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## **The Effect of Supplier Collaboration on Procurement Performance in the County Government of Elgeyo Marakwet**

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# The Effect of Supplier Collaboration on Procurement Performance in the County Government of Elgeyo Marakwet

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## Abstract

Organizations adopt procurement as a strategic approach to take care of the environmental, economic and social demands originating from the government, social and environmental bodies and general public. However, in recent times there have been reports of firms facing market challenges resulting to low returns and closure. Their performance is dwindling and this has been attributed to competitive pressures. A substantial part of these pressures can be traced to the supply chain where variations. The purpose of the study was to find out the effect of supplier collaboration on procurement performance in the county government of Elgeyo Marakwet. Descriptive research design was employed by the study and the target employees specifically were procurement staff, main store staff, ICT staff, finance staff, quality assurance staff and suppliers from county government Elgeyo Marakwet. The total accessible population for the study was 140 employees while the sample size was 104 employees. Census technique was used to establish the desired group to be for the study. A structured questionnaire was used to collect data and is set in a Likert scale format. The researcher conducted the pilot study in county government of Nandi to ascertain the validity and reliability of the research instrument before conducting the actual study. Face and content validity were then used to test the validity of the questionnaire. The researcher used the Cronbach alpha coefficient determine the reliability of the instrument where the alpha coefficient was found to be reliable. The data were analyzed descriptively and inferentially with the aid of SPSS version 24. Regression was used to establish the causal influence of the study variables. The study found out that procurement collaboration  $\beta = 0.175$ ;  $p < 0.05$ . The findings imply all the independent variables have positive and statistically significant influence on the procurement performance. It can therefore be concluded that supply chain practices were a significant influence on procurement performance in Elgeyo Marakwet County. The study recommended that the

policies which govern the county governments are utilized harmoniously. It will be beneficial to the policy makers who aims at improving and strengthening policies and regulations in regard to procurement services. Furthermore, the findings benefit future researchers in the line procurement and supply chain management.

**Key Words:** *Supplier Collaboration, Procurement Performance & County Government of Elgeyo Marakwet.*

## **1.0 Introduction**

Supply chain practices is an increasing prevalent aspect of business life today and firms outsource business functions to focus on core competencies and cut operating expenses (Varney, 2011). The Malaysian government at some point issued a statement calling for all suppliers to use the e-procurement system (Wagner & Sweeney, 2010). The Malaysian public sector is going through a rapid change especially as far as adoption of technology is concerned. Adoption of e-government and particularly e-procurement is inevitable for the government. A review conducted by Commonwealth of Australia indicates that the National governments of Italy, New Zealand, Scotland, New South Wales and Western Australia revealed that these countries were already using e-procurement system for public procurement activities (Van Weele, 2010).

In Africa, the concept of e-procurement is just gaining popularity especially in the public sector to deal with the problems of lack of accountability and transparency in procurement activities in the public sector, e-procurement platforms have scored highly towards influencing efficiency in procurement services (Erzurumlu, 2010). Tanzania for instance, in large extend the e-procurement systems has allowed e-sharing, e-advertisement, e-submission, e-evaluation, e-contacting, e-payment, e-communication and e-checking and monitoring to ensure all public procurement activities are conducted online (Tanzania PPOA, 2016).

In Kenya supply chain practices are applied in county governments to contribute greatly in maintaining the availability of essential goods and services in various county departments. The supply chain sequence begins with the basic suppliers of raw materials and extends all the way to the final consumers. Facilities include; Warehouses, processing centers, distribution centers, retail outlets or service centers. Function and activities include forecasting, inventory management, information management, quality assurance, scheduling, production, distribution, delivery and customer service (Mburu, 2012).

Elgeyo Marakwet County is one of the County Governments in Kenya created under the new two-tier governance system, i.e. national and county systems created by The Kenya Constitution 2010. Elgeyo Marakwet County, whose Headquarters is Iten, is inhabited by two major communities, Keiyo and Marakwet, minority community of Sengwer and other small communities. The County Government started implementing its mandates in March 2013 as per the provisions of the Fourth Schedule of the Constitution which came into effect in August 2010. Agriculture, health, education, trade, infrastructure, and integrated county development planning are some of the mandates that the county assumed the responsibility of, immediately the constitution was operationalized.

## **1.1 Statement of the Problem**

Organization adopt procurement as a strategic approach to take care of the environmental, economic and social demands originating from the government, social and environmental bodies and general public (Kennard, 2012). Organizations are paying more and close attention to their environment due to the complexity and rapid changes thus formulating and implementing policies and strategies that will enhance their survival and growth. Every business exists to make profit. In the 21st century, these profits are realized in a myriad of ways including cost savings, improvement of working capital and reduction of risk. However, in recent times there have been reports of firms facing market challenges resulting to low returns and closure. The Constitution of Kenya 2010 created County Government structure based on principles of democracy, revenue reliability, gender equity, accountability and citizen participation. Devolution is meant to enhance accountability by bringing politicians and resources closer to the people they are intended to serve. However, the implementation of devolution has not been easy as the County Government needed to engage in massive procurement in the establishment of County Governments. This has affected the performance levels of these County Government. Supply chain performance is influenced by contingent factors that lie beyond the realm of strategy and structure. Poor Supply chain performance can reduce shareholder value by as much as 8 to 10 % or even worse in time-sensitive environments where early market introduction is critical to success (Most researchers have concentrated majorly on effect of green procurement on supply chain performance with little or no focus on social and economic aspects. Therefore, the current research intends to bridge the existing research gap by establishing the influence of supply chain practices on procurement performance function in the county government of Elgeyo Marakwet, Kenya.

## **2.0 Literature Review**

### **2.1 The Effect of Supplier Collaboration on Procurement Performance**

Mamad and Chahdi (2013) conducted a study on the factors of the collaboration between the upstream supply chain actors: A case of the automotive sector in Morocco. By entering in a sequential process, the methodology for the study consisted of two phases: an exploratory qualitative to contextualize the model through semi-structured interviews with 15 actors of Moroccan automotive industry and the other confirmatory quantitative based on the development of a questionnaire to collect data and test hypotheses. Empirical findings of the study indicated that the determinants both transactional. The study was limited to one country hence need for further research in other countries.

Gichuru, Iravo and Arani (2015) did a research on the collaborative supply chain practices on performance of food and beverages companies: A case study of Del Monte Kenya Ltd. The general purpose of the study was to investigate collaborative supply chain practices in the performance of Del Monte Kenya Ltd. Descriptive case study design was adopted by the study. The study adopted Stratified random sampling technique. The questionnaires were used by the researchers to collect data from respondents. The findings of the study were that information sharing and resource sharing has positive influence in the performance company. The study was limited to a single processing firm hence need for further research in a number of industries.

Kinai and Were (2017) researched on the role of supplier collaboration on organization performance: A case of Kenya urban roads authority. The purpose of the study was to determine

the role of supplier collaboration on organization performance in Kenya Urban Roads Authority. The study used descriptive research design to describe characteristics of a population or phenomenon that was studied. Census approach was used by the researchers to collect data from the all the 141 respondents. The study found out that effective supplier collaboration on organizational performance of Kenya Urban Roads Authority's from the finding it can there be concluded that supplier collaboration platform. The study used a small sample size which calls for the use of other research designs.

Kumar and Banerjee (2014) conducted a study on the supply chain collaboration index: An instrument to measure the depth of collaboration, Benchmarking in Iran manufacturing firms. The research was informed by institutional theory, resource-based theory, selection theory and stakeholders' theory that had their roots in Procurement and supply chain management collaboration. The study used convenience sampling to sample the unit of observation. Descriptive statistics including frequencies, percentages, means and standard deviations was used to capture the characteristics of the variables. The findings of the study indicated that procurement proficiency, technological advancement, procurement ethics and top management support have a positive relationship with Public Procurement legal framework implementation.

## **2.2 Transaction Cost Theory**

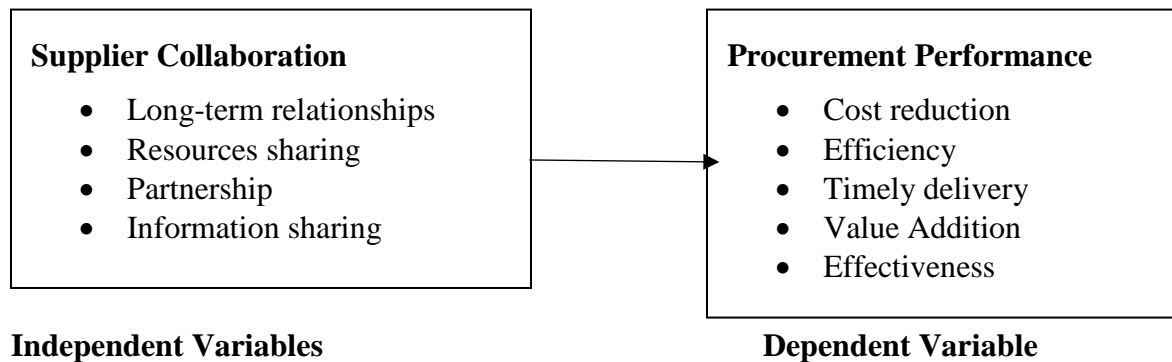
Transaction cost theory was advanced by Williamson in 2010. This theory is built on the premise that optimal buyer-supplier relationship is one based on the lowest possible total cost, where internal operations costs are balanced with the costs of purchasing, planning, adapting and monitoring externally transacted operations (Williamson, 2010). The theory also outlined three dimensions of transaction relations, namely: transaction-specific investments, uncertainty and frequency (Mateyz & Maja, 2013). TCE perspective to buyer supplier relationship governance was particularly useful in connection to efficiency, flexibility and overall performance issues. The commitment-trust theory of relationship management says that two fundamental factors, trust and commitment, must exist for a relationship to be successful Christopher, (2004).

Collaboration with suppliers involves forming bonds with suppliers by meeting their needs and honoring commitments. Rather than chasing short-term profits, businesses following the principles of relationship marketing forge long-lasting bonds with their suppliers (Kumar and Banerjee, 2012). As a result, suppliers trust these businesses, and the mutual loyalty helps both parties fulfill their needs. Trust is the confidence both parties in the relationship have that the other party won't do something harmful or risky. Businesses develop collaboration and trust by standing behind their promises which enhances business competition and reduces costs of operations.

The theory is relevant to the study as it provides basis for understanding the nature of relationship between buyers and suppliers. Collaboration involves a long-term desire to maintain a valued partnership. Desire causes the business to continually invest in developing and maintaining relationships with its customers. Through a series of relationship-building activities, the business shows its commitment to the suppliers (Mateyz and Maja, 2013). Relationship based on commitment and trust are cooperative behaviors that allow both parties to fulfill their needs. Buyers not only get the product or service they're paying for, but they also feel valued. The main critique of this theory is the need to shift from a narrow cost perspective to a wider transaction benefits-based analysis and also a question of actors being only opportunistic.

### 2.3 Conceptual Framework

A conceptual framework is a written or virtual product that explains, either in narrative or in graphically form, the main things to be studied, the key elements being variables, concepts and the presumed relationships among them (Eldridge, *et. Al.*, 2016). Conceptual framework is structured from a set of broad theories and ideas that help a researcher in properly identifying the problem they are looking at, frame their research questions and find suitable literature (Mamad & Chahdi, 2013). The conceptual framework explained the relationship between the dependent and the independent variables in the study.



**Figure 1: Conceptual Framework**

### 3.0 Methodology

#### 3.1 Research Design

The study used descriptive research design. The design facilitated gathering of required quantitative data through a questionnaire (Namusonge, 2010). The results from quantitative research method were used to enhance, elaborate or clarify results from quantitative research method. Scholten and Schilder (2015) recommended descriptive survey design for its ability to produce statistical information about aspects of study objective that interest policy makers and researchers. Therefore, descriptive research design was appropriate for the study which comprehensively tested and analyzed the relationships between variables. The study used descriptive design to gain an understanding of how procurement collaboration, green procurement, electronic procurement and outsourcing decision affected performance of procurement at Elgeyo Marakwet county government.

#### 3.2 Target Population

Population refers to the larger group from which a sample is taken while the target population is a complete set of individual cases or objects with some common characteristic to which the research wants to generalize the result of the study (Kothari, 2013). The target population for this study comprised of procurement staff, main stores staff, ICT staff, finance staff and quality assurance staff and suppliers at County Government Elgeyo Marakwet. The choice of the population was because the employees have the knowledge and experience about procurement activities. While

the overall accessible population for the study were 140 employees drawn from County Government Elgeyo Marakwet as depicted in Table 1.

**Table 1: Accessible Population**

Employees	Accessible Population
Procurement staff	24
Main stores staff	45
ICT staff	10
Finance staff	30
Quality assurance staff	16
Suppliers	15
<b>Total</b>	<b>140</b>

### 3.3 Sampling Frame

A sampling frame is the source material or device from which a sample is drawn. It is a list of all those within a population who can be sampled, and may include individuals, households or institutions (Creswell, 2013). Because a researcher rarely has direct access to the entire population of interest in social science research, a researcher must rely upon a sampling frame to represent all of the elements of the population of interest. Hence, the sampling for the study was derived from various departments at Elgeyo Marakwet county government.

### 3.4 Sample Size and Sampling Technique

Census technique was used to select the sample to be included in the study. The method was convenient because every element in the population has an equal chance of being selected as the sample. According to Sekaran (2011) census is appropriate for small sample size and also has the least bias and offered the most generalization and hence for the study to be more representative. Kothari (2013) stated that the descriptive studies of 10-40% of the accessible population is a representative sample. The county government compose of different departments classified according to their skills. Therefore, census method was applied in determining the desired sample size. According to Cooper and Schindler (2011) ensures that each department is well represented. The current study will determine the sample by help of the slovin’s formula of determining the effective sample size.

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

Where **n** represent the sample size, **N** represent the total accessible population and **e** represent the level of precision. Hence the sample size for the study was as follows;

$$n = \frac{140}{1 + 140(0.05^2)} = 104 \text{ Respondents}$$

**Table 2: Sample Size**

Employees	Accessible Population	Sample Size
Procurement staff	24	18
Main stores staff	45	33
ICT staff	10	7
Finance staff	30	23
Quality assurance staff	16	12
Suppliers	15	11
<b>Total</b>	<b>140</b>	<b>104</b>

### 3.5 Research Instrument

The study used semi structured questionnaires in collecting data from the respondents. A questionnaire is a document consisting of a number of questions typed and printed in a systematic order on a form, (Kothari, 2013). The questionnaire items were developed in such a manner that all statements were closed-ended. This was done to ensure that quantitative data was obtained for purposes of describing phenomena and also making inferences on the target population. The questionnaires were self-administered. The questionnaires were chosen since it gives speedy results and are scalable since they allow one to gather information from a large audience. Further, questionnaires usually cover all aspects of a topic thus they are dependable and reliable (Creswel, 2013). Likert scale questionnaire was used in the study. A Likert scale measures the level of agreement with statements relating to attitude or objects and is usually on a 1 to 5-point scale consisting of strongly disagree, disagree, neutral, agree and strongly agree (Robinson, 2014).

### 3.6 Data Processing and Analysis

The Social Package for Statistical science (SPSS) software will be very useful in data analysis. Correlation will be used to test for relationship between the independent variables and the dependent variable (Creswell, 2013). The results were fitted in the regression model below for prediction.

$$Y = \beta_0 + \beta_1 X_1 + \epsilon$$

Where: Y represents Procurement performance (dependent variable),

$\beta_0$ ,  $\beta_1$  are regression coefficients to be estimated

$X_1$  represents procurement collaboration and  $\epsilon$  represents an error term

## 4.0 Research Findings and Discussions

### 4.1 Supplier Collaboration and Procurement Performance

Respondents were asked their opinion on how supplier collaboration practice affects procurement performance in county government of Elgeyo Marakwet and are results are presented in Table 4.7.



**Table 3: Descriptive Statistics for Supplier Collaboration**

Statements		SA	A	N	D	SD	Mean	Std.
1. Collaboration has led to a long-term relationship	F	44	49	3	0	0	4.229	.761
	%	45.9	51.0	3.1	0	0		
2. There is sharing of resources aimed at improving performance	F	52	42	1	1	0	4.147	.963
	%	54.2	43.8	1.0	1.	0		
3. Supplier partnerships has enhanced management of resources	F	38	49	6	2	1	4.049	1.10
	%	39.6	51.0	6.3	2.	1.0		1
4. Engaging suppliers leads to better sharing of information	F	46	49	0	1	0	4.229	.901
	%	47.9	51.0	0	1.	0		7
<b>VALID N=96</b>					0			

**Table 4: Hypotheses Test Summary Results**

Hypotheses	$\beta$ and P Values	Decision (Accept/Reject)	Rule
<b>H<sub>01</sub></b> Supplier collaboration has no significant effect on procurement performance in the county government of Elgeyo Marakwet.	$\beta = 0.175$ ; $p = 0.043 < 0.05$	Null hypothesis rejected	

The study findings reveal that collaboration has led to a long-term relationship between buyers and suppliers at county government of Elgeyo Marakwet. Majority of the respondents agreed that the county has built long term relationships with its suppliers 93(96.9%). This indicates that the level of supplier collaboration has an important interaction effect on the relation between external resources and buying firm performance, where collaborative forms of buyer-supplier exchange facilitate greater access to external resources (Mean=4.229). Also, the respondents agreed that there is sharing of resources at county government of Elgeyo Marakwet 94(98%). Sharing of resources between departments at county governments enhances service delivery hence leading to better performance at the county level (Mean=4.147). This concurs to the study conducted by Gichuru, Iravo and Arani (2015) on the collaborative supply chain practices on performance of food and beverages companies. They found that that resource sharing has positive influence in the performance company.

Further, majority of the respondents agreed that supplier partnerships has enhanced management of resources at county government of Elgeyo Marakwet 87(90.6%). The respondents argued that enhanced partnerships will improve services and therefore procurement have potential to streamline operations leading to achievement of the county government goals (Mean=4.049).

Lastly majority of the respondents agreed that engaging suppliers leads to better sharing of information 95(98.9%). This imply that engaging suppliers on time helps the county to plan and expect deliveries of time (Mean=4.229). this findings in essence reflects the results of Shalle, Guyo, and Amuhaya, 2014) on the effects of buyer/ supplier collaboration on e-procurement performance found out that supplier collaboration enhances procurement performance hence creating a competitive advantage through sharing information making joint decision, inter-procurement relationship.

### **5.1 Summary**

The study found that a unit change in supplier collaboration would positively result to a positive change in performance of procurement in the county government of Elgeyo Marakwet. The study established that supplier collaboration influences the performance of procurement to a great extent that; long term relationships, resource sharing, partnerships and information sharing influences the performance of procurement at the county government of Elgeyo Marakwet. The findings therefore imply that effective supplier collaboration in county government influences the performance of the procurement positively. It leverages long term business relationships, resource sharing revenue improvement, flexibility of operations, responding to demand uncertainties, cost reductions and timely delivery of products. Procuring organizations enhances there working relationships with the suppliers and customers in order to foster and create a better position in the market based on the ultimate value derived from the end customer. The procuring entities need to create strong collaboration with its supplies that enable them to leverage their market orientations by responding to rapid changes in customers' value

### **6.1 Conclusion**

The study concludes that supplier collaboration is critical in the performance of procurement in the county government of Elgeyo Marakwet. The study further concluded that improving supplier collaboration greatly influences the performance of procurement that; long term relationships, resource sharing, partnerships and information sharing influences the performance of procurement at the county government of Elgeyo Marakwet. It can be the deduced that supplier collaboration in county government influences the performance of the procurement positively. Continuous supplier engagement leads to long term business relationships, resource sharing revenue improvement, flexibility of operations, responding to demand uncertainties, cost reductions and timely delivery of products. There is need for the Procuring organizations to improve their working relationships with the suppliers and customers in order to foster and create a better position in the market based on the ultimate value derived from the end customer.

### **7.1 Recommendation**

The study recommends that the policies which govern the county governments are utilized harmoniously. These policies include customs levies, exportation and importation regulations and quality standardization. The study recommends that the Elgeiyo Marakwet County should appoint a procurement oversight committee that will supervise the implementation of the law and policies on procurement. This will increase the level of Supplier selection, efficiency and efficient management in county government resources. Therefore the researcher suggests a similar study should also be done on other counties since their operations are different from that of Elgeiyo Marakwet County.

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