

EFFECT OF SUPPLIER APPRAISAL ON PERFORMANCE OF MANUFACTURING FIRMS IN NAIROBI COUNTY, KENYA

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Abstract: With the increased organization performance concerns and awareness among several stakeholders in the manufacturing firms as well as interest groups such as consumer groups, manufacturing sector organizations may find it appropriate to adopt supplier appraisal practices. This study is guided by the lean supplier competence model, shareholders theory, strategic theory and grey system theory. The study is guided by the following objectives, the supplier appraisal criteria, the supplier development, supplier appraisal practices and supplier appraisal approach. The research objectives and research questions set out and the scope of study limited to manufacturing firms in Nairobi County, Kenya. The study used descriptive research design. Data was analyzed using both descriptive and inferential statistics where regression analysis was used to establish the effect of independent variables on the dependent variable. The population census was 455 respondents drawn from manufacturing firms Nairobi county with a sample size population of 213. The data was analyzed with SPSS version 23. Non-probability sampling technique was used. As such, since the purposive non-probability sampling technique would be appropriate. Questionnaires were used to collect both primary and secondary data. Data collected was validated, edited, coded and then analyzed qualitatively. Descriptive statistics such as percentages and frequencies was used to summarize the data. It was established that most of the supplier appraisal indicators have positive impact on performance of the firm. The study findings showed that the four variables had a significant influence on performance of the firms. The study recommended that a similar research should be conducted with an aim at investigating the effects of supplier appraisal on performance with other variables or of other firms in other sectors, including the service industry in the Kenyan market. The study indicated that there has been limited amount of research on effects of supplier appraisal on performance of manufacturing firms in Kenya. Thus, the findings of this study serve as a basis for future studies on supplier appraisal.

Key words: *Supplier Appraisal Criteria, Supplier Development, Supplier Appraisal Practices, Supplier Appraisal Approach, Performance*

Introduction

Organization's ability to provide dependable quality and efficient products and services depends on its access to quality supply of inputs (Cabras, 2011). Market factors are always dynamic, as such, organizations also need to be in constant changes. This is particularly true in competitive and globalized markets. Organizations are progressive and under compression to find methods to reduce input cost and manufacturing costs through engaging in strategic supplier appraisal techniques and evaluation (Christian, 2011). According to Awiro & Gituro (2011) supplier evaluation is perceived as a tool which provides the buying firm with a better understanding of "which suppliers are performing well and which suppliers are not performing well. But studies reveal that even after having carried out an in-depth supplier evaluation plus appraisal coupled with the enactment of Public Procurement and Disposals Act (PPOA) of 2010 and other policies on supplier evaluation, inefficiencies still exist ranging from supplies being made halfway or even termination of contracts before conclusion.

Any organizational success often hinges on the most appropriate selection of its partners and suppliers. Suppliers are an increasingly important activity within most manufacturing firms, and severe financial and operational consequences can result from the failure to optimize the procurement function. Specifically, appropriate suppliers selection is one of the fundamental strategies for enhancing the quality of output of any organization, which has a direct influence on the company's competitiveness and reputation (Manyega, 2015). One of the techniques used by organization to select best suppliers is supplier appraisal. Supplier appraisal is the quantitative and qualitative assessment of suppliers to ensure a portfolio of best in class suppliers is available for use (Grandia, 2015). To sustain effective and reliable sources of supplies, buyers should select their suppliers carefully and evaluate them regularly (Manyenze, 2013).

The concept of supplier appraisal has gained popularity among practitioners and even scholars (Vorster, 2010). In Nigeria, the study conducted by Manal *et al.* (2014) on supply chain practices identified supplier evaluation and a critical supply chain activity that every organization must engage in. In Kenya, the PPOA Act 2010 and procedure 2006 serves as a guide that provides guidelines and procurement procedure and supplier evaluation and appraisal for public procurement entities to ensure judicious, economic and efficient use of state resources ensuring that public procurement is carried out in fair, transparent and non-discriminatory manner. Among other criteria, the Act 2005 states that tenderers and other suppliers should possess the necessary professional and technical qualifications and competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience in the procurement object and reputation; and the personnel to perform the procurement contract. In spite of all these, public institutions such as Universities have never realized the objective of supplier evaluation (PPOA, 2010).

There have been reported concerns that performance of the manufacturing firms have a lot of gray areas in the operations ranging from suppliers failure to meet delivery dates, delivery of inferior materials and even at times failing to furnish the orders completely (choi & Krause 2006). At the same time there is an increasing trend of a number of suppliers even those within the approved list of suppliers demanding payment before the deliveries are made (Manal et al, 2014). The aim of this research study therefore was to find out the effect of supplier appraisal on performance of manufacturing firms in Nairobi County, Kenya.

Statement of the Problem

Suppliers are crucial backers whose operation can influence the entire performance of the organization. The selection of a supplier should follow an elaborate assessment of the effective suppliers since they have magnificent impact in the organization. Delayed deliveries, poor quality goods and services, untimely completion of works is collective scenario experienced by manufacturing firms. PPOA report revealed that 30% of supply chain ineptitudes in the manufacturing and public sector at large in Kenya are triggered by the deficiencies caused by the supplier's. As such most firms have come up with strategies of reducing the issues caused by the suppliers through supplier appraisal and evaluation. In ideal scenarios, supplier appraisal is anticipated to have positive influence on performance. Nonetheless, PPOA reports showed that vendors are in most cases conventionally selected on the basis of lowest price quoted and while quality, time and other important aspects is not taken with great importance. Supplier appraisal is arguably one of the most significant method of ensuring qualified suppliers are given the tenders. It is for this reason that this study focuses on the effects of supplier performance on manufacturing firms.

The study done by Grandia (2015) recommended that manufacturing firms should borrow a leaf from those that have successful proactive procurement functions in place. However, the study did not show the benefits firms stand to gain by adopting proactive supplier practices. Onyinkwa (2013) illustrated that planning of supplier's appraisal is an ingredient to service delivery, but the study focused on service delivery ignoring other measures of procurement like financial gains from cost reduction. On the other hand Singer (2017) asserts that strategic procurement management has a direct impact on the procurement performance of the firms. Tozay (2012) concluded that procurement planning and strategies have a direct positive impact on the performance of organization in delivery of goods and services. The study did not bring out the strategic procurement practices to use to realize these benefits. According to Rioba (2015), the factors affecting supplier selection in Kenya include technical capability, associated costs, organizational profile, quality assessment, risk factors, service levels and the profile of the suppliers. The research also established that in most organizations in Kenya include opacity in the process of selecting suppliers and that it does not involve technocrats from other departments that may be affected by the requisitioned goods or services. Parmenter (2015) in a research on the supplier performance indicators suggested that clear structures should be instituted to ensure defective delivery.

However, despite there being numerous studies done, none of the studies was done to investigate the supplier evaluation criteria and the influence to the organization performance in Kenya. Therefore this study was undertaken to fill the knowledge gap by assessing the effects of supplier appraisal on performance of manufacturing firms in Kenya.

Research Objective

- i. To analyze the effect of supplier appraisal criteria on performance of manufacturing firms in Kenya.
- ii. To establish the effect of supplier appraisal practices on performance of manufacturing firms in Kenya.
- iii. To determine the effects of supplier appraisal approach on performance of manufacturing firms in Kenya.
- iv. To find out the effect of supplier development on performance of manufacturing firms in Kenya.

Theoretical Review

The lean Supplier Competence Model

The Lean Supplier Competence Model was developed by Preuss (2007). Through the model, a gap analysis can be charted and an action plan drawn to bridge the disparity in the organization. The model evaluates the supplier against the five categories supports the Lean techniques of Kaizen – continuous improvement. The Supplier Competency Model explains how organizations interact in the five areas of competency where there is varying degrees of performance ultimately to achieve lean organizational operations. Each category is broken down into specific behaviors or ways the company and the supplier interact with each other. These behaviors are rated from a "1" as "Less Lean" to a rating of a "5" as "More Lean." This measurement allows a company to determine placement of business based on common values and common strategic goals. Using this model, as the business philosophies of the company and the supply base draw together to eliminate waste, the natural result is a reduction of cost to the supply chain and to the ultimate customer (Panagiotis, 2014). This theory is relevant in supplier appraisal criteria since it advocates for competence in the organization. It is particularly important for an organization that is intending to foster lasting supplier relationship and those intending to build strategic partnership with suppliers. The sourcing organizations evaluate suppliers based on certain competence parameters and select the one that it would best work together with (Loeser, 2011).

Shareholders Theory

The motivation of stakeholders in a business management setting reflects current interest in managing the issue of sustainability in inter-organizational relationships, where the firm is generally considered an unsatisfactory unit of analysis and it is necessary to take a whole system, sector based or industry view (Manal et al., 2014). It provides a theoretical lens through which researchers can identify and examine influences that promote survival and legitimacy of organizational practices. Relationships according to stakeholder thinking do not occur in a vacuum of dyadic ties, but as a network of influences involving multiple stakeholders (Weele, 2010). This idea fits with the interest in boundary spanning and stakeholder networks that extends beyond the boundary of the firm or individual who can affect, or is affected by, the achievement of a company.

Zubcic (2011) attributes the source of an increasingly turbulent business environment to a change in the relationship between internal stakeholders (i.e. owners, customers, employees and suppliers), and external stakeholders (i.e. governments, consumer advocates, environmentalists, special interest groups and the media). The diversity of Shareholders theory and its facility for identifying and prioritizing conflicting requirements has rejuvenated interest in the literature particularly in the context of the possibilities of collaborative implementation of sustainable supply chain scenarios (Mickoleit, 2010). This theory supports supplier development considerations the benefits of shareholders and the organization at large.

Strategic Theory

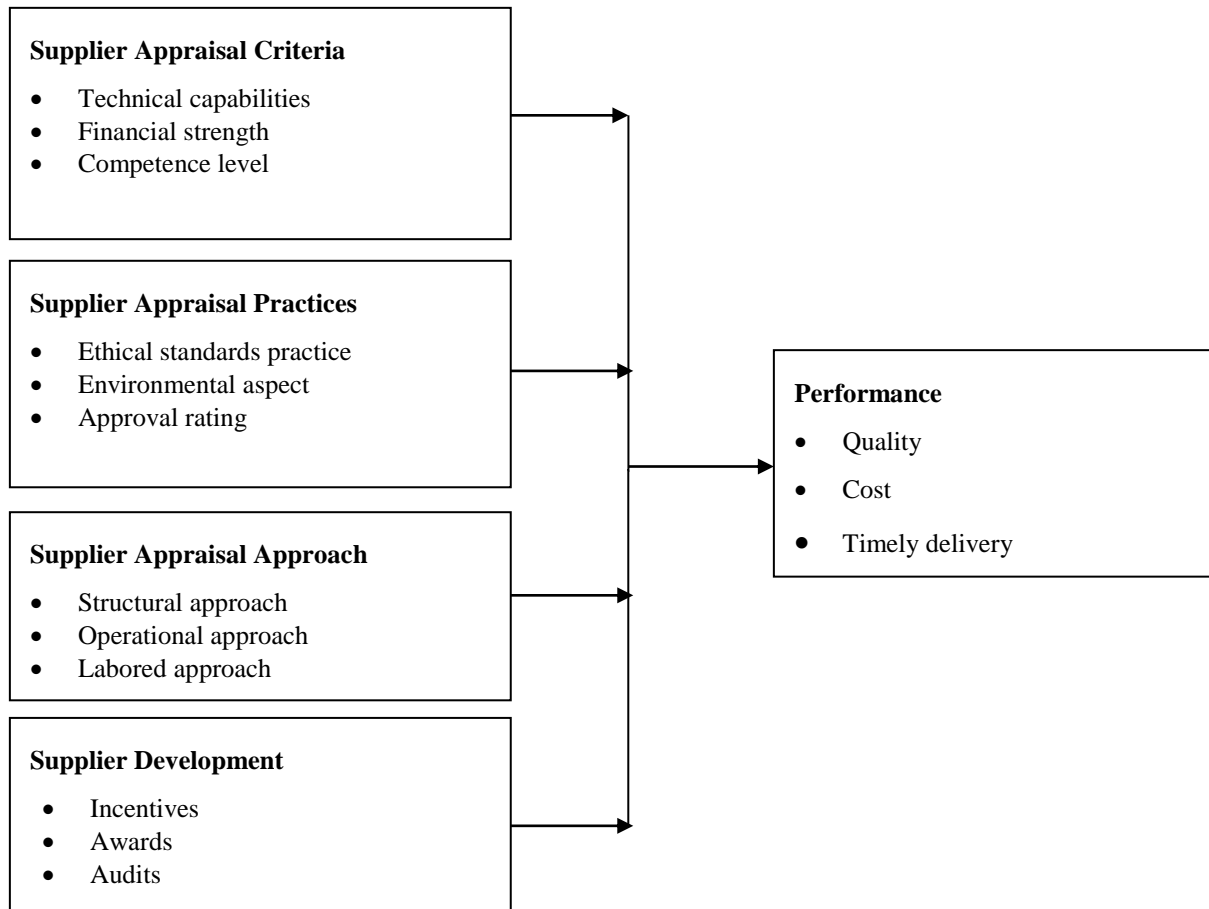
Strategic choice theory considers the interaction between organizational actions and events (Reza, 2013). The integrative approach of strategic choice theory is of importance and beneficial for strategic management of suppliers in the organization, for instance, by stressing cross-functional cooperation and interrelation of vendors in the firm in organizations (Palmer, 2013). Theories enhance research and practice as they help make sense of complex and dynamic environments in the organization (Loeser, 2011). Strategic choice theory depicts the relationship between the suppliers of the firm and firm performance and the overall interaction between environment and organizations. In the context of this study, some of the variables i.e. Strategic Partnerships with Suppliers, and adoption of effective strategic supplier appraisal practices and it focuses on involving the top management critical decision to make these strategic decisions to invest on these practices to improve the performance of their organizations and achieve a competitive advantage. This theory supports the variable supplier appraisal practices by helping understand the influence of performance of a firm.

Grey system theory

According to Grey System Theory, in a practical business environment, in most instances, supplier selection takes place in an environment with less than perfect information. As such, there is some level of uncertainty in the decisions related to supplier selection. In such an environment, it is important to develop certain indicators or criteria; qualitative or quantitative that the supplier can be subjected to before selection. From this theory, the grey correlation analysis model with seven progressive steps was developed (Marett, 2013). These steps include; grey generation aimed at gathering information on grey aspects, grey modeling done to establish a set of grey variation equations and grey differential equations, grey prediction aimed at achieving a qualitative prediction, grey decision, grey relational analysis and grey control (Waithaka, 2012).

The theory of Grey System considers the following factors in deciding on the best supplier; Existence of key factors important to the buyer, the numbers of factors are limited and countable and can be directly attributed to potential suppliers, in dependability of factors and factor expandability. The theory applies the principle of series comparability to generate a grey relation. An evaluation matrix may be developed to facilitate this process. The best supplier is selected by choosing a goal and weighting the values of all evaluation factors based on the characteristics of materials to be sourced based on demand patterns (Manyenze, 2013).

Conceptual Framework



Independent Variable

Dependent Variable

Figure 1 Conceptual Framework

Research Methodology

The study used descriptive research design. Data was analyzed using both descriptive and inferential statistics where regression analysis was used to establish the effect of independent variables on the dependent variable. The population census was 455 respondents drawn from manufacturing firms Nairobi county with a sample size population of 213. The data was analyzed with SPSS version 23. Non-probability sampling technique was used. the study used purposive non-probability sampling technique. Questionnaires were used to collect both primary and secondary data. Data collected was validated, edited, coded and then analyzed qualitatively. Descriptive statistics such as percentages and frequencies was used to summarize the data. Data presentation methods include tables, charts and figures. To determine the extent to which supplier appraisal affects performance of manufacturing firms in Kenya, the following regression equation was adopted:

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

Where: Y = Supplier appraisal, X_1 = Supplier Appraisal Criteria, X_2 = Supplier Appraisal practices, X_3 = Supplier Appraisal Approach X_4 = Supplier development, β_0 = represents the constant term, β_i = 1....4 are the coefficients of the independent variables and ε is the error term

Results

A total of 213 questionnaires were administered, 134 were dully filled and returned making the overall response rate to be 63%. According to Kothari, (2012) a response rate of 50% is adequate for the descriptive study; as such, a response rate of 63% for the study is adequate as per the recommendations.

Demographic Information

The demographic information for the study comprised of the gender, age, position held in the organization and duration of service in the sector.

Table 1 Demographic Characteristics

Demographic Characteristic	Category	Percentage
Respondents Gender	Female	30%
	Male	70%
Respondents Age	Between 20-29 years	18%
	Between 30-39 years	37%
	Between 40-49 years	40%
	Above 50 years	5%
Respondents' Level of Education	PhD	2%
	Masters	8%
	Degree	52%
	Diploma	35%
	Certificate	3%
Respondents Work Experience	Below 1-5 years	12%
	Between 6-10 Years	25%
	Between 11-15 Years	45%
	More than 16 years	18%

Supplier Appraisal Criteria

The research sought to determine from the respondents the extent to which they agree the firms implemented the supplier appraisal criteria in an effort to improve performance in the manufacturing firms. From the research findings, majority of the respondents indicated that they neither agreed nor disagreed that the firms

implemented supplier appraisal criteria based on the average mean of 2.792. Majority of the respondents neither agree nor disagree that the firms focus on financial stability of the suppliers process as shown by a mean of 2.85; the respondents also had moderate stand that the firm technical capabilities of the suppliers guaranteed as shown by a mean of 2.55; respondents also were in moderate agreement on firm is keen in establishing the competence of the supplier in the organization as shown by a mean of 2.55. Majority of the respondents were in moderate agreement that financial strength affect the quality of products as shown by mean of 2.02. Concisely, majority of the respondents agreed Competence level affects performance as shown by a mean of 3.99. This implies that majority of the firms had started recognizing the role of supplier appraisal on enhancing performance with other firms in the manufacturing sector. The findings of this study are in tandem with literature review by singer, (2017) who observed that supplier appraisal criteria that are enhance issues such as using effective purchasing strategies, waste reduction, and budget review and planning of the materials.

Table 2 Descriptive analysis of supplier appraisal criteria

Statements	Mean	Std Dev
Do the firms focus on financial stability of the suppliers	2.85	1.54
Is The technical capabilities of the suppliers guaranteed	2.55	1.43
Do The firm is keen in establishing the competence of the supplier in the organization	2.55	1.32
Financial strength affect the quality of products	2.02	1.23
Competence level affects performance	3.99	1.39
Average	2.792	1.382

Supplier Appraisal practices

The research sought to determine from the respondents the extent to which they agree the firms implemented the supplier appraisal practices in an effort to improve performance function in the manufacturing firms. From the research findings, majority of the respondents indicated that theyneither agreed nor disagreed that the firms have effective supplier practices based on the average mean of 3.31. Majority of the respondents agreed that the firms have implemented environmental aspect when selecting the suppliersas shown by a mean of 3.12; the respondents also had moderate agreement stand that the ethical standard of the supplier crucial before the award of the tender to supplier in the organization as shown by a mean of 2.94; respondents also were in agreement that organization provides the approval rating for key suppliers in the organization as shown by a mean of 3.53. Majority of the respondents were in agreement that ethical measurement affects performanceshown by mean of 3.81 and the respondents were in agreement that approval rating increase quality of products and services shown by mean of 4.17.

This implies that majority of the firms had started recognizing the role of supplier appraisal practices on performance with other firms in the manufacturing sector. The findings of this study are in tandem with literature review by Tozay, (2012) who observed that supplier appraisal practices that are enhance issues such as using effective purchasing strategies, and proper ethical standards that enhances performance.

Table 3 Descriptive analysis of supplier appraisal practices

Statements	Mean	Std Dev
Environmental aspect is considered when selecting the suppliers	3.12	1.32
The ethical standard of the supplier crucial before the award of the tender	2.94	1.3
Do the organizations provide the approval rating for key suppliers in the organization?	3.53	1.45
Do ethical measurement affects performance	3.81	1.4
Do approval rating increase quality of products and services	4.17	1.12
Average	3.314	1.318

Supplier Appraisal Approach

The research sought to determine from the respondents the extent to which they agree the organization implemented the supplier appraisal approach to boost their performances. From the research findings in majority of the respondents neither nor disagreed agreed that the firm has formally introduced operational approach crucial for supplier selection process that enhances performance, as shown by average mean 3.77. Respondents agreed that organization focus on the key structural consideration in the suppliers before selection as shown by average 3.70. The respondents agreed that Labor force of the supplier fundamental before tender allocation as shown a mean of 3.58. The respondents agreed that Cultural approach affects performance of the organization as shown by mean of 3.18. The respondents agreed that Effective Labored approach enhances quality as shown by a mean of 3.64. This implies that majority of the firms have started recognizing the role of supplier appraisal approach in enhancing performance with other firms in the manufacturing sector. The findings of the study are in agreement with literature review by Waithaka (2012), who indicated that supplier appraisal, selection and approach improve productivity and performances of a firm.

Table 4 Descriptive analysis of supplier Approach

Statements	Mean	Std Dev
Operational approach crucial in supplier selection process	3.77	0.181
The organization focus on the key structural consideration in the suppliers before selection	3.70	0.139
Is labor force of the supplier fundamental before tender allocation	3.58	0.189
Cultural approach affects performance of the organization	3.18	0.175
Effective Labored approach enhances quality	3.64	0.162
Average	3.57	0.138

Supplier development

The research requested the respondents to indicate the extent to which they agree the firms has implemented the supplier development in an effort to enhance their performances in the manufacturing sector. From the results, majority indicated that they neither agree nor disagree that the firm had provide incentives to the potential suppliers as shown by a mean of 3.30. The respondents agreed that prequalified suppliers given awards for job well done as shown by a mean of 3.62. The respondents agreed that frequent Audits done to the suppliers of the organization as shown by a mean of 4.07. The respondents agreed that mutual partnership affects performance as shown by a mean of 3.50. The respondents agreed that the Incentives to suppliers affects performance as shown by 3.53. The above findings corroborates with literature review by Sandeep (2007) who indicated that supplier development is achievable through; vendor incentives, random assessment of the suppliers ability and keen handling and verification of the products. According to Eyaa & Oluka (2011), the long term relationship with suppliers is another important aspect of enhancing performance of firms.

Table 5 Descriptive analysis of supplier development

Statements	Mean	Std Dev
Do the organization provide incentives to the potential suppliers	3.30	1.28
Are prequalified suppliers given awards for job well done	3.62	1.27
Frequent Audits done to the suppliers of the organization	4.07	0.95
Mutual partnership affects performance	3.50	1.54
Incentives to suppliers affects performance	3.53	1.45
Average	3.622	1.26

Performance of the firms

The research requested the respondents to indicate the extent to which they agree firms implemented the supplier appraisal to enhance their performances in their firms. From the research findings, majority of the respondents neither agree that; the firms implementation of supplier appraisal positively affects to the performance, As such all the variables have effects on the performance of the firm as an important element in its supplier appraisal. The firms incorporated supplier appraisal also has positive impact on the cost budget, quality and timely delivery as shown in the figure 2 below.

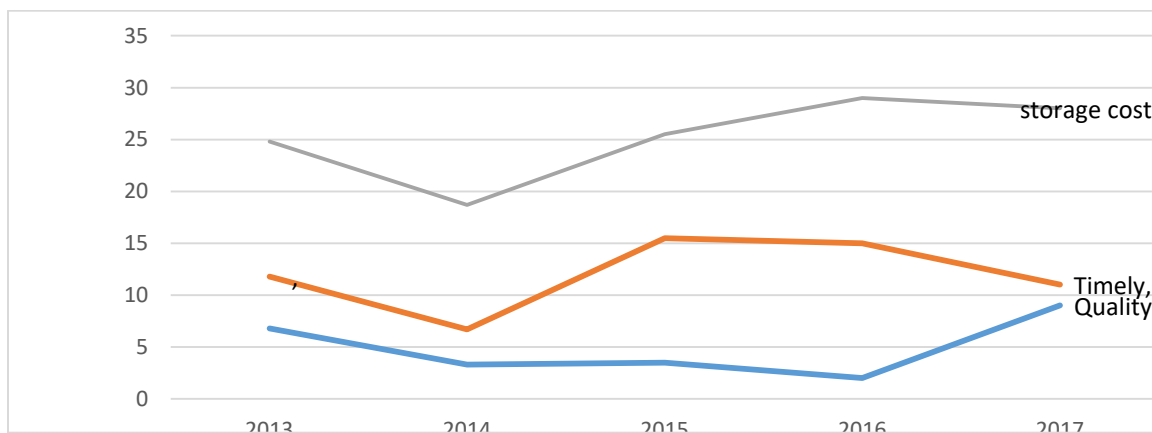


Figure 2 performance of the firms

Correlation Analysis

The study used Pearson correlation analysis to establish the association among the variables used in the study. The results of the study are indicated below.

Table 6 Correlation Matrix

		Supplier Appraisal Criteria	Supplier Appraisal Practices	Supplier Appraisal Approach	Supplier Development
Supplier Appraisal Criteria	Pearson correlation	1			
		.538**			
Supplier Appraisal Practices	Sig Pearson correlation	0.000	1		
		.535**	.613**		
Supplier Appraisal Approach	Sig Pearson correlation	0.003	0.000	1	
		.154**	.373**	.477**	
Supplier Development	Sig Pearson correlation	0.014	0.000	0.001	1
		.493**	.575**	.679**	.576**
Performance	Sig Pearson correlation	0.000	0.000	0.000	0.000

Correlation findings are presented in Table 6 above indicates that the correlation between supplier appraisal criteria and performance at energy firm was 0.493 with a corresponding p value of 0.000. The correlation coefficient was therefore significant and positive implying that if supplier appraisal criteria increases the performance at manufacturing firm also increases. The findings concur with Karimi Namusonge (2014) findings who also revealed that technical capability, financial strength and competitive level affected performance in the manufacturing sector. The results further revealed that the correlation between Supplier appraisal practices and performance at 0.575 with a corresponding p value of 0.000. The correlation coefficient was also significant and positive which implied that if increase in supplier appraisal practices increases the performance of manufacturing firm. This finding conforms to those of palmer (2013) who found out that there is a strong relationship between approval ratings of suppliers and performance of a firm.

The findings also indicate that the correlation between supplier appraisal approach and performance at manufacturing firm was 0.679 with a corresponding p value of 0.000. The correlation coefficient revealed a significant and positive association implying that if supplier appraisal approach increase the performance also increases singer (2017) also emphasizes that the scope of supplier appraisal approach is determine whether the operational approach, structural approach and labored approach. The finding results indicate that the correlation between supplier development and performance on manufacturing firms was 0.576 with a corresponding p value of 0.000. The correlation coefficient revealed a significant and positive association implying that increase in supplier development increases the performance. According to Preuss (2011) incentives and awards and audits are very crucial in enhancing the performance of vendors in the organization.

Multivariate Regression Analysis

A multiple linear regression was conducted at 95 percent confidence ($\alpha=0.05$) to establish the statistical significance of the hypothesized relationships. The findings revealed a relationship $R=0.640$, indicating a strong positive association between supplier appraisal criteria, supplier appraisal practice, supplier appraisal approach, supplier development and performance. $R^2=0.41$ indicate that 41.7% of variation in the performance can be explained by the four variables

Table 7 Multivariate Regression Analysis

Model	R	R^2	Adjusted R^2	Std. error of the estimate
1	0.640	0.417	0.401	0.54908

The result of ANOVA test show that the F value is 43.602 with a significance of p value =0.000 which was less than 0.05, meaning that there is a significant relationship between supplier appraisal criteria, supplier appraisal practices, supplier appraisal approach, supplier development and performance of a firm. The ANOVA statistics at 5% level of significance shows that the value of F calculates(F computed) is 43.602 and the value of F critical (F tabulated) at 4 degrees of freedom and 83 degrees of freedom at 5% level of significance is 2.44. F calculated (F computed) is greater than the critical (F tabulated) ($43.602 > 2.44$), this showed that the overall model was statistically significant at 5% significance level.

Table 8 Analyze of various (ANOVA) results (overall model significance)

	Sum of squares	Df	Mean square	F	Sig
Regression	52.583	4	13.146	43.602	.000b
Residual	75.674	129	0.301		
Total	128.257	133			

Table 9 Regression coefficient Results

	B	Std error	t	Sig.
(constant)	2.331	0.173	13.473	0.000
Supplier Appraisal Criteria	0.196	0.042	4.666	0.000
Supplier Appraisal Practices	0.260	0.065	4.000	0.000
Supplier Appraisal Approach	0.217	0.052	4.173	0.000
Supplier Development	0.198	0.061	3.245	0.000

Dependent Variable: performance function

The coefficient of supplier appraisal criteria was ($\beta=0.196$, $p=0.000$, <0.05) shows a statistically significant relationship between supplier appraisal criteria and performance. The results implied that a unit increase in supplier appraisal criteria would result to an increase of 0.196 units in performance. Similarly, Vorster (2013) study concluded that technical capability affected performance of an organization. It was therefore recommended that the implementation of supplier appraisal indicators have impact on the performance of a firm. The coefficient of supplier appraisal practices was ($\beta=0.260$, $p=0.000$, <0.05) shows a statistically significant relationship between supplier appraisal practices and performance. The results implied that unit increase in supplier appraisal practices would results to an increase of 0.260 units in performance. This finding conforms to those of Weele (2010) who found out that there is a strong relationship between supplier appraisal practices and performance, therefore the study conclude that the presence of a supplier appraisal positively affects performance in organization.

The coefficient value of Supplier Appraisal Approach was ($\beta=0.217$ $p=0.000$, <0.05) this shows statistically significant relationship between Supplier Appraisal Approach and performance function of a firm. The results is tandem with the research done by Schmalensee (2013) who found out that just in time is effective in utilization of operational activities in the organization increases the performance of the firms. The coefficient of supplier development was ($\beta=0.198$, $p=0.000$, <0.05) shows a statistically significant relationship between supplier development and performance. The results implied that a unit increase in supplier development would results to an increase of 0.198 units in performance of the firm Tozay (2012) also emphasized that the scope of supplier development is to determine whether the organization's awards and audit process as represented by management, is adequate and functioning in a manner which ensures that the suppliers are appropriately identified and managed.

Conclusions

The study concluded that supplier appraisal criteria such as technical capabilities of the supplier, Competence level and financial strength are basis for effective and efficient selection of the qualified supplier to perform task and duties of the firms have an impact on the performance of the firm. The study concluded that effectiveness of in supplier appraisal practices such as ethical standard practices, environmental aspects and approval ratings contributes to performance improvement of the firm's performance.

The study concluded that supplier appraisal approach affects the performance of the firm. The structural approach is effective in the performance of the firm. Operational approach is cognizant in enhancing the suitability of the supplier through the critical assessment of the ability to perform. The labored approach is moreover very critical in establishing the ability of the supplier to finish duties on time as speculated by the firm. The study concluded that supplier development elements have an impact in motivation of the suppliers which may results to poor quantity, late deliveries, and increase in cost and also lack of supplier delivery appraisals which lead to impact on the performance of the firm. Many respondents agreed that incentives, awards and audits improve the performance of the firm.

Recommendations

Manufacturing firms should embrace expertise in assessing the technical capabilities of the supplier before the selection. The firms should also focus in ascertaining the financial strength and competence level for the suppliers. This will improve the performance of the firms as it will be able to meet the requirements of users and also reduce disputes among suppliers. Manufacturing firms should adopt supplier appraisal practices. These should be done by having an effective ethical standard practices guidelines, improving the environmental aspect strategies in the organization, and implementing effective and efficient approval ratings of the suppliers in the organization. This will aid in improving performance as much capital will not be tied up in correcting the defects caused by the suppliers due to lack of effective practices. The operations of the organization should be effectively and efficiently controlled through supplier appraisal approach. Structural approach of the suppliers is very critical in enhancing performance.

Labored approach and operational approach should be embraced for effective delivery of services in the organization. These activities enhance the performance of the firms as they ensure the right quality is received, extra costs are not incurred and production is not delayed. Manufacturing firms should practice long-term relationship with suppliers and develop strategies to develop them so that they can be able to deliver the quality required without errors and defects. Use of the incentives, awards and frequent audits of their work is paramount in ascertaining the hardworking suppliers and rewarding them as per the work they have done. These activities improve the performance of the firm as they assist in improving the performance of the suppliers and consequently the entire firm.

Conflict of Interest

No potential conflict of interest was reported by the authors.

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