INFLUENCE OF INNOVATION PROCUREMENT PRACTICES ON PERFORMANCE OF NATIONAL SOCIAL SECURITY FUND IN KENYA

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ABSTRACT

Rapid and revolutionary changes in technology have created an increasingly information-centric global economy, where knowledge has become a key factor in competitiveness. The challenge for many firms today is how to adopt an IT system that can withstand these rapid and revolutionary changes. Primary data was gathered using semi-structured questionnaires where the respondents were issued with the questionnaires. Descriptive research analysis was used. The findings provide a plethora of practical insights into why the Kenyan public sector is marred with instances of quality issues for iinovative buys. It established that majority of the employees from both user and procurement departments in NSSF do not possess adequate skills and competence to conduct public procurement for innovations. Policy and practice for procurement for innovation should be carefully evaluated and the results of that evaluation fed back into improved approaches. The government should create supporting structures of expertise with the help of public authorities that have R&D-review as core business and introduce clear incentives to procuring public authorities (the procuring entity) by stating that one percent of the total volume of procurements should be allocated to innovation procurements.

Key Words: *Innovation communication technology, Innovation, Procurement, Public Procurement, Quality, Supplier capability, Technical requirements, tendering methods and Training of staff*

INTRODUCTION

The importance of proper management of procurement is highlighted by the fact that it account for substantial portion of firm's resources and time (Naief, 2002). In such a highly competitive environment nowadays, it is necessary for every firm to maintain an efficient and effective procurement to cut administration cost and to keep abreast of the market condition to procure material and services at the right price, quality and time. Traditionally, firms use paper based system to procure materials and services by searching for material from paper based catalog provided by suppliers through telephone and fax. The traditional material procurement process involves generation, copying and transfer of many paper documents (Heng, et al. 2002).

Innovation procurement is the application of Internet technology as well as encouraging staffs initiatives in material and service procurement. It involves the use of various forms of Information Technology (IT) to automate and streamline the procurement process, improving efficiency and transparency, thereby reducing the cost of operation within and between business parties (De Boer, Harink & Heijboer, 2002). Even given the potential benefits of e-procurement, many organizations especially within the developing economies have not effectively embraced the practice. The emergence of electronic marketplace also called e-marketplaces or market

spaces especially internet-based ones, changed several of the processes used in trading and supply chain. These changes, driven by information technology resulted in: in greater information richness of transactional and relational environment; lowering of information search costs for buyers; greater temporal separation between time of purchase and time of possession of physical products in the e-marketplace; greater temporal proximity between time of purchase and time of possession of digital products purchased in the e-marketplace; the ability of buyers and sellers to be in different locations. Therefore, an electronic market system is an inter-organizational information system that allows the participating buyers and sellers to exchange information about prices and product offerings (Bakos, 1991).

In Kenya a wide range of organizations are struggling to adopt information and communication technology in their procurement functions despite proven benefits (Kinyanjui & McCormick, 2002). According to Mitra, Laka and Abdulla (2000) the most common forms of e-commerce in the Kenya market are e-procurement, e-Banking and of late embanking. Of the three, e-procurement which is a user friendly; Internet based purchasing system has generated a lot of interest due to its ability in improving efficiency and transparency (Nikolaos, Poulos & Bokos, 2006). According to Kinyanjui and McCormick (2002) only 33% of firms have implemented e-procurement as a strategy to improve services in Kenya.

In Kenya, public procurement takes up about 10% of GDP (OECD Report, 2007). In 1986, a study was conducted by SGS Consultants to evaluate public procurement systems in Kenya and the major finding was that public procurement was not operating efficiently and that the state was losing a lot of money through shoddy deals. The report strongly indicated the need for reforming the public procurement system in the country. The environment of public sector purchasing has become more complex than ever before (OECD Report, 2007).

The public procurement system has undergone significant evolutionary stages. In the past, the system was characterized by raised allegations of unscrupulousness in public financial management which include poor quality, corruption, rent seeking and underhandedness between public officials and the business community, making procurement commitments without funds or just because funds are available, wasteful usage of government supplies, poor implementation of donor-funded proposals due to procurement related inefficiencies, lack of procurement planning, absence of procurement records, and lack of proper policies and procedures (Marron, 2003).

STATEMENT OF THE PROBLEM

The popularity of the Internet has significantly influenced organizations' intentions to use new inter-organizational systems (IOS) technologies such as innovation procurement. Procurement is an important part of the supply chain and does not only affect external stakeholders but also internal stakeholders. This entails that it has potential to add value not only to the external side of the supply chain but also to the internal supply chain. The electronic application of procurement (e-procurement) has had many benefits to organizations such as cost savings and profits

(Systems Union, 2006). Given the highly competitive environment due to factors such as globalization and technological advancements, it has become inevitable for companies to implement systems of doing things in a much more efficient, effective, easier and faster way. E-procurement is certainly a way of using the internet to achieve these objectives and its effect on the procurement department would be a good indicator of how other departments are being affected (Presutti, 2003).

According to PWC report, the NSSF has in its books a Sh 1.94 billion outstanding doubtful debts, including Sh 251.51 million it invested in Euro bank and unremitted rental income of Ksh 30.68 million collected from tenants in Bruce house, view park towers and Nyayo Estate (Serekan, 1992). NSSF audit report for the year ended June 2011 qualified that the fund also lost Sh. 64.14 million in the irregular disposal of three plots in Kikambala-Mombasa. NSSF lost the money by awarding tender to the lowest bidder who paid sh 633.7 million against the Shs 697.8 million deemed as the reasonable price (Serekan, 1992).

Locally, studies which have been done in an attempt to study quality in procurement include Obiero (2008) did a study on the challenges in the implementation of the 2005 procurement act on the Kenyan Ministry of Higher Education, Science and Technology while Kiburi (2008) conducted a study on the factors influencing the implementation of e-procurement among firms listed on the Nairobi Stock Exchange. LePine (2005) did a study on procurement performance measurement systems. Vinnova (2009) studied internal factors affecting efficiency of Procurement of Kenya Prisons Service. However, evidence of the studies focusing on the influence of procurement practices on organization performance is lacking. Thus this study aims to bridge this knowledgeable gap by investigating the influence of innovation procurement practices on organization performance with focus to National Social Security Fund.

GENERAL OBJECTIVE

The main objective of the study was to investigate influence of innovation procurement practices on performance of National Social Security Fund.

SPECIFIC OBJECTIVES

1. To explore if training of NSSF procurement staff members influences procurement performance.
2. To determine if capability of suppliers engaged by NSSF's procurement function influences procurement performance.
3. To assess if management styles and decision making influences procurement performance.
4. To determine if the ICT infrastructure in place influences procurement performance.

LITERATURE REVIEW

Adaptive Structuration Theory

Adaptive Structuration Theory is based on Anthony Giddens' Structuration theory. This theory is formulated as "the production and reproduction of the social systems through members' use of rules and resources in interaction". DeSanctis and Poole adapted Giddens' theory to study the interaction of groups and organizations with information technology, and called it Adaptive Structuration Theory. AST criticizes the technocentric view of technology use and emphasizes the social aspects. Groups and organizations using information technology for their work dynamically create perceptions about the role and utility of the technology, and how it can be applied to their activities. These perceptions can vary widely across groups. These perceptions influence the way how technology is used and hence mediate its impact on group outcomes (Hanley, 2002).

Mahmood (2010) further proposed an "adaptive structuration theory" with respect to the emergence and use of group decision support systems. In particular, they chose Giddens' notion of modalities to consider how technology is used with respect to its "spirit". "Appropriations" are the immediate, visible actions that reveal deeper structuration processes and are enacted with "moves". Appropriations may be faithful or unfaithful, be instrumental and be used with various attitudes (Mahmood, 2010).

Institutional Theory

Institutional theory examines how external pressures influence a company (Hirsch, 1975). Within institutional theory, there are three forms of isomorphic drivers namely, coercive, normative, and mimetic (DiMaggio and Powell, 1983). Coercive isomorphic drivers occur from influences exerted by those in power. Institutional theory can be used to study how a company addresses green issues due to external pressures (Jennings and Zandbergen, 1995), and thus institutional theory has become a major research direction to explain environmental related practices (Lounsbury, 1997). Government agencies are an example of powerful institutions that may coercively influence the actions of an organization through, for example, fines and trade barriers (Rivera, 2004). Normative isomorphic drivers cause enterprises to conform in order to be perceived as having legitimate organizational activities. Social normative pressures can explain environmental management practices among enterprises (Ball and Craig, 2010). Mimetic isomorphic drivers occur when enterprises imitate the actions of successful competitors in the industry, in an attempt to replicate the path of their success (Aerts et al., 2006).

Resource Dependence Theory

Resource dependence theory (RDT) suggests that, in the supply chain, member firms should be dependent and collaborate to seek higher performance gains in the long-run instead of pursuing short-term benefits at the expense of others. In RDT, firms are dependent on resources provided

by others in order to sustain growth, as well as other organizations who may be dependent on them (Paloviita and Luoma-aho, 2010). One important assumption of the RDT is that firms cannot be fully self-sufficient with regards to strategically critical resources for survival.

In SCM, eco-design of products and materials recovery are exemplary organizational resources requiring supply chain partnership to effectuate performance benefits (Shang et al., 2010; Zhu and Sarkis, 2005). These resources can also be converted to relationship-specific assets, similar to those identified in transaction cost economics, on which partner firms depend to generate sources of advantages. On the other hand, firms need to control or access critical resources, e.g., standards, procedures, enabling technologies, materials sources, and distribution channels, to implement SCM practices and fully realize the potential gains.

Information Theory

This theory argues that companies seek to communicate their environmental performance to outside stakeholders, but may not always find this easy to do since they may lack full knowledge of the products, processes and materials flowing through their supply chains. Typically, suppliers may hold more information about their environmental performance and the performance impact is to be experienced by the customers. A major advantage of greening supply chains is derived from the capability to market and sell green products. Such capability potentially develops new products and hence builds competitive advantages for enterprises. Yet, companies may not be able to reap this image benefit due to the information asymmetry arising from consumers' inability to discern how green the products or materials from the supply chain are (Delmas and Montiel, 2009).

Perceived Influence of Innovation Procurement Practices on Organization Performance

Training of Procurement staff

Hanley (2002) in Uganda did research on explaining non-compliance in Public Procurement in Uganda. One of the objectives was to investigate if lack of professionalism is responsible for non-compliance of procured supplies. Rothwell, and Zegveld, (1981) previously revealed that lack of professionalism was hi gh amongst public procurement officers in Uganda and this can still be attributed to the fact that the profession is still young in Uganda. Basheka and Bisangabasaija (2010) who state that the level of professionalism in public procurement is low or non – existent confirm this position.

Bandura, (1997) collected data from the respondents who were procurement officers using a structured self –administered questionnaire. Professionalism was measured using 12 items obtained from the works of Nyiri, et al., (2007), Serekan, (1992) and Basheka, and Bisangabasaija, (2010). These items covered integrity, confidentiality, being ethical, matters relating to conflict of interest, competencies in the area of procurement and level of procurement knowledge.

The study population was the 120 Central Government Procuring and Disposing Entities (PDEs). The list of the entities was obtained from the Public Procurement and Disposal of Public Assets Authority (PPDAA). Consistent with OECD (2006), the sample size selected was 92 randomly selected from the population in order to give each entity and equal chance of being selected. Their finding was that familiarity with procurement regulations and professionalism explain 52.4% of the variation in compliance with procurement regulations.

Capability of suppliers

The shift towards more complex supply chains requires deeper understanding of value chain structures and industry capabilities. More extensive management skills are needed at the buyer's side to understand suppliers' potential to respond to demand signals for new innovations (Schapper et al., 2006). While from an innovation promotion perspective relationship based management approach would be called for, it is clear that it there is a risk to encourage favoritisms, oligopoly and artificial creation of barriers to new entrants (Caldwell et al 2005).

Arrowsmith (2002), in the United States did research on Purchasing Performance standards where they stated that purchasing managers need to periodically evaluate supplier performance in order to retain those suppliers which meet their requirements in terms of several performance criteria. The evaluation element typically consists of identifying the attributes, criteria, or factors relevant to the decision and then measuring or rating each vendor by considering each of the relevant factors. Three outputs (performance indicators) and three inputs (supplier attributes) were used for analysis. The traditional, indicators/ attributes of product price, shipment quality, and delivery compliance were used for supplier performance. The methodology proposed was applied to the supplier selection process of a medium-sized manufacturer of bottling machinery and complete packaging lines.

The firm's production program includes the design and manufacture of a range of equipment to handle plastic containers, another group of equipment to handle glass containers, and a third type which can be used for both plastic and glass containers. Machines and bottling lines are specially designed and manufactured for the mineral water, soft drink, fruit juice, wine, beer, liqueur, and pharmaceutical industries. The company has an annual sales volume of $43 million and employs 240 individuals (60 in technical departments). More than 20 suppliers were available in the marketplace for this type of component. The analysis was carried out on 23 suppliers as the sample size. The attributes measured included management capabilities, facilities and capacity, technological capabilities, price, quality and delivery compliance. Supplier four had the highest points for the best performances with respect to the three components identified.

Management Styles

Valovirta (2012), in Spain did research with an objective of determining if the implementation of quality management purchasing had a positive impact on business performance. The sample

frame consisted of 1,200 purchasing managers who were selected from the Dun and Bradstreet database of the largest manufacturing companies in Spain. Purchasing managers were determined as the most appropriate respondents, because they are most familiar with their organization's purchasing practices and performance outcomes. The respondent sample was composed of high-level purchasing executives, including 145 directors of purchasing (48%), 89 general managers of purchasing (29%), 19 purchasing managers (6%), and 45 "other" titles (17%). An important finding was that the extent of adoption of quality management purchasing has a direct positive impact on improving internal customer satisfaction and indirectly business performance. Therefore, it was found that the implementation of the practices included in the constructs of management commitment contribute to improve the quality of materials purchased.

ICT infrastructure

Marron, (2003) in Greece did a research with and their objective was to proof the hypothesis that ICT investment makes no contribution to business performance. The sample of the survey was randomly selected from the database of ICAP and consisted of 304 Greek companies from the 27 most important sectors of Greek economy. In this sample there was equal representation of the small, the medium and the large companies: in particular, 103 of these companies were small (with more than 10 and less than 50 employees), 103 were medium (with more than or equal to 50 and less than 250 employees) and 98 were large (with more than or equal to 250 employees). Additionally two similar samples were also created (with the same percentages of small, medium and large firms, and the same percentages of companies from the above 27 sectors). The hypothesis was rejected meaning that in Greece the ICT investment makes a statistically significant positive contribution to business performance.

RESEARCH METHODOLOGY

Research Design

Orodho (2003) defines a research design as the scheme, outline or plan that is used to generate answers to research problems. According to Kombo and Tromp (2006), research design can be thought of as the structure of research. This study employed a case study to investigate influence of innovation procurement practices on performance. A case study is a strategy of investigating a phenomenon within its real life context. The descriptive method of research was used for this study. For this research, two types of data were gathered. These include the primary and secondary data types. The primary data was derived from the answers the participants expressed during the survey process to determine the key variables. The secondary data on the other hand was obtained from income sheets on the banking industry used for review of financial statements to determine financial performance. With the use of the survey questionnaire and published literatures, however this study employed both qualitative and quantitative approach of research.

Target Population

Target population as described by Borg and Crall (2009) is a universal set of study of all members of real or hypothetical set of people, events or objects to which an investigator wishes to generalize the result. The target population of this study was NSSF while the study population was top management staff, middle and lower management staffs who deal directly with the day to day operations at the NSSF. Mugenda and Mugenda (2003) explained that the target population should have observable characteristics to which the researcher intents to generalize the result of the study. This definition assumes that the population is not homogeneous.

Sampling Technique

The sampling plan describes the sampling unit, sampling frame, sampling procedures and the sample size for the study. The sampling frame describes the list of all population units from which the sample will be selected (Cooper and Schindker, 2003). The study employed stratified random sampling technique in coming up with a sample size of 117 respondents from a total of 390 from NSSF. The study employed 30% in sampling. Stratified random sampling is unbiased sampling method of grouping heterogeneous population into homogenous subsets then making a selection within the individual subset to ensure representativeness. The goal of stratified random sampling is to achieve the desired representation from various sub-groups in the population. In stratified random sampling subjects are selected in such a way that the existing sub-groups in the population are more or less represented in the sample (Mugenda & Mugenda, 2003).

Data Collection Methods and Instruments

The study employed a questionnaire to collect primary data. Questionnaires are appropriate for studies since they collect information that is not directly observable as they inquire about feelings, motivations, attitudes, accomplishments as well as experiences of individuals (Mellenbergh, 2008). The questionnaire comprised of both open and close-ended questions. Franker (2006) stated that a questionnaire is useful in obtaining objective data because participants are not manipulated in any way by the researcher. According to Franker (2006) questionnaires have the added advantage of being less costly and using less time as instruments of data collection.

The data instrument addressed the four research objectives while it was sub-divided into two sections. The first section of the questionnaire enquired general information about the respondents, while the next sections answered the four objectives. The researcher involved three research assistances to help in distribution of question to the targeted respondents. The questionnaires were administered through drop and pick later method. The quantitative section of the instrument employed used both a nominal and a Likert type scale format to determine each of the variables. A 5 point Likert scale ranging from 1 to 5 was used as answers to statement like questions. The Likert - type format is selected as the format yields equal - interval data, a fact

that allows for the use of more powerful statistical to be used to test hypotheses (Kiess and Bloomquist, 2008).

Data Analysis and Presentation

Before processing the responses, the completed questionnaires were edited for completeness and consistency. The study generated both qualitative and quantitative data. Quantitative data was coded and entered into Statistical Packages for Social Scientists (SPSS Version 17.0) and analyzed using descriptive statistics. Qualitative data was analyzed based on the content matter of the responses. Responses with common themes or patterns were grouped together into coherent categories.

Descriptive statistics involved use of absolute and relative (percentages) frequencies, measures of central tendency and dispersion (mean and standard deviation respectively). Quantitative data was presented in tables and graphs and explanation was presented in prose. The study also used inferential statistics, which will involve coefficient of correlation and multiple regression analysis, to establish influence of innovation procurement practices on performance. Specifically, the study used spearman correlation to establish relationship between innovation procurement and organization performance. The correlation coefficient was two-tailed as the relationship outcome expected was either positive or negative and at 95% confidence level.

The regression equation is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where;

Y-Is the dependent variable (Procurement performance)

β_0-the regression model constant (Y-intercept)

β_1-β_4- Beta coefficients of the explanatory variables

X_1- Training of Procurement Staff

X_2- Supplier capability

X_3- Management styles

X_4- ICT infrastructure

ε- The error term assumed to have zero mean and independent across time periods.

DATA ANALYSIS AND INTERPRETATION

In this study a multiple linear regression model was implemented to identify the relationship between the four independent variables and the dependent variable which is the quality of innovative goods and services procured. The researcher applied the statistical package for social sciences (SPSS) to code, enter and compute the measurements of the multiple regressions for the study. The finding of the study is as shown in table 1 below.

Table 1: Model Summary

Model	R	R Square	Adjusted R^2	Std. Error of the Estimate
1	.760[a]	.577	.559	0.69097

a. Predictors: (Constant), There is no proper ICT infrastructure to handle the procurement process properly and efficiently, Supplier capability makes no contribution to quality of goods procured, Top management are committed to staff development and career enhancement, Technologies allow organizations to respond better to existing challenges and improve the anticipation of future developments

All the four independent variables that were studied, explain only 57.7% of the implementation of organization performance as represented by the adjusted R2. This therefore means that other factors not studied in this research contribute 42.3% of the organization performance. Therefore, further research should be conducted to investigate the other influences of innovation procurement practices (16.6%) towards organization performance.

Analysis of Variance (ANOVA)

In trying to test the significant of the model, the study used ANOVA. From table 2 the significance value is 0.001 which is less that 0.05 thus the model is statistically significance in predicting how staff training, capability of suppliers, top management commitment and ICT infrastructure influence organization performance. The F critical at 5% level of significance was 2.47. Since F calculated (value =3.916) is greater than the F critical, this shows that the overall model was significant.

Table 2: Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.196	4	0.249	3.916	.001
	Residual	1.762	93	0.034		
	Total	1.958	97			

a. Dependent Variable: satisfaction with innovation procurement
b. Predictors: (Constant), There is no proper ICT infrastructure to handle the procurement process properly and efficiently, Supplier capability makes no contribution to quality of goods procured, Top management are committed to staff development and career enhancement, Technologies allow organizations to respond better to existing challenges

Multiple Regression

As per the SPSS generated as shown in table 4.10, the equation;

$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \varepsilon)$ becomes:

$Y = 1.830 + 0.165\ X1 + 0.385X2 + 0.118\ X3 + 0.502\ X4$

The regression equation above has established that taking all factors into account (capability of suppliers, top management commitment and ICT infrastructure) constant at zero, organization performance will be 1.830. The findings presented also shows that taking all other independent variables at zero, a unit increase in Staff competency will lead to a 0.165 increase in organization performance; a unit increase in Capability of suppliers will lead to a 0.385 increase in organization performance; a unit increase in top management commitment will lead to a 0.118 increase organization performance and a unit increase in ICT infrastructure will lead to a 0.502 increase in organization performance.

Table 3: Regression Coefficients

	Unstandardized Coefficients		**Standardized Coefficients**	**t**	**Sig.**
	B	**Std. Error**	**Beta**		
(Constant)	1.830	6.385		13.756	.000
Staff competency	.165	.063	.176	-2.633	.010
Capability of suppliers	.385	.043	.677	8.877	.001
Commitment of top managers	.118	.032	.252	3.667	.002
ICT infrastructure	.502	1.344	.748	9.824	.000

a. Dependent Variable: satisfaction with innovation procurement

This infers that ICT infrastructure influence organization performance most followed by capability of suppliers, then Staff competency while top management commitment had the least influence on organization performance. This notwithstanding, all the variables were significant as their P-values were less than 0.05. According to von Hippel (2004) to in the case of non regular public procurement such as innovative public procurement, the conditions are not the same as in regular procurement. In contrast to mainstream economics, innovation theory treats public innovative procurement as a special case of user-producer interaction. This means that the process is not regarded as the result of anonymous market process as a mainstream economics perspective would suggest, but as the result of user- producer cooperation and information sharing. This understanding is also emphasized in the systems of innovation, where innovation is seen as a complex and interactive process influenced by many factors such as employee training,

suppliers involvement, top management commitment, infrastructures among other factors and due to these characteristics, firms almost never innovate in isolation (Edquist, 2007).

Summary of the Findings

The objectives of this study were to explore if training of NSSF procurement staff members influences procurement performance, to determine if capability of suppliers engaged by NSSF's procurement function influences procurement performance, to assess if management styles and decision making influences procurement performance and to determine if the ICT infrastructure in place influences procurement performance.

Staff training

The study revealed that requisitioners and user departments are neutral on the quality of innovative goods and services procured by the procurement department. According to Vinnova (2009) he suggested that this staff competence includes technical competence of the innovation as well as competence to manage the procurement process. This whole process is usually left to procurement professionals. However, in many cases, the procurers are not the users of the innovation so may not fully understand the need of innovation. This may result in the production of a tender specification that does not satisfy the needs of the innovation.

The study further revealed that majority of the employees in the procurement department were not members to any procurement professional body e.g. CIPS, that had no working knowledge of other languages other than English thus limiting their potential in global procurement, most of the staf members are experienced indicated by the majority age, they are poorly renumerated as professionals, most don't have motivation in terms of promotions and in-house training and seminars are not often conducted. The research also established that most staff have their highest level of education as Higher National diploma. Most of the respondents agree that staff training competency affects quality of innovative goods and services to a moderate extent.

Lawson and Squire (2006) did a research and established that purchasers with high skills and knowledge have a significant impact on financial performance and operational efficiency in terms of quality improvement, design and reduction of lead times. This was similarly supported by studies done by Rothwell and Zegveld (1981), where they stated that whereas relatively little in-house competence is needed when procuring off-the shelf goods for the lowest possible price, greater competence of procurers is required to encourage suppliers to innovate.

Capability of Suppliers

The study established that the firms had suspended an average number of suppliers in the last one year, they had issued substantial amount of contracts single suppliers in the last one year; few respondents stated that there is a supplier development programme in place and that suppliers are not involved in most innovative procurement at the initial stages. However most agreed that

capability of suppliers affects quality of innovative goods and services to a great extent. They disagreed that supplier capacity makes no contribution to quality of innovative goods.

To mitigate technological risks in procurement for innovations, Zsidisin and Smith (2005) proposed a range of measures around 'early supplier involvement' that may reduce uncertainties and help to ensure that suppliers keep on track. They advice to ensure alignment between designs and capabilities early in the design cycle, where feasible supported by scorecards to track current supplier performance for determining if they should be invited to participate in new ESI projects. They also recommend to check for supplier capacity constrains trough measures such as sharing future demand developments with potential suppliers early on, providing in- house market intelligence to screen potential suppliers, and to consider second sourcing or at least a stand- by supplier, at least for the conventionally procured products. Moreover, some researchers state that more extensive management skills are needed at the buyer's side to understand suppliers' potential to respond to demand signals for new innovations (Schapper et al., 2006).

Top Management Commitment

The study established that commitment of top management affects the quality of innovative public procurement process to a great extent. The study also found that top management are committed to staff development and career enhancement, they are committed to perform change management for smooth transition, they encourage collaborative relationships with supplier for innovative procurement, they make efforts to standardize the procurement processes, they make efforts to establish quality assurance management systems and that the implementation of the practices includes the constructs of management commitment contribute to improve the quality of materials purchased.

The study further revealed that top management make efforts to encourage adherence to legislative procurement procedures and requisition development, and are willing to take accountability for innovative procurement actions and requisitioning. In addition, top management makes efforts to streamline record management systems and that performance reporting is required by management sometimes. Finally the research established that all solicitations processes involving innovations were approved by management before commencing the process and that there is a limited budget provision for research and development (R&D). Empirical research in TQM has evidenced that cross-functional coordination and management commitment are positively correlated with quality performance and service quality (Curkovic et al., 2000), and that company performance is positively correlated with personnel management (Carter et al., 2000) and benchmarking (Carr & Smeltzer, 1999).

ICT Infrastructure

The study revealed that ICT Infrastructure affects implementation quality of public procurement for innovations to a very great extent. Most respondent stated that ICT investment makes no

contribution to business performance, that new technologies are promising to save costs, to improve customer and supplier relationships, business processes and performance, and to open new business opportunities; and that technologies allow organizations to respond better to existing challenges and improve the anticipation of future developments.

The study further indicated neutrality on whether technology (IT) infrastructure may contribute to challenges in system specification and agreed that VMI is important as an approach for managing materials and information flows between one or more customers and their immediate suppliers. However, they disagreed that technology provides tools to enable organization operations to consistently procure the best-value materials and services, using unified internet-based sourcing tools and streamlined support for complex negotiations. Previous studies state that the emphasis is on the use of technology to substitute or enhance transactional activities in order to gain operating efficiencies (Essig and Arnold, 2001; Osmondbekov et al., 2002).

In addition, some studies indicate that lack of awareness and readiness by public authorities to understand markets and technologies can be regarded as an additional barrier (Lember et al., 2011). The adoption of ICT can be considered as strategic in so far as these technologies can impact value chains and industries structures and can in particular create value from intangibles in business activities (Kauffman, 2006).

CONCLUSIONS

The study sought to establish influence of innovation procurement practises on performance of national social security fund in Kenya on the part of staff training the study concludes that majority of the employees performing both requisitioning and procurement departments in NSSF, although possessing work experience, they are not adequately skilled which may compromise the quality of innovative goods and services procured. Public procurement for innovations involve a lot of risk thus knowledge and skills possession is of much importance.

On determining capability of suppliers engaged by the NSSF's, the study concludes that there is a moderate percentage of a supplier management initiative. Similarly the study concludes that there is substantial instances of sole source and limited competion, including limited global procurement. The study further concludes that there is a small percentage of buyer-supplier strategic partneship during procurement for innovations. However, there is a general feeling that suppliers' capability affects the quality of innovative goods and services procured to a great extent.

On management styles and decision making influence on procurement performance, the study concludes that commitment of top management decisions and resource allocation towards innovation affects the quality of innovative public procurement process in NSSF to a great extent.

On ICT infrastructure, the study concludes that ICT Infrastructure affects implementation quality of public procurement for innovations to a very great extent at NSSF while ICT infrastructure like extranet and e-purchase order are not implemented which impact on quality of innovative goods and services procured.

RECOMMENDATIONS

On training of NSSF Procurement staff members the study recommends innovation with high social returns on investment; however, because it involves risks and uncertainties the volume of investment in innovation procurement is sub- optimal. But in selected sector and through the utilization of the tools promoted by the amended directives there is now visible progress. Procurers are aware of risks and are, as a rule, risk averse. They have a lot to lose and little to gain, if things go wrong. So the initial way to face risk was through political commitment. Risk management may often exist but implicitly, without formal structure or using the name. Plus, as time goes by, more systematic ways to deal with risk emerge.

On management styles and decision making the study recommends that the internal controls for such procurement for innovation should be put in place to avoid quality issues e.g. address the issue of better organizational set ups to encourage and facilitate the procurement of products and services not yet in the market and manage the associated risk. This may include strategic partnership with suppliers, commitment to R&D, staff motivation, encouraging global procurement and implementing project management for public procurement for innovation to mitigate risks associated with innovation as long as policy makers and legislators have not amended the present laws governing Public Procurement.

On capability of suppliers engaged by the NSSF's procurement function, the study recommends to management of NSSF and the Kenya Public Sector to commit to staff training for both end-users and procurement staff by conducting in-house training and seminars in the procurement profession and keep up with the dynamism in procurement e.g. INCOTERMS 2010, language, contract interpretation etc.

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