for inspection of goods that are consumed in the market.

Information Technology and Procurement Process Efficiency

Technology is the change or integration of means of processing a product or service from what is perceived not be a good version to a better one. It can also be said to be a change of system or way of operation from inefficient or manual to automatic operations (Campbell, 2005). According to Campbell (2005), private sector procurement activities have evolved from orders, systems to nowadays E-procurement. The study notes that unless one remembers that technology is a tool and that one needs to know how to use it, for it to be productive, the money that spend on technology will never appear to be wasted. According to the study, the emergence of internet technologies has changed the way that governments and organizations operate. The majority of organizational spending consists of purchasing and thus in order to decrease the total costs spent on purchasing process, internet technologies have been used by both governments and enterprises. Several studies have noted that E-Procurement is a "Revolution" due to its potential to reduce the total costs of acquisitions (Campbell, 2005). These studies point out that the one thing to always remember about technology is that it is a tool to assist in getting sourcing and procurement related activities done in the organization. According to Monrove (2002), in the last decade, the development of information technology has proved decisive for the network society that has evolved in recent years. The study note that today, information technology is relatively cheap and flexible technology which not only has held significant importance for communication in society, but also for the development of the interplay between one procurement units of an organization to another. Another study by Rusek (2006), noted that the digitalization of information and data, as well as the opportunities offered by the internet, provides the basis for rationalization and improved efficiency in administrative processes for private sector procurement companies. In public sector companies digitalization provides a number of advantages, for example, the opportunity to establish new and more efficient work processes and to communicate and cooperate in new ways.

Traditional paper-based work processes in procurement can be made more efficient, changed or rendered superfluous when data and data-communication become electronic. Via this path, resources can be transferred from administration to service. Digitalization does not only bring advantages with it. The risk element in procurement changes radically along with technical development, for example, when traditional paper documents disappear and are replaced by digital information that easily can be stolen (copied), changed, deleted, etc., without trace. In future, security surrounding

digital systems will be allocated important priority in all fields of society (Rusek, 2006). Development also requires an important technical redirection and comprehensive further training for users. For procurement officers, development will mean the need for further training, amended procurement methods and new IT-based in procurement tools. In the latest era, the significant usage of E-Procurement systems by governments and enterprises led to significant savings in government procurement costs. It has been shown theoretically and empirically that these savings are mostly caused by increased competitive environment, thus by increased number of bidders in government procurement auctions (Rusek, 2006). The success of E-Procurement systems mostly depends on the increases in number of bidders (suppliers) that participate to procurement auctions. So, the implementation of E-Procurement has some restrictions namely technology adoption and usage of E-Procurement systems by suppliers. Some public institutions have not embraced e-procurement. Again, E-procurement has high maintenance costs and required level of professionalism that needs to be investigated in terms of sustainability (Rusek, 2006). Berger and Humphrey (2007) noted that the use of technology has not been fully embraced in the practice of undertaking procurement activities in Kenya. Berger and Humphrey observe while there are up to date systems such as reverse auction for undertaking bidding process in procurement, in most private and public sector the process is still being undertaken manually giving room for manipulation and corruption. Manual process also takes longer thus thereby affecting procurement activities. Dale (2010) also noted that the manufacturing industry performance in Kenya is hampered by lack of investment in technology that helps to reduce lead time, improve efficiency and efficacy, and eliminate quality default and corruption in the processes.

Procurement Process Efficiency

Effective procurement management should acknowledge complexity, find the right skills & organize the work, develop a sound strategy, manage timetable effectively, follow sound bid evaluation method and develop a smart, fair contract. Effective procurement requires organized teamwork: authorities, responsibilities, schedule, and resources (Eduardo, 2004). The term public procurement refers to the purchasing by governments and local authorities of the works, goods and services they need to operate; ranging from simple office items to sophisticated high-tech equipment. An effective and efficient procurement system ensures that the public receives value for money (Kippra, 2006). Irregular procurement activities in public institutions provide the biggest loophole through which public resources are misappropriated (Otieno, 2004). The question that begs therefore is, what factors influence an effective procurement process and how? A system may be efficient without being effective. An efficient system would be one that appear to be well functioning, timely but may not be producing desired results. In public procurement process, the overriding principle for effectiveness is value for money which means that the process should provide goods, services and works in the right quantity, time and price. Therefore, an effective procurement process must be timely, cost effective; of right quality and quantity that meets the needs of procuring entity. A discussion of the key principles of procurement is important at this stage. The principles include: value for money, ethics, competition, transparency and accountability. The International Bank for Reconstruction and Development Guidelines for Procurement (2004), defines procurement as the acquisition of goods, buying or purchase of works, hiring contractors and consultant services. The process creates, manages and terminates a contract which is regulated by a legal framework. In Kenya, this process is regulated by the Public Procurement and Disposal Regulations (PPDR). A lack of familiarity with the procurement procedures of the funding agencies combined with inadequate command of essential business skills has been attributed to increased costs and delays in procuring supplies (Canon, 2006). Efficient and effective procurement has also been linked

RESEARCH METHODOLOGY

Although there are numerous research designs; the study employed a descriptive research design. Descriptive research design was appropriate as it enabled the researcher to generalize the findings to a large population. The study utilized quantitative approaches in the collection of data. According to Kothari (2009), the approach enables data to be systematically collected and analyzed in order to provide a descriptive account of the variables under study. The target populations in this study are the 100 NHIF procurement staff spread throughout the 31 offices across the country. From the target population of 100 employees, a sample of respondents which was a true representative of the population was tabulated using a statistical method proposed by Yamane (1992) which yielded a sample size of 80 respondents. Simple random sampling technique was used in collecting data from the respondents. Questionnaires are survey instruments that have been used in many similar studies to collect anonymous information in a structured manner. The survey questionnaire is seen as appropriate; it allows data from both sampled groups to be collected in a quick and efficient manner. The use of survey questionnaire makes it possible for descriptive, correlation and inferential statistical analysis (Saunders & Lewis, 2009). Procurement process efficiency was measured by a 5-point scale while the statements in the view of the same are on a Likert scale. In the 5-point scale 1, 2, 3, 4 and 5 represent strongly disagree, disagree, neutral, agree, and strongly agree respectively. Data was collected from the respondents by personally visiting the various departments to administer the 80 questionnaires. The researcher also considers sending questionnaires to the relevant departments in offices that are far away. This was followed by a confirmation whether the instruments reached the targeted respondents.

The data collected from the questionnaires was analyzed descriptively and statistically with Statistical Package for Social Sciences (SPSS) version 21.0. The results of the study were presented in tables. For the purpose of analyzing the relationships of each of the independent variable on the dependent variable, the study used correlation analysis to test the strength and direction of each relationship. Out of 80 questionnaires that were issued to the sampled respondents, 71 of them were filled and returned. Of the returned questionnaires, 6 were incorrectly filled and thus were not used in the final analysis. Therefore, 65 questionnaires were correctly filled and hence were used for analysis representing a response rate of 81.2%. According to Curtin (2000), getting a high response rate (>80%) from a small, random sample is considered preferable to a low response rate from a large sample.

RESEARCH FINDINGS AND DISCUSSIONS

The researcher sought to find out the distribution of the respondents according to their gender, age bracket, education level and working experience. The aim was to deduce any trend from the respondent's profile that was directly linked to the variables of the study. According to the findings, majority of employees were male (56.9%) while female were 43.1%. The researcher attributed trend to the existing gender gap in employment in most public sector organizations in Kenya today. The findings indicate that a majority of employees in NHIF are of the age group 31 – 40 years (38.5%) while the least age group is between 21 – 30 years (13.8%). The researcher attributed this to the current freeze imposed by the government in various parastatals in Kenya. The study established that more than 90% of the respondents had an undergraduate degree or a master degree level of education which was attributed to the technical nature of procurement activities in the organization. Further, only 9.3% of the respondents had a diploma level of education further indicating higher requirements are needed to join NHIF in Kenya. Finally, majority of the respondents (43.1) had worked for over 3 years in their respective branches of NHIF in Kenya. Cumulatively, more than 84 had more 3 years of experience while

only 3.1% had less than 1 year working experience. This can be attributed to the fact that most private sector institutions have employees on short-term contracts in an attempt to minimize human resource costs, maximize productivity and to enhance firm performance. Further, the freeze on employment in most government parastatals in the past few years attributed to the current government policies of restructuring and enhancing the performance of these parastatals could have contributed to this trend. The researcher analyzed the factors influencing procurement process efficiency at National hospital Insurance Fund in Kenya. The selected factors included staff competence, quality management and information technology. The dependent variable for the study was procurement process efficiency.

Influence of Staff Competence on Procurement Process Efficiency

The results of the analysis on factors associated with staff competence and how it influences procurement process efficiency at NHIF are shown in Table 1. Majority of the respondents agreed that there was adequate staff training which had improved inventory management (3.86), that the organization had motivation schemes which enhanced procurement staff performance (3.98), that the organization had a negotiated term for the procurement process (3.97) and that the organization deploys its staff based on skills, competence and abilities (3.72). The respondents were unsure as to whether the organization recruits competent staff to handle the procurement function (3.37), whether all the procurement staff understand the procurement procedures (3.42) and whether the organization lays emphasis on procurement negotiation skills and creativity (3.23). The respondents however disagreed when asked whether the organization values employee skills and experience in the procurement process (2.32). Furthermore, higher variations in the responses as shown by the standard deviation values were seen when the respondents were asked whether organizations recruit competent staff (1.093), staff understanding procurement process (1.202) and emphasis on negotiation skills and creativity (1.111). On average, the other responses had a standard deviation of <1.000 which indicated smaller dispersion from the mean which was interpreted to mean convergence of responses on the particular propositions. Correlation analysis was then carried out to establish whether there was a relationship between staff competence and procurement process efficiency. It was found that there was a fairly strong positive relationship between staff competence and procurement process efficiency at NHIF ($r = 0.534$). Although the correlation was fairly strong, the positive nature of the relationship implies that higher levels of procurement process efficiency at NHIF can be associated with staff competence. Based on these findings, the study concluded that there is a significant relationship between staff competence and procurement process efficiency at NHIF and therefore the organization needs to focus more on staff competence. The findings of this study are in agreement to those of Boyan (2003), who stated that there are clear benefits in ensuring that staff who handle suppliers are professionals and that approaches to supplier management are handled well. The study noted that competence can ensure that the benefits of new products and services are brought to the attention of the right person in the organization; it can avoid souring relationships and add to the organization's reputation for efficiency and good management.

Table 1: Influence of Staff Competence on Procurement Process Efficiency

	n	Min	Max	Mean	Std. Dev.
The organization recruits competent staff to handle the procurement function	65	1	5	3.37	1.093
There is adequate staff training which has improved inventory management	65	1	5	3.86	0.974
All the procurement staff understand the procurement procedures	65	1	5	3.42	1.202
The organization has motivation schemes which enhance procurement staff performance	65	1	5	3.98	0.977
The organization values employee skills and experience in the procurement process	65	1	5	2.32	0.998
The organization has a negotiated term for the procurement process	65	1	5	3.97	0.945
The organization lays emphasis on procurement negotiation skills and creativity	65	1	5	3.23	1.111
The organization deploys its staff based on skills, competence and abilities	65	1	5	3.72	0.973

Influence of Quality Management on Procurement Process Efficiency

The findings in this section are in line with the second study objective. Table 2 shows the findings related to quality management and how it influences procurement process efficiency. The respondents agreed on average that the organization has put in mechanisms to ensure time delivery of requisitions (3.94), that the organization has invested on systems aimed at reducing wastage and damages in procurement process (4.21), that the organization has a quality and competence inspection team that monitors quality (3.91) and that the organization has measures to ensure consistent product quality across its branches (4.04). The respondents were however unsure when asked whether all the employees in the procurement function understand the quality management standards (3.21) and whether the organization has also put in measures to reduce quality complaints (3.39). Further, the standard deviations of all the responses on the propositions ranged between 0.653 and 0.988 which indicated less dispersion from the mean. The study interpreted these standard deviations to mean that the responses on average converge towards the mean. From the subsequent correlation analysis, it was established that there was a weak positive relationship between quality management and procurement process efficiency at NHIF ($r = 0.432$). The weak positive relationship implies that procurement process efficiency at NHIF is influenced by the adoption of quality management practices in its procurement function and processes. Based on these findings, the study concluded that there is a significant relationship between quality management and procurement process efficiency and therefore the management at NHIF should enhance the quality standards of their procurement function if the procurement process efficiency is to be enhanced. The findings are in agreement with those of Armstrong (2001), who established that the most important functions of procurement management in quality work is being able to motivate

procurement employees, promote their morale in organization and to ensure total quality management in their processes.

Table 2: Influence of Quality Management on Procurement Process Efficiency

	n	Min	Max	Mean	Std. Dev.
All the employees in the procurement function understand the quality management standards	65	1	5	3.21	0.962
The organization has put in mechanisms to ensure time delivery of requisitions	65	1	5	3.94	0.988
The organization has invested on systems aimed at reducing wastage and damages in procurement process	65	1	5	4.21	0.745
The organization has also put in measures to reduce quality complaints	65	1	5	3.39	0.984
The organization has a quality and competence inspection team that monitors quality	65	1	5	3.91	0.861
The organization has measures to ensure consistent product quality across its branches	65	1	5	4.04	0.653

Influence of Information Technology on Procurement Process Efficiency

In this section the researcher presents various aspects touching on information technology and how it influences procurement process efficiency at NHIF. The findings are based on a 5-point Likert scale and are depicted in Table 3. The study established that most respondents agreed that the organization had embraced information technology in its procurement process (4.35), that the organization often used e-procurement processes in its procurement function (4.13), that the use of e-procurement had improved transaction time and accuracy of requisitions (3.98), that information technology had enhanced smooth coordination of procurement activities across the branches (4.18) and that information technology had enhanced information flow in the organization (4.02).

Table 3: Influence of Information Technology on Procurement Process Efficiency

	n	Min	Max	Mean	Std. Dev.
The organization has embraced information technology in its procurement process	65	1	5	4.35	0.877
The organization often uses e-procurement processes in its procurement function	65	1	5	4.13	0.914
All the employees effectively uses the IT platforms	65	1	5	3.39	1.117
Use of e-procurement has improved transaction time and accuracy of requisitions	65	1	5	3.98	0.959
The use of information technology has eased the procurement process	65	1	5	3.15	0.983
IT has enhanced smooth coordination across the branches	65	1	5	4.18	0.755
IT has enhanced information flow in the organization	65	1	5	4.02	0.798

The respondents were unsure when asked whether all the employees effectively used the information technology platforms in the procurement process (3.39) and whether the use of information technology had eased the procurement process (3.15). The researcher therefore deduced that information technology influences procurement process efficiency at

NHIF. Further, there was a higher dispersion on the responses on whether employees effectively use IT platforms as shown by the standard deviation value (1.117). The study interpreted this dispersion to mean greater variation on use of IT platforms within the organization. The other propositions on average had standard deviations of <1.000 which was interpreted as a general convergence of responses on the particular responses. From the correlation analysis it was established that there was a fairly weak positive relationship between information technology and procurement process efficiency ($r = 0.367$). The weak positive relationship implies that high levels of procurement process efficiency can be associated to some extent to the information technology used by the organization. Based on these findings, the study concluded that there is a significant relationship between information technology and procurement process efficiency at NHIF. The study therefore concluded that NHIF should therefore invest more on its information technology platforms in order to enhance its procurement process efficiency. The findings are in agreement to those of Rusek (2006), who found that the digitalization of information and data, as well as the opportunities offered by the Internet, provides the basis for rationalization and improved efficiency in administrative processes for private sector procurement companies.

CONCLUSIONS

The study concluded that adequate staff training, staff motivation, negotiation terms, staff deployment, staff skills and abilities all had significant influence on the procurement process efficiency. The organization therefore needs to enhance staff training on the procurement process in order to enhance its efficiency. It was also concluded that staff competence plays a significant influence on procurement process efficiency. Further, it was concluded that the organization has put in mechanisms to ensure time delivery of requisitions, it has invested on systems aimed at reducing wastage and damages, it has in place a quality and competence inspection team that monitors quality and that the organization has measures to ensure consistent product quality across its branches. The organization should thus ensure all the employees in the procurement function understand the quality management standards and put in measures to reduce quality complaints. Finally, the study concluded that the organization had embraced information technology, it uses e-procurement processes in its procurement function, its use of e-procurement had improved transaction time and accuracy of requisitions, its use of information technology had enhanced smooth coordination of procurement activities across the branches and that use of information technology had enhanced information flow in the organization. It was thus concluded that information technology has a significant influence on the procurement process efficiency at NHIF. After drawing inferences in line with the study objectives, the researcher has proposed pertinent recommendations.

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