

Supplier Evaluation Practices And Procurement Performance Of Tea Processing Firms In Nandi County, Kenya

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ABSTRACT: The purpose of the study was to analyse the effect of supplier evaluation practices on the procurement performance of tea processing firms in Nandi County, Kenya. The specific objective was to determine the effect of supplier evaluation on procurement performance of tea processing firms in Nandi County, Kenya. This study used resource dependence theory, networking theory, and Payne's five forces model. A cross sectional research design was adopted on a target population of 96 respondents where census sampling technique was used with data collected using questionnaires. Data was analyzed using descriptive statistics and multiple linear regression analysis. The study findings indicated that supplier evaluation had a significant negative effect on procurement performance given a coefficient of -0.185 with a p - value < 0.05. The study findings are relevant to managers and policymakers for purposes of formulating policies aimed at implementing effective SRM practices which may enhance procurement performance. It was recommended that tea processing firms in Kenya to embrace evaluation practices as the coefficient of determination (0.618) was an indication that approximately 62% of variations in the procurement performance measured through cost level is explained by changes in supplier evaluation.

1.1 Background of the Study

The world though being a global village, supply chains still challenges of supplier relationship management. Researchers have explored different operation management dimensions but managing the relationship between buyers and sellers stands out as the key pillar in the supply chain. Procurement is the acquisition of goods, services and works [5]. Performance entails the effectiveness of achievement of the set organization's objectives [20]. Procurement performance is a measure of how procurement function meets its goals and objectives with minimum cost through purchasing efficiency and maintaining effectiveness [3]. Procurement performance can be measured through procurement cost and analytic performance. Cost level is defined as the price needed for acquisition, production, and maintaining a product or service whose unit of measurement is money [4]. The overall success of supply chain management is meeting goals in relation to time, cost and quality. Therefore, need for procurement departments of any organization to assess on supplier relationship management practices to create value for money [9]. Supplier evaluation is the assessment of suppliers both qualitatively and quantitatively before selection and after the selection process to ensure quality suppliers are selected and minimization of costs [15]. Supplier evaluation begins after the determination of the purchase need [18]. During supplier evaluation, suppliers are evaluated based on timely deliveries, quality, technical capacity, and financial capability. Establishing strategic relationships with major suppliers is crucial because it enhances value creation and build trust and commitment. Research has shown that through long term reciprocal performance among all participants, the supply chain can be improved [26]. Globally, practitioners and academicians have pointed their aggressive concern on importance of adopting effective SRM practices [43]. An American survey rated Toyota among the best manufacturing companies in the world in terms of working relationships. From the report of Toyota Motor Corporation by [25], Toyota enables adequate cost

controls though mutual relationships with suppliers. Industries in Pakistan faced supplier relationship management problems, which were as a result of lack of trust, loyalty, incompetent staff, late deliveries, and inefficient communication. In order to increase procurement performance in the United Kingdom (UK), supplier relationship management practices were initiated in a globalized tobacco supply chain. Tobacco companies in the UK indicated commitment on supplier relationship management practices to mitigate risks associated with the supplier [27]. Decline in procurement performance in America was recorded in the manufacturing industry due to poor relationships between suppliers and manufacturing firms, which led to low profits from a rate of 10% to 3.6 % in the year 2013, causing the gross domestic product (GDP) to decline from 9.8% to 6% [44]. The contribution of supplier relationship management had not been felt in the Nigerian manufacturing sector, and according to World Bank report, the procurement performance of the manufacturing sector's contribution to GDP in Nigeria declined from 9.8% achieved in 2009 to 9.6% in 2013. A report by Union Consulting Limited in the year 2009, indicated that private companies in Uganda have embraced collaboration with suppliers by ensuring strong relationships to retain suppliers, customer satisfaction, enhancing trust, loyalty, and meeting the future needs of the procurement function. In spite of the foregoing, most of manufacturing firms in Uganda have not embraced supplier relationship management practices, thus leading to loss of trust and commitment, low levels of customer retention, failure to meet future needs, and customer dissatisfaction. Supplier relationships in Uganda were characterized by substandard goods, failure to deliver, rejection, late delivery, and delayed payment [6]. From a study [12], it was depicted that Tanzania faced numerous challenges, including poor supplier selection and evaluation, which lead to losses because of the selection of incompetent suppliers and contractors who failed to achieve value for money by supplying substandard goods and services to public entities. As recorded in Tanzanian

audit report for the year 2017/2018, poor performance of a contract worth TZS. 95.32 million was recorded due to poor supplier relationship management practices [37]. According to the Public Procurement Regulatory Authority (2019) in Tanzania, there were scenarios where evaluated suppliers lacked competencies. In Kenya, public and private entities are regulated by the Public Procurement and Asset Disposal Act (2015), though most of the Kenyan procuring entities do not plan on supplier relationship practices with effect to procurement performance due to challenges associated with capacity (Awino, 2011). In the last ten years, supplier management challenges have been rapidly growing in the manufacturing industry in Kenya, despite the fact that the manufacturing sector being the third largest GDP contributor by 10.3% (Economic Survey, 2015). In 2013, Kenya overview report by World Bank affirmed that, supplier relationship is a significant contributor to procurement performance and can be used as a building block for achieving vision 2030. Lack of effective SRM practices contributed to 61% of losses attributed to procurement bids [1]. From the Public procurement audit report 2012/2013, it was revealed that Kshs.18.3 billion was lost due to disorderly and inefficient procurement practices involving supplier relationship management practices, an indication that Kenyan manufacturing and processing firms, including tea firms, continue in their struggle to implement supplier relationship management practices. SRM practices enable organizations to reduce cost and increased competitive advantage [2]. Findings indicated that most tea firms in Kericho County have engaged in business with many suppliers with which they have failed to maintain a long term relationship, which leads to late deliveries, increased costs, and poor quality of products. Kenya is recorded as the third largest exporter globally at 23%, making tea industry one of the pillars of achieving the government vision 2030 [7]. The Kenyan tea sector faces various challenges where tea firms continue to struggle with poor information systems between supply chain networks, inconsistent leaf collection rates, and poor supplier relationship management practices. Therefore, to improve procurement performance, both the internal and external forces of the organizations need to be integrated [2].

1.2 Statement of the Problem

Lack of effective supplier relationship management practices contributes to 61% of losses in procurement bids [1]. For instance, Public Procurement Audit Report 2012/2013 revealed that Ksh.18, 291,430.30 was lost due to ineffective procurement practices involving supplier relationship practices. Nandi County Tea factories incur losses of about over 150 million annually due to lack of commitment from suppliers and leadership, which has prevented tea processing firms from attaining better procurement performance [20]. Both private and public tea sector in Nandi County have engaged in businesses with a large number of suppliers causing lapses in managing long term relationships with suppliers, in turn this has led to delayed deliveries, inconsistent leaf count, insufficient stock, and poor quality products attributed to lack of a comprehensive approach for managing interactions with suppliers[27]. Past studies conducted on supplier relationship management practices and

procurement performance focused on different industries rather than the tea sector, which portrayed conflicting significant and insignificant results, for example, Tobacco Company, sugar firms and East African Breweries. Therefore, generalizing the results to the tea firms may not reveal a clear perspective of how supplier evaluation may be affecting procurement performance in the tea industry. Therefore, there is need for a study to analyze the effect of supplier relationship management practices on procurement performance of tea processing firms in Nandi County.

1.3 General Objective

- i. Determine the effect of supplier evaluation on procurement performance of tea processing firms in Nandi County, Kenya.

LITERATURE REVIEW

2.2.1 Resource Dependence Theory

Resource dependence theory states that the environment controls organizations [32]. The supply chain's linkage and reciprocal dependency are explained using this theory in the sense that businesses depend on one another for essential resources like raw materials, products, and services and how they can handle such relationships [31]. The assumptions of resource dependence theory are: strategic collaboration for mutual advantage, establishing the environment required to rely on another partner to create a sense of power and relationship confidence. According to [33], close cooperation is necessary in inter-company relationships to minimize resource reliability risks and improve performance. Supply chain partners work closely together, sharing resources and relying on one another, necessitating strategic partnerships and collaboration to enhance performance. As a management of sources of supply is gaining strategic significance, accompanied by various activities that the purchasing department must complete [6] and [31] modified the resource dependence theory and stated that, organizations develop interrelationships so that they may be able to minimize loss, attain better performance. Resource dependence theory complements this study since procurement of external resources is a vital aspect of strategic management of any firm bringing out the concept of supplier development, which endeavours to establish relationships with other organizations to obtain sufficient resources and improve procurement performance. Resource dependence theory also explains how organizations manage their inter-dependence with other firms through supplier relationship management practices to improve procurement performance.

2.2.2 Networking Theory

Network theory explains and recognizes interactions between organizations and the effect of relationship enhancement on organizational performance [11]. Networking theory emphasizes the aspect of strong ties in a networked environment and states that a networked supply chain helps managers to cultivate a pragmatic assessment of individuals' resources and its implication on the business performance. Access to resources and coordination are viewed as the primary factors that trigger inter-organizational relationships applied in today's

business environment. Networking theory plays a significant role for organizations that are anticipating forming cooperative ties [10]. This facilitates the alignment of supply chain actors, resources, and activities that form the components of a network [11]. Hence the study will use networking theory as the main theory. Networking theory was applied to this study because it is useful in the investigation of trust and commitment in inter-organizational relationships [8]. Through a networked approach, firms can be able to design the supply chain actors who can benefit from maintaining and building strong ties for management responsiveness. A further implication of the networking theory is that it is useful in demonstrating network knowledge sharing and management of buyer-supplier relationships.

2.2.3 Payne's Five Forces Model

Payne's Five Forces Model was developed by Payne and Frow the year 2005 to assess processes relevant customer relationship management. Customer relationship management encompasses the development of strategy, creation of value, integration of channels, performance assessment, and information management. These five processes are coordinated for the success and performance of the firm. Payne's five forces model affirms that there are three aspects of value creation. Organization needs to identify value creation processes and create value for their customers. Value is maximized by identifying value-adding suppliers to the organization and emphasizes using segments for mutual exchange. Payne's five forces model is relevant to the study since it can be used in identifying suppliers to engage in long-term beneficial relationships for mutual value creation through supplier evaluation, segmentation, development, and training to improve the procurement performance of the firms.

2.4.1 Procurement Performance

It refers to effectiveness and efficiency in the acquisition of goods and services measured through cost level [3]. Cost level is the price required for acquisition, production and maintenance of a product or service usually measured in terms of money. Cost level can be either an expense, a loss or a gain in the monetary value of procurement performance. The procurement function ensures that suppliers supply at the minimum cost and are linked to the organization through coordination and cooperation of procurement practices and processes. Therefore, procurement performance is based on total cost level, quality and effective supplier relationship management practices [27].

2.4.2 Supplier Relationship Management Practices

In most manufacturing and processing companies, managers are looking for methods to create an integrated supply chain first strategy. The current corporate environment has nearly become borderless. This has necessitated the use of proactive supply chain techniques which are successful in the overall supply chain management process. Supply chain techniques such as strategic supplier collaboration are examples of supply chain practices [26]. This may be accomplished by supplier evaluation, segmentation, development, and

training of suppliers that share similar aims and are willing to adapt to their buyers' demands.

2.4.2.1 Supplier Evaluation

Supplier evaluation is the process of assessing and monitoring suppliers in order to reduce costs and enhance performance [40]. Despite the fact that the purchase price does not include all of the expenses related to materials and final product, the procurement department imposes additional charges on the supplier in the form of poor quality obtained materials or late delivery of purchases [41]. Acquisition costs, including expenses incurred due to poor quality, late delivery, and other factors in addition to the unit price of acquired inputs must be included when evaluating suppliers. Suppliers with exceptional technological knowhow enable businesses to continuously improve their goods in terms of performance and [5]

Conceptual Framework

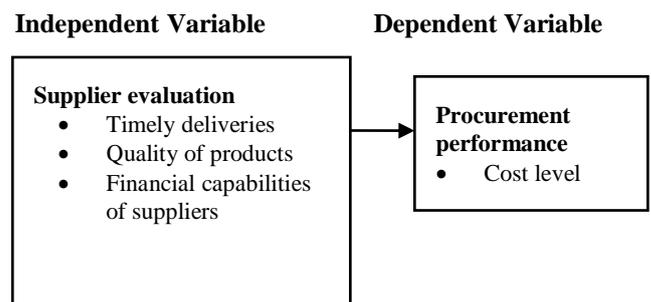


Figure 2.1: Conceptual Framework

2.5 Empirical Literature

This section contains literature reviewed by scholars on effect of supplier evaluation on procurement performance.

2.5.1 Supplier Evaluation and Procurement Performance

A study on the role of buyer supplier relationship on supply chain performance of Kenyan state corporation's organizations: a case study of the Kenyan Tea Development Agency involving a sample of 56 respondents [42]. The findings based on the majority implied that supplier evaluation had a positive effect as it improved procurement performance in the Kenyan Tea Development Agency. Similarly, from a study by [40], on influence of supplier evaluation on procurement performance of state corporations in Kenya, using a cross-sectional research design on a sample of 187 respondents, supplier evaluation was measured through; supplier capacity, supplier financial viability, supplier competence, and quality delivery while procurement performance measured by customer satisfaction and lead time. It was evident that supplier evaluation had a significant positive effect on procurement performance. According to a study by [28] on the effect of supplier development on procurement performance in the public sector in Kenya: a case of Kenya Electricity Generating Company Limited (Kengen), using descriptive research design based on a sample of 160 employees indicated that supplier evaluation led to increased organizational performance due to increased profitability. The findings of the study proved that the organization usually conducts supplier

visits to assess and evaluate their suppliers regularly. This led to increased procurement performance. A study by [14] on supplier evaluation and performance of food and beverage firms in Nairobi used a target population of 46 and found that supplier evaluation had a significant positive relationship with procurement performance of the organization. The study measured supplier evaluation using price, employees' capabilities and environmental friendliness, and procurement performance was measured through profitability. A study conducted by [17] on the influence of supplier relationship management practices on the operational performance of large manufacturing organizations in Kenya, established that supplier evaluation had a significant negative effect on procurement performance. The units of measurement for supplier evaluation were quality financial ability, supplier capability, technical capability and lead time, while procurement performance measures were customer satisfaction, production efficiency, and improved quality.

METHODOLOGY

3.1 Research Philosophy

Research philosophy explains the world view and focuses on knowledge and reality. An individual's understanding of reality affects the whole research process. Thus, the study was guided by positivism research philosophy that states that the phenomena being investigated leads to

dependable data construction. Positivism allows the researcher to develop and test hypotheses using quantitative statistical techniques [21]. Positivists hold the belief that there is stability in reality; thus, the phenomenon being examined can be observed from an objective point of view [13]. Positivism research philosophy was the most suitable philosophy as data collected was both qualitative and quantitative. This study involved hypothesis testing while analysis was both descriptive and inferential. The hypotheses were tested through p – values obtained from the results of the regression model as it is an appropriate measure for accepting and rejecting the null hypotheses.

3.3 Research Design

The study used a cross-sectional research design as it allows description of a phenomenon observed through data collection at a given time and measures the existing relationship between two variables [23].

3.4 Target Population

Population is a set of respondents from whom information is obtained. Participants in a population group must share common visible features [21]. The target population of the study was 96 respondents, as in Table 3.1. The targeted respondents were procurement officers, logistics managers, quality assurance officers and finance officers.

Table 3.1: Target Population

Department	Factory								Total
	Williamson	EPK	Chepkumia	Emrock	Chebut	Kaptumo	Kipchabo	Nandi Tea	
Procurement	3	3	3	4	3	3	2	5	26
Logistics	2	2	2	2	2	2	2	2	16
Finance	4	3	4	4	4	4	3	4	30
Quality	2	2	4	2	4	4	2	4	24
Total	11	10	13	12	13	13	9	15	96
Percentage (%)	11.46	10.42	13.54	12.50	13.54	13.54	9.37	15.63	100.00

List of registered tea manufactures in Nandi County.

Source: Tea Board of Kenya, 2021

3.5 Sampling Technique

The study used a census sampling technique since data was collected from all the targeted officers in the respective tea firms and it was statistically insignificant to divide the population. The tea processing firms are major tea companies hence more likely to embrace supplier relationship management practices. Sampling is a procedure of picking out respondents from the entire population for data collecting [23].

3.6 Data Collection Tools

Primary data was collected by structured questionnaires. Questionnaires were considered as the most appropriate tool since large amount of data was collected over a short period of time and guarantees confidentiality of the respondents (Yang, 2013). Questionnaires were closed ended for the purpose of providing accurate data to fulfil

the requirements of the study objectives and to enable respondents to respond without restriction. The closed-ended questions were based on a five-point Likert scale to facilitate easy coding into the SPSS software for analysis and interpretation.

3.7 Reliability

Reliability is the level to which a research tool can be based to produce consistent results every time it is used [23]. The greater the value, the more reliable the instrument. The reliability of coefficient of 0.7 and above was the most accepted as the best measure of reliability [23]. A pilot study was conducted at Sisibo Tea Factory Limited located in Elgeyo Marakwet County since the firm had similar characteristics with Nandi tea factories. The purpose was to ensure that everyone in the sample understood the questions in the same way [23]. To

determine reliability level of pilot test items, 10 questionnaires were sent to respondents at Sisibo Tea Factory. Their responses were analysed and the reliability test produced. Cronbach's Alpha was determined which explained the consistency in measuring the effect of SRM practices on procurement performance. The findings in Table 3.2 shows that Cronbach's Alpha of the study variables was 0.832 which was greater than 70% thus indicating that the instruments were reliable.

Table 3.2: Reliability Table

SRM practices	Cronbach's Alpha	Items	Results
Supplier Evaluation	0.762	9	Reliable
Procurement performance	0.832	8	Reliable

3.8 Validity

Construct validity was tested using KMO and Bartlett's test of Sphericity to determine inter-correlation between the variables under study before computing confirmatory factor analysis. Kaiser- Mayer- Olkin and Bartlett's test were used to measure construct validity. For KMO test the value has to be greater than 0.5 for factor analysis to be carried out. The results of the SPSS in Table 3.3 indicated that KMO value of the variable was greater than 0.7 leading to a recommendation of the factor analysis. Bartlett's value for Chi square was 30.738 with a significance value of 0.001 thus the research instruments were recommendable.

Table 3.3: KMO and Bartlett's Test

Construct	No of Items	AVE	KMO	Bartlett's test of Sphericity		
				χ^2	Df	P-value
SE	8	0.520	0.762	34.856	15	0.000
PP	8	0.573	0.794	30.738	15	0.001

Descriptive Statistics

3.9 Supplier Evaluation and Procurement Performance

Table 3.4: Effect of supplier evaluation on procurement

Statement	A	D	N	SA	SD
	N %	N %	N %	N %	N %
1. Evaluation of suppliers affects procurement performance.	35 (42.2%)	2 (2.4%)	7 (8.4%)	36 (43.4%)	3 (3.6%)
2. Suppliers ensure shorter lead times.	25 (30.1%)	9 (3.6%)	13 (15.7%)	20 (24.1%)	16 (19.3%)
3. Evaluation of shorter lead times affects procurement performance	22 (26.5%)	11 (13.2%)	20 (24.1%)	12 (14.5%)	18 (21.7%)
4. The organization evaluates its suppliers basing on compliance to quality.	39 (47.0%)	3 (3.6%)	9 (10.8%)	18 (21.7%)	14 (16.9%)

5. Evaluation of conformance to quality by suppliers affects procurement performance	33 (39.8%)	6 (7.2%)	10 (12.0%)	21 (25.3%)	13 (15.7%)
6. Suppliers are evaluated based on their financial capabilities.	34 (41%)	7 (8.4%)	11 (13.3%)	17 (20.5%)	14 (16.9%)

3.9.1 Evaluation of Suppliers Has an Effect on Cost Level

Results in Table 4.4 indicated that 35 (42.2%) strongly agreed, 2 (2.4%) disagreed, 7 (8.4%) neutral, 36 (43.4%) strongly agreed and 3 (3.6%) strongly disagreed that supplier evaluation had an effect on cost level. From the response rate, strongly agree had the highest response rate of 43.4% indicating that, through supplier evaluation most responsive and competent suppliers are selected. Supplier evaluation enables tea processing firms in structuring the supplier base and improving the efficiency of the supply chain and gaining the utmost value from their suppliers. The few respondents 2 (2.4%) who disagreed implied that some tea processing firms are at risk of recording higher cost due to selection of incompetent suppliers through direct procurement without conducting supplier pre-screening, this leads to poor procurement performance as the firm may not be able to identify hidden cost drivers in the business. This results are corresponding to [42] findings that indicated supplier evaluation had an effect on procurement performance given the selection of most qualified suppliers.

3.9.2 Suppliers Ensure Shorter Lead Times

In Table 4.4, it was evident that, 25 (30.1%) agreed, 9 (10.8%) disagreed, 13 (15.7%) neutral, 20 (24.1%) strongly agreed and 16 (19.3%) strongly disagreed that suppliers ensure shorter lead times. Majority of the respondents agreed at 30.1% that suppliers ensure shorter lead times since longer lead times may lead to discontinued operations and this may force the procurement department to increase cost through direct procurement from unvetted suppliers which is costly. This was an indication that tea processing firms in Nandi are able to avoid a supply delay, which could negatively affect procurement performance, contractor dependencies, and cost efficiencies across the board. The few respondents (10.8%) who disagreed that suppliers do not ensure shorter lead time was an indication that some tea processing firms in Nandi County do not adhere to shorter lead time as longer lead times can put an immediate halt on tea processing firms as factory operational managers may lack the components needed to complete production of tea. Stopping the production line puts tea processing firms behind on completing customer requests, creating another situation of having limited stock and incase a particular market experiences growth authorized distributors of processed tea may be unable to keep up with demand, this puts tea factories behind on their production demand for customers and their suppliers.

3.9.4 Evaluation of Shorter Lead Times has an Effect on Cost Level

Table 4.4 findings show that, 22 (26.5%) agreed, 11 (13.2%) disagreed, 20 (24.1%), neutral, 12 (14.5%) strongly agreed, 18 (21.7%) strongly disagreed that shorter lead times has an effect on cost level. Most of the respondents agreed on effect of shorter lead time on cost level (26.5%). This is an indication that shorter lead times in tea processing firms increases output which in turn increases sales and enhance customer satisfaction. 13.2% of the respondent who disagreed that evaluation of supplier lead time does not affect cost level implied that a longer lead-time some tea processing firms could intensify inventory inefficiency since firms with longer delivery lead-time could face a greater risk in terms of supply disruptions due to less accurate inventory management and manipulating different deterministic lead-times with autoregressive customer demand. These findings were similar to those of [28] who studied effect of supplier relationship management on procurement performance in public sector in Kenya. Their findings recorded that evaluation of lead time affected procurement performance.

3.9.5 The Organization Evaluates Its Suppliers Basing On Quality Compliance

Table 4.4 findings affirms that, 39 (47.0%) agreed, 3 (3.6%) disagreed, 9 (10.8%) neutral, 18 (21.7%) strongly agreed and lastly 14 (16.9%) strongly disagreed that the organization evaluates its suppliers basing on quality of products. Majority of the respondents agreed that organizations evaluates their suppliers (47%). This was an indication that majority of tea processing firms in Nandi County evaluate their supplier on quality compliance basis to enhance efficiencies and value addition to their products and ensure the best contracts in terms of quality, costs, flexibility, and finding low-risk sources of high-quality goods through mutually beneficial, long-term business. Respondents who disagreed implied that some tea processing firms do not evaluate their suppliers basing on quality as procurement function of some tea processing firms in my not be able understand supplier's practices and processes and this may increase monetary and time costs. These costs may involve costs associated with additional inspection, extra freight charges, and obsolete inventory. The results were similar to those of [17] who found that most of the respondents indicated that suppliers were evaluated based on quality of products.

3.9.6 Evaluation of Conformance to Quality by Suppliers Affects Cost Level.

Table 4.4 shows the level of evaluation of conformance to quality by suppliers and its effects on cost level in the procurement function. From the findings, majority of the respondents agreed (39.8%) that conformance to quality by suppliers affects cost level of the procurement function. This is because evaluation of suppliers basing on compliance to quality minimizes operational costs and enhances value of products. Tea firms will be able to provide a third-party perspective to the supplier through the supplier evaluation process and it will lead to better collaboration lead to cost reduction and better delivery times. The results were in line with [14] who found that evaluation of conformance to quality by

suppliers affects cost level of the procurement function.

3.9.7 Suppliers Are Evaluated Based On Their Financial Capabilities

In Table 4.4 the results revealed that majority indicated that they agreed 34 (41%) that suppliers are evaluated based on their financial capabilities. It is important to evaluate suppliers based on their financial capabilities to minimize uncertainties caused due to third parties involvement. By measuring supplier performance using financial capabilities tea processing firms can be able to set a threshold for its supplier that can lead to higher-quality output. With supplier evaluation, companies can plan better on new products and services based on a good understanding of their suppliers' capabilities and performance levels in other companies. This corresponds to [14] who found that suppliers were evaluated basing on their financial capabilities.

4.1 Inferential Statistics

The study carried out multiple regression analysis to support the descriptive statistics results which could not give the direction of relationship. The regression results are presented in Tables 4.9 to 11 and discussed in line with the study objectives.

Table 4.5: Regression Analysis Results

Model	Unstandardized Coefficients		T	Sig.	
	B	Std. Error			
1	(Constant)	6.567	.063	104.238	.000
	SE	-.185	.057	-3.246	.000

4.2 Model Summary^a

An R of 0.786 showed that there was a strong association between values predicted by the model and values obtained from the multiple linear regression analysis. R square is a coefficient of determination used to measure the variation in Y as explained by X in a linear regression model. R square explains how well predictors fit a line or a curve. An R² of 0.618 indicated that approximately 62% of the variation in procurement performance measured by cost level is explained by variations in the SRM practices. Thus procurement performance is not only affected by the predictors in the model but also other factors that are not used in the model.

Table 3.6: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.786 ^a	.618	.598	.1642

a. Predictors: (Constant), SE

4.3 ANOVA^a

The results of the ANOVA in Table 3.6 indicates that SRM significantly affect procurement performance at 95% confidence level given a P- value of 0.000 which is not greater than 0.05. The F statistic of the ANOVA implies that there is a significant relationship between SRM practices and procurement performance. An F value of 8.148 is greater than the critical value (2.46) at 4 degrees of freedom. The SRM practices significantly explained the variation in procurement performance at 5%

level of significance given an ANOVA Table 4.11 with a p-value 0.000 which is less than 0.05.

Table 3.7: ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression .879	4	.220	8.148	.000 ^a
	Residual 2.102	78	.027		
	Total 2.981	82			

a. Predictors: (Constant), SE

b. Dependent Variable: Procurement performance (Cost level)

Results in Table 4.11 indicated that a regression model linking SRM practices and procurement performance is given as in model 4.10

$$Y = 6.567 - 0.185SE + 0.063SS - 0.094SD + 0.236ST$$

Model 4.1

4.4 Supplier Evaluation and Procurement Performance

From Table 4.10 and regression model 4.1, supplier evaluation (SE) had a regression coefficient of -0.185 and a probability value of 0.000 which was less than 0.05. This implied that supplier evaluation had a significant negative effect on procurement performance measured by cost level at a 5% level of significance. That is, a unit increase in the number of supplier evaluations reduced procurement performance by 0.185 units. This indicated that the null hypothesis that supplier evaluation has no significant effect on procurement performance of tea firms in Nandi County, Kenya was rejected at 5% level of significance. The finding corroborates the descriptive statistics results and corresponds to those of [17] who carried out a study on influence of supplier relationship management practices on procurement performance of large manufacturing organizations in Kenya.

4.5 Summary of the Findings

The purpose for this study was to analyze the effect of supplier evaluation practices on procurement performance of tea processing firms in Nandi County, Kenya which was based on the specific objectives. Both descriptive and inferential data analysis techniques were employed.

4.5.1 Supplier Evaluation and Procurement Performance

Descriptive statistics results indicated that most respondents at 49 (59.0%) strongly agreed that supplier evaluation affected procurement performance. Regression coefficient of -0.085 with a p-value 0.000 < 0.05 supported the descriptive statistics and indicated supplier evaluation had a statistically significant negative effect on procurement performance such that a unit increase in the number of supplier evaluations reduced procurement performance by 0.085. This led to the rejection of the null hypothesis that supplier evaluation has no significant effect on procurement performance of tea firms in Nandi County, Kenya at 5% level of significance.

4.6 Recommendations

Tea processing firms need to embrace supplier evaluation to ensure selection of competent suppliers, elimination of hidden costs, management of risks and reduction of procurement cycle time to improve on procurement performance of their firms. This will help tea processing firms to structure their supply base and improve on supply

chain efficiency that will foster improvement on the overall organizational performance.

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