

EFFECT OF SUPPLIER APPRAISAL PROCEDURES AND CAPACITY ASSESSMENT APPRAISAL ON ORGANIZATIONAL PERFORMANCE

Mutai Rose Jelagat & Philip Kiprotich Bii

¹Masters Student Jomo Kenyatta university of Science technology and Agriculture
P.O. BOX 3610-30100 Eldoret, **KENYA**

²Garissa University College School of Business and Economics
P.O. BOX 1801-70100 Garissa

ABSTRACT

The study sought to establish effect of supplier appraisal procedures and capacity assessment appraisal on organizational performance. The objectives of the study were to establish supplier appraisal procedures used in Kenya Power Company and to determine effects capacity assessment appraisal on procurement performance. The theories adopted by the study are institutional theory. The study employed descriptive survey design. The area of study was Kenya Power Company (KPC), North rift region. The target population was 168 employees in procurement department and Heads of Departments (HODs) in KPC North rift region. Purposive sampling was used to select HODs and simple random sampling was used to select employees in the procurement department. Questionnaire was used as the main data collection instrument. The data was analyzed using descriptive statistics and correlation analysis. The company has supplier evaluation criteria in place for various supplier categories. There was a strong positive relationship between appraisal procedures and procurement performance. Kenya Power Company conducts site visits to establish supplier capacity, financial stability is an important criterion for selecting suppliers, the company conducts due diligence to establish the capacity of the suppliers, and suppliers are always required to provide proof of their technical competent in order to be considered for the supply. Capacity assessment appraisal was found to have a strong relationship with procurement performance. The study established that value for money is the major consideration in supplier appraisal, the organization settles to supplier after negotiating a fair deal. Recommendations; the organization should therefore invest on modern appraisal criteria that have been proven to have greater procurement performance, pursue capacity assessment techniques that are geared towards long term relationship, in order to save on the cost on regular supplier appraisal.

Keywords: Supplier appraisal procedures, capacity assessment, performance.

INTRODUCTION

Purchasing and suppliers are of major strategic importance to most companies today. This is because a substantial amount of the resources used by a company are made available through its suppliers. Purchasing from suppliers account for more than half of total costs of operation for most companies, this position is normally substantially higher when well analyzed (Gadde and Hakansson 2001), suppliers are important to buying firms not only in financial terms but in risk management and total cost of acquisition and ownership. Supplier selection and evaluation is the process by which organizations identify, evaluate and contract with suppliers. Supplier selection is one part of the value chain that is now considered to deploy tremendous amount of an organization's resources and for this reason, much is expected in terms of high value from suppliers (Beil, 2009).

Logeek (2010) noted that the procurement business function is increasingly recognized as a strategic area of organization performance management. He further noted that for the procurement function to perform optimally, the organization have to get the right supply chain who are innovative and always seek opportunities for continuous improvements. According to BCG (2011) one of the strategies of getting the right supply chain is through appraising the suppliers. Chung et al (2004) noted that the global competitive environment drives organizations to be highly dependent on the success of supplier selection process. Chung et al (2004) noted that any deficiency in coordination of the process will lead to excessive delays and poor customer service. Samli & Browning, 2003) observes that suppliers are manufacturer's external organizations or business partners, and their performance will decide the future performance of the whole supply chain.

Statement of the Problem

Supply Chain Management (SCM) has become a critical factor for the organizations success. Kenya has been undergoing reforms starting with the Public Procurement and Disposal Act 2005 that saw the creation of Public Procurement Oversight Authority, all these reforms are geared towards improving efficiency in public co operations. In order to compete effectively in the world market, a company must have a network of competent suppliers. Supplier assessment and selection is designed to create and maintain such a network and to improve various supplier capabilities that are necessary for the buying organization to meet its increasing competitive challenges. A firm's ability to produce a quality product at a reasonable cost and in a timely manner is heavily influenced by its suppliers' capabilities.

Objectives

- i. To establish effect of supplier appraisal procedures on organizational performance
- ii. To determine effect of capacity assessment appraisal on organizational performance

LITERATURE REVIEW

Capacity assessment

Abubakar & Rajput (2012) noted that supplier development practices are important components of supply chain management. They noted that these practices play key role for bringing improvement in buyer-supplier performance. Krause et al (2007) noted that the increasing dependence on suppliers and the importance they play in both the maintenance of an existing supply chain and the development of future strategic capabilities suggests a growing requirement an organization to effectively manage and develop their suppliers. Mahajan & Sarang (2012) observed that supplier development has two objectives, first to reduce problem of supplier by making immediate changes in the supplier's operations and second to increase suppliers' capability such that suppliers make their own improvement. Clarke (2007) noted that supplier development can be closely linked to the process of regular assessment. Areas requiring improvement can be identified, action plans drawn up and progress monitored. Clarke further noted that the linking of assessment systems to development programmes underlines the dynamic nature of partnerships and emphasized that the overriding concern is for progressive improvement of performance. Monahan (2005) noted that supplier development is one of the strategies used to add value to the supply chain. CIPS (2006) noted that supplier development involves embracing supplier expertise and aligning it to the buying organization's business need, and, where appropriate, vice versa.

Abubakar & Rajput (2012) noted that supplier development practices are important components of supply chain management. They noted that these practices play key role for bringing improvement in buyer-supplier performance. Prahinski & Benton (2004) had earlier indicated that supplier evaluation practices such as site visits are effective mechanisms in improving buyer-supplier relationships performance and that site visits aid the transfer of knowledge and promotes familiarity between the two parties. The study established that the implementation of supplier appraisal results is being hampered by lack of clear structures on supplier appraisal, lack of commitment from the management, limited resources and lack of cooperation from suppliers.

Mungai, (2014) the study sought to establish how supplier appraisal criteria influence procurement performance in real estate industry. The study also established that different supplier evaluation criteria are given different importance when selecting potential suppliers with financial stability, technical competence and quality control and management seen as major criteria in selecting suppliers. Kavale & Mwikali (2012) indicated that the choice of criteria in supplier evaluation and selection process has a great influence on procurement performance and management. This study established that the weighted model is the most popular model used to appraise suppliers. The study also found that a good supplier appraisal model should have the following attributes; provide structures and discipline to the evaluation process, helps avoid selection of unqualified suppliers, reduce subjectivity during the evaluation and should hastens the evaluation and selection process.

Wange & Cho (2007) who argued that apart from the total cost of ownership, financial stability, quality control and technical capability and competence are the most important criteria in selecting suppliers. The study also indicated that the supplier appraisal criteria used when evaluating and selecting suppliers influence the performance of the procurement function.

Supplier approaches

The government of Kenya has a procurement and disposal act (2005) which aims to establish procedures for procurement and the disposal of unserviceable, obsolete or surplus stores and equipment by public entities to maximize economy and efficiency, promote competition and ensure that competitors are treated fairly, promote the integrity and fairness of those procedures, increase transparency and accountability in those procedures and to increase public confidence in those procedures and facilitate the promotion of local industry and economic development, private companies have borrowed a leaf from this policy and are coming up with their own to support fair and competitive supplier engagement.

The methods chosen are extremely important to the overall selection and appraisal process and can have a significant influence on the selection results (Bello, 2003). Arsan (2011) noted that several techniques are used by companies to evaluate suppliers and measure performance. Arsan further observed that the first step in implementing any of the techniques is to determine the attributes that should be considered. A firm should focus on the attributes that it finds most important.

According to Drucker (2005) a best practice is a technique, method, process, activity, incentive, or reward that is believed to be more effective at delivering a particular outcome than any other technique, method, process, etc. when applied to a particular condition or circumstance, with proper processes, checks, and testing, a desired outcome can be delivered

with fewer problems and unforeseen complications. Best practices can also be defined as the most efficient (least amount of effort) and in effective (best results) way of accomplishing a task, based on repeatable procedures that have proven themselves over time for large numbers of people.

Tahriri et al., (2008) notes that the categorical method rates suppliers on several criteria which are then combined into a single score. The authors further note that the categorical model is a simple method, but it is also the quickest, easiest, and least costly to implement. However, it may be influenced by recent events and usually implies a high level of subjectivity and therefore it is imprecise (Petroni, 2000). Arsan (2011) noted that using categorical method in supplier evaluation is the easiest method to implement but suffers from subjectivity. The method does not provide a detailed insight into the supplier's true performance because the attributes being measured are weighted equally. However, Bello (2003) notes that the method is simple and effective especially where the number of suppliers is limited and the number and volume of transactions are small. Tahriri et al (2008) postulated that weighted point model is also easy to implement, flexible, and fairly efficient in the optimization of supplier selection and evaluation decisions. However, it is more costly than the categorical method, but tends to be more objective, even though it relies on the buyer's assessment of the supplier performance.

Bello (2003) observed that weighted point method considers the attribute that are weighted by the purchasing organization where the weight for each attribute is then multiplied by the performance score that is assigned. Finally, these products are totaled to determine final rating for each supplier. According to CIPS (2006) this method is much in use because of the degree of objectivity it tends to bring to the process of evaluation. CIPS further argues that this approach is particularly suited to a quick decision on sourcing for emergency and/or small value imports. Tahriri et al (2008) postulated that weighted point model is also easy to implement, flexible, and fairly efficient in the optimization of supplier selection and evaluation decisions. Tahriri et al however noted that it is more costly than the categorical method, but tends to be more objective, even though it relies on the buyer's assessment of the supplier performance.

According to Arsan (2011) third party appraisals may also be undertaken mostly through a variety of agencies especially when assessing the compliance to quality systems such as BS/EN ISO 9000. Arsan (2011) emphasized the need for conducting site visits in supplier premises. Arsan noted that such visits are essential when appraising potential new suppliers of high value/high risk items or tenders for major projects. This is collaborated by Bello (2003) who observed that site visits enable information provided on a questionnaire to be verified and answers given by the supplier's staff in the course of the visit to be evaluated.

Adobor& McMullen (2007) felt that adoption of modern techniques such as Just in Time would make firms want to buy from few preferred suppliers. In addition, it not only overlooked but failed to address associated shortcomings of the process as challenges with supplier evaluation include resource and cost commitments in establishing and maintaining a robust and effective system, challenges with specifying and gathering meaningful and relevant information, data integrity, scorecards that do not get at the root causes of supplier problems, and subjective or inconsistent scoring which may result in inaccurate assessment.

There are a few studies illustrating the actual occurrence of supplier Performance evaluation. Simpson et al. (2002) found that about half of the purchasing managers in a survey of 299 US

firms used formal supplier evaluation systems. Purchasing Magazine, in a large survey with purchasing managers across the US, showed that 61 % of the companies used formal Performance measurement systems in relation to their suppliers (Morgan 2000). Time, cost and quality are three major factors that are of primary concern to the main parties involved in procurement (Idiako, & Shittu, 2015). Berjis, (2012) proposed the assessment of tenderers on the basis of ten key pre-selection criteria. They are finance, human resources, organization and management, project specific requirements, past experience, past performance, technology, quality system, health and safety system, and equipment. Weightings are assigned to represent the importance of these criteria and different scores are assessed for each criterion. The sum of the products of the weight and the score for each criterion form the multi-criteria scoring model for suppliers' selection.

Gordon (2006) observed that developing a robust, easy-to-deploy method of evaluating suppliers is a critical business competency. Gordon noted that the methodology should be sound and the approach practical. According to Arsan (2011), supplier evaluation may take various approaches which all influence the quality of data obtained from the suppliers which reflect the true picture of the suppliers. Bello (2003) noted that there are many sources which the buyer should use to check or verify the dependability and reliability of each supplier. Arsan (2011) observed that desk appraisal is one of the widely used to collect information about the supplier. Beil (2009) noted that field research is important in supplementing desk research especially when appraising suppliers of high risk/high value products and when long-term, collaborative relationships are under consideration.

Methodology

Research Design

The study adopted descriptive survey design; Creswell (2003) observes that a descriptive research design is used when data are collected to describe persons, organizations, settings or phenomena. The design was therefore be appropriate for assessing the effects of procurement appraisal on performance.

Target Population

The target population for the study was employees in Kenya Power Company who take part in procurement appraisal; these composed of the employees in the procurement department and Heads of departments from various sections. There are a total of 132 employees in procurement department and 36 HODs in the six branches within KPC North rift regional office (HR department Database, 2016), therefore the target population was 168 employees.

Sample size and sampling procedures

The study adopted purposive to select HODs and simple random sampling to select employees in procurement department. The researcher targeted employees in the procurement department, and HODs since they are involved in procurement appraisal. The sample size was determined using the formular proposed by Yamane (1973).

$$n = \frac{N}{1 + Ne^2}$$

Where:

This study allowed the error of sampling on 0.05. Thus, sample size was as follows:

$$n = (N) / (1+Ne^2)$$

$$= 168 / (1+168*0.0025)$$

$$= 118$$

N = Number of Total Population

n = Number of Sample Size

e = Sampling Error (designating to be at the 0.05 significant level)

*Confidence level is 95% or 0.05 of level of significant is chosen for this study

The sampling procedure is indicated in table 1.0

Table 1.0: Sample size

Departments	Designation	Population
Procurement	Procurement officer	12
	Senior purchasing officer	6
	Purchasing officer	18
	Clerks	46
Finance	HOD	6
Audit	HOD	6
Marketing	HOD	6
Maintenance	HOD	6
Human resource	HOD	6
Transport	HOD	6
Total		118

The study used questionnaire as the main data collection instrument.

Data analysis

After the data is collected, it was cleaned, coded into the computer and analyzed with the aid of Microsoft Excel package and Statistical Package for Social Sciences (SPSS) version 21.0. Descriptive statistics; frequencies and percentages were used during the analysis. Correlation analysis was used to explain the relationship between procurement appraisal and performance. Data was presented using frequency tables.

RESULTS

Supplier Appraisal Procedures used in Kenya Power Company

The first objective of the study was to establish supplier appraisal procedures used in Kenya Power Company. The study established that the company has supplier evaluation criteria in place for various supplier categories, as indicated by 53(50.5%) of the respondents who strongly agreed, 48(49.5%) agreed while 4(3.8%) of the respondents disagreed. Most of the respondents 44(41.9%) strongly agreed, 42(40.0%) of the respondents agreed that supplier performance checklist has been developed in the company while 3(2.8%), 1(0.1%) disagreed and strongly disagreed respectively.

The study results revealed that appraisal procedures adopted by Kenya Power Company incorporate sustainability aspects and support supplier performance, as evidenced by majority

of the respondents 49(46.7%) who strongly agreed and 25(23.8%) who agreed while 3(2.8%) of the respondents disagreed. On statement that preference is given to the multidimensional methods of supplier performance, 49(46.7%) of the respondents strongly agreed, 31(29.5%) agreed while 3(3.8%) disagreed. The information is presented in table 4.1

Table 4.1: Supplier Appraisal Procedures used in Kenya Power Company

	SA		A		U-3		D-2		SD-1	
	F	%	F	%	F	%	F	%	F	%
The company has supplier evaluation criteria in place for each category	53	50.5	48	49.5	0	0.0	4	3.8	0	0.0
Supplier performance checklist been developed in the company	44	41.9	42	40.0	0	0.0	3	2.8	1	0.9
Appraisal procedures incorporate sustainability aspects and support the supplier performance	49	46.7	25	23.8	0	0.0	7	6.7	0	0.0
preference given to the multidimensional methods of supplier performance	49	46.7	31	29.5	0	0.0	3	2.8	0	0.0

Effect Capacity Assessment Appraisal on Procurement Performance

The second objective of the study was to establish the effect of capacity assessment on procurement performance. The study established that Kenya Power Company conducts site visits to establish supplier capacity, as indicated by 56(53.3%) of the respondents who strongly agreed, 38(36.1%) agreed while 3(2.8%) disagreed and 4(3.8%) strongly disagreed. It was also established that financial stability is an important criterion for selecting suppliers, as indicated by 73(69.5%) of the respondents who strongly agreed and 31(29.5%) agreed. On the statement that the company conducts due diligence to establish the capacity of the suppliers, 67(63.8%) of the respondents strongly agreed and 25(23.8%) of the respondents agreed.

The suppliers are always required to provide proof of their technical competent in order to be considered for the supply, as indicated by 51(48.5%) of respondents who strongly agreed, 49(46.7%) who agreed while 5(4.7%) disagreed.

Table 2: Response on Capacity Assessment Appraisal

	SD		D		U		A		SA	
	F	%	F	%	F	%	F	%	F	%
The company conducts sites visits to established supplier capacity	4	3.8	3	2.8	0	0.0	38	36.1	56	53.3
Financial stability is an important criterion for selecting suppliers	0	0.0	1	0.9	0	0.0	31	29.5	73	69.5
The company conducts due diligence to establish the capacity of the of the suppliers	0	0.0	0	0.0	0	0.0	25	23.8	67	63.8
The suppliers are always required to provide proof of their technical competence in order to be considered for supply.	0	0.0	5	4.7	0	0.0	49	46.7	51	48.5

Correlation results

The researcher conducted Pearson correlation analysis to establish whether there is a significant relationship between independent variables and dependent variable. The study established a strong positive relationship between all the independent variables and dependent variables. There was a strong positive relationship between appraisal procedures ($r = 0.853$, $p = 0.000$) and procurement performance. This indicates that the appraisal procedure employed by the organization significantly affect procurement procedure. Capacity assessment appraisal was found to have a strong relationship ($r = 0.820$, $p = 0.0001$) with procurement performance. The results indicate that capacity assessment procedures such as site visit, determination of financial stability, need for the suppliers to proof their competence capacity affects procurement performance.

Variables		Procurement performance
Appraisal procedure	Pearson Correlation	.853**
	Sig. (2-tailed)	.000
	N	105
Capacity assessment	Pearson Correlation	.820**
	Sig. (2-tailed)	.001
	N	105

CONCLUSIONS

The company has supplier evaluation criteria in place for various supplier categories. Most of the respondents agreed, supplier performance checklist has been developed in the company. Supplier appraisal procedures adopted by Kenya Power Company incorporate sustainability aspects and support supplier performance. Preference is given to the multidimensional methods of supplier performance. There was a strong positive relationship between appraisal procedures and procurement performance.

Kenya Power Company conducts site visits to establish supplier capacity, financial stability is an important criterion for selecting suppliers, the company conducts due diligence to establish the capacity of the suppliers, and suppliers are always required to provide proof of their technical competent in order to be considered for the supply. Capacity assessment appraisal was found to have a strong relationship with procurement performance.

RECOMMENDATIONS

The study established a positive relationship between procurement appraisal procedure and procurement performance. The organization should therefore invest on modern appraisal criteria that have been proven to have greater procurement performance.

The study established that capacity assessment affects procurement performance. The study recommends that, the organization should pursue capacity assessment techniques that are geared towards long term relationship, in order to save on the cost on regular supplier appraisal.

REFERENCES

- Abubakar, A.H, and Rajbut, A.K (2012) Impact of Supplier Selection on Inventory Handling Performance. *International SAMANM Journal of Marketing and Management* Vol 1, No 1, 44-60.
- Adobor, H., & McMullen, R. (2007). Supplier diversity and supply chain management: A strategic approach. *Business Horizons*, 50, 219–229.
- Arsan (2011). Performance Measurement and Metrics: An Analysis of Supplier Evaluation retrieved from www.scm.ncsm.edu/scm-articles
- Beil, D. (2009). Supplier Selection. *Stephen M. Ross School of Business*, 1-21.
- Bello, M.J.S (2003). *A Case study approach to the Supplier Selection Process*, (Msc thesis) School of Management Systems Engineering, University of the Puerto Rico, Mayaguez Campus.
- Berjis, P. (2012). *Effectiveness of Prequalification Practices in Public Procurement* (Doctoral dissertation).
- Chung, W.W.C., Yam, A.Y.K., Chan, M.F.S., 2004. Networked enterprise: a new business model for global sourcing. *International Journal of Production Economics* 87 (3), 267–280
- CIPS (2006). Contract Management; CIPS Knowledge bytes, retrieved from www.cips.org
- Clark, K. (2007). *Product development performance*. Boston, Harvard Business School Press.
- Creswell, J. W. (2003). Educational research: planning, conducting and evaluating quantitative and qualitative research. Upper Saddle River: Pearson Education in
- Onwuegbuzie, A. J & Leech, NL. (2007). A call for qualitative power analysis. *Quality and Quantity*, 41:105–121.
- Gadde, L.-E. & Hakansson, H. (2001). *Supply Network Strategies*. Chichester: John Wiley.
- Gale, P. (20013). *E-purchasing profiles of adopters and non-adopters*. *International Marketing Management*, Vol 32, No 3, pp 227-233.
- Gordon, S. (2006) *Supplier Evaluation and Performance Excellence: A Guide to meaningful Metrics and Successful results*, Fort Lauderdale.
- Kavale, S & Mwikali, R (2012). Factors affecting the selection of optimal suppliers in procurement management, *International Journal of Humanities and Social sciences*, Vol 2 No. 14.189-193.
- Krause, D.R, Handfield R.B and Tyler B.B (2007). The relationship between supplier development, commitment, social capital accumulation and performance improvement, *Journal of Operations Management*, Vol 25, Iss 2, 528-545.
- Logeek, S (2010) *Analysis of Success factors for Supplier Development*. Published MBA thesis, San Diego State University.
- Morgan, J. (2000), How effective are your measurement systems? *Purchasing*, Vol. 8, December, pp. 26-28.
- Mwichigi, S. N., & Waiganjo, E. W. (2015). Relationship between Outsourcing and Operational Performance of Kenya’s Energy Sector: A Case Study of Kenya Power. *International Journal of Academic Research in Business and Social Sciences*, 5(3), 497-513.
- Petroni, A., (2000), Vendor selection using principal component analysis. *The JSCM*, 1(13):63-69
- Prahinski, C. & Benton, W.C. (2004). Supplier evaluations: communication strategies to improve supplier performance. *Journal of Operations Management*. Vol 22, Iss 1, 39-62.
- Samli, A. C. and Browning, J. M. (2003). Developing competitive advantage: International sourcing as a strategic tool. *Journal of Global Marketing* 16 (4), 35-52

- Simpson, D. Power and D.J. (2002). Use the supply relationship to develop lean and Green suppliers, in *Supply Chain Management. An International Journal*, Vol. 10.
- Tahriri, F., Osman, M. R., Ali, A., Yusuff, R. M., Esfandiary, A., (2008). AHP approach for supplier evaluation and selection in a steel manufacturing company. *Journal of Industrial Engineering and Management*, 1 (2), pp. 54-76.
- Wang, E.T. & Cho (2007). Transaction attributes and software outsourcing success; an empirical investigation of transaction cost theory, *Information System Journal*, Vol.12, No.2. pp.153-81.