

EFFECT OF SUPPLIER SOURCING ON PERFORMANCE OF WARD DEVELOPMENT PROJECTS IN KENYA

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Abstract: *This study investigates the effect of supplier sourcing on the performance of ward development projects in Narok County, Kenya. Despite numerous initiatives to enhance development projects, challenges such as delays, cost overruns, and quality issues persist, partly due to procurement practices. Supplier sourcing, including strategies for engaging reliable suppliers and fostering buyer-supplier collaboration, plays a crucial role in project success. Using an explanatory research design, the study surveyed 171 respondents, including procurement managers, suppliers, and ward committee members. Data were collected through self-administered questionnaires and analyzed using both qualitative and quantitative methods. Reliability tests confirmed the consistency of the data collection instrument, and descriptive statistics highlighted key factors influencing supplier sourcing. The results indicate that effective supplier sourcing significantly enhances project performance by ensuring timely delivery, managing costs, and improving quality. Correlation analysis shows a positive and significant relationship between supplier sourcing and project performance, with a coefficient of 0.594 ($p < 0.01$). The study concludes that strategic supplier sourcing is vital for the successful execution of ward development projects, providing recommendations for optimizing procurement practices to improve overall project outcomes.*

Keywords: *supplier sourcing, ward development, procurement management practices*

1. Introduction

In developed countries, the subject of development projects has provoked several discussions in the last few years in spite of reformations in Malaysia. Procurement practices were cited as one of the factors that increased projects having challenges of not being able to complete on time (Pooe, Mafini, and Makhubele, 2015). However, Grimm, Hofstetter, and Sarkis (2016) contested that little investigation has so far been carried on, on procurement management practices and project performance. Procurement management practices roles are applied as an essential tool for realizing financial, social, and other purposes (Mafini, 2015). Project performance demonstrate that the success of a project was founded on intricacy of project, strategies in engaging, how associations concerned associate with one another, the project manager's expertise, and the competences of all those remaining individuals that are participating through which projects perform.

In Kenya, ward development projects that may be widely distributed into benefit groups, whose concern is to enhance the measure of sustenance of their members, and Resource Creation Activity in societies whose principal plan is to be involved in some kind of financial initiative for capital production for their people as well as having projects that have a lasting impact on socio economic aspects of the society. A vast number of

both metropolitan and rural societies are involved in project exercise from farming, art works, comedy, film making, basket weaving, ceramics, gems, and embroidery designing, wood carving among others to further skillful commodity exchanging, micro ventures and fiscal administration.

The process of finding reliable suppliers is essential for any business. Considering that, on average, manufacturing companies spend 55 percent of their sales on materials acquired (Leenders and Fearon, 1998), it is clear that supply chain disruptions can have a significant effect on profits. Decisions about suppliers are crucial to effective supply chain management, since they affect a manufacturer's operational strategy and financial well-being. According to Westing and Fine (1995), good supplier sourcing aids in determining which suppliers among those that claim to be able to supply actually can. Investing time and resources into finding a reliable supplier is a wise move in the long run because subsequent orders can be placed more cost-effectively and with greater trust. The positive working relationship between the procurement and the user departments is another benefit. These authors go on to say that a reliable supplier is an asset to any business that uses its services. Suppliers like these are crucial to the success of any business. Helping with product creation, cost-benefit analysis, and on-time delivery of the desired quality are all areas in which they excel and which they offer to their clients.

A company's finances might take a serious hit if it mismanages the supplies it purchases from suppliers. Considering that, on average, manufacturing companies spend 55 percent of their revenue on materials, any disruptions in supply could have a significant effect on profits (Leenders and Fearon, 1998). According to Hendricks and Singhal (2003a), for instance, purchasing companies that report supply chain disruptions owing to supplier faults often see a 12% loss in shareholder returns. When comparing these companies' performance to their per-disruption measures, Hendricks and Singhal (2003b) discovered that the average performance was lower. The same authors also claim that choices made on where to get supplies during a single sales period can have an effect on the company's bottom line in the long run. Many retailers have the chance to turn a profit during the holiday season between the end of one year and the beginning of the next; however, if they do not make the most profitable sourcing decisions to meet customer demand, they may experience unnecessary stock-outs and lose money on opportunities missed, or they may be stuck with an excess of products that must be heavily discounted to clear shelves and save cash flow.

Dobler and Burt (1996) state that a healthy buyer-supplier relationship can be fostered through attentive sourcing. According to them, when a buyer and seller have good communication, it makes it easier for the buyer to negotiate for better terms, such as increased performance, supplementary services, joint efforts to cut costs, and information sharing about innovations. Sourcing, as defined by Baily and Farmer (1986), is more than just selecting a supplier for each order individually. The process requires maintaining connections with both the suppliers who are now providing the goods and services and the suppliers who may have been passed over for the time being but are still in the running. Making choices regarding how to divide up available business and under what conditions is also part of the job. Finding sources of supply, ensuring supply continuity, securing alternate sources of supply, and amassing knowledge on procurable resources are all examples of sourcing, as defined by Farmer and Weele (1995).

According to Van Weele (1994), "multiple sourcing" refers to the process of acquiring resources from several different vendors. Research shows that there are situations in which using numerous suppliers is better than using a single one. Due to factors such as insufficient capacity of any other supplier to meet organizational demand, the need to test the performances of new suppliers before committing wholly to one supplier, increased keener competition for all suppliers, assurance of supply should a single source fail, and avoidance

of supplier dependence on the organization, which could threaten its survival if orders are not forthcoming, there are many reasons to diversify suppliers (Farmer and Weele, 1995).

The relationship between purchasing competence and other manufacturing priorities was developed as a viable construct by Das and Narasimhan (2000). The purchasing departments of manufacturing companies are the focus of an empirical investigation. According to the findings, production performance in terms of cost, quality, and delivery, as well as new product launch and customization, all benefit from increased purchasing competence. A study of the connections between purchasing integration, a subset of purchasing competence, and manufacturing performance across multiple dimensions, concluded that the two are inextricably linked.

According to Gartner (2003), board-level executives in Western Europe were less than half as satisfied with the benefits of outsourcing contracts in 2002 as they were in 2001. In 2002, he said, European countries lost 6 billion Euros because of ineffective agreement structures and mismanaged partnerships with IT outsourcing firms. But research by Frayer et al. (2010) suggests that corporations are beginning to see outsourcing as a way to save costs, boost quality, and strengthen their competitive standing. The growing popularity of outsourcing arrangements, along with their unknown complexity, calls for more understanding of how to put it to good use.

2. Problem Statement

Due to the current rapid growth of the Kenyan economy and the vast number of large projects being undertaken in both the public and private sectors, community-based initiatives are of particular importance. Despite the fact that a number of ward development projects are now in the works, there is concern about the frequent and protracted delays that have resulted in project underperformance Echtelt et al., (2008).

The performance of ward development projects in Kenya is influenced by various factors, one of which is the sourcing of suppliers. According to Lawson et al. (2014), supplier sourcing plays a crucial role in the success of these projects by impacting aspects such as project planning, supplier innovation, and buyer-supplier collaboration. However, the effectiveness of supplier involvement in new product development projects is not solely dependent on direct actions but also on strategic management activities and supplier development initiatives Hoegl & Wagner (2005). Despite the potential benefits of supplier collaboration, challenges such as time and cost overruns, quality issues, and the need for improved resource management practices persist in donor-funded health projects and commercial housing projects in Kenya. Additionally, the socio-cultural environment and risk governance practices in construction projects in Kenya further underscore the complexity of ensuring project success.

To address these challenges and enhance the performance of ward development projects in Kenya, it is essential to explore how supplier sourcing strategies impact project outcomes. By investigating the qualitative and quantitative elements of buyer-supplier collaboration, leveraging supplier innovation, and implementing effective supplier development activities, a deeper understanding of the relationship between supplier sourcing and project performance can be achieved Mobegi et al. (2020). Furthermore, integrating best practices from successful initiatives like the Urban Reproductive Health Initiative and the Baby Friendly Community Initiative can provide valuable insights into scaling up interventions and improving project sustainability Maingi et al. (2018).

Therefore, this study aims to examine the effect of supplier sourcing on the performance of ward development projects in Kenya, considering factors such as supplier involvement, innovation, collaboration, and risk management. By analyzing the experiences of various projects in different sectors and drawing on lessons from

successful programs, this research seeks to provide recommendations for optimizing supplier sourcing strategies to enhance the overall performance of ward development projects in Kenya.

3. Study Objectives

The study sought to assess procurement management practices and performance of ward development projects in Kenya with a specific objective to find out the effect of Supplier sourcing on performance of ward development projects in Narok County.

4. Research Question

The study was guided by the research question; What is the effect of supplier sourcing on performance of ward development projects in Narok County?

5. Research Methodology

This study employed explanatory design because it is able to show the relationship between the independent and dependent variables. Explanatory research sought to establish link between factors. Explanatory research is responsible for finding ‘why’ of the events by establishing cause –effect relationship The explanatory design provided better understanding of the research problem through integration of qualitative and quantitative analyses (Creswell and Plano-Clark, 2007; Ivankova, Creswell and Stick, 2006).

The target population for this study was 300 respondents. The target population consisted of employees from wards in Narok County, more so those working in procurement department, senior procurement managers, ward development managers, members of the county assembly, the suppliers and contractors as well as the ward committee members who benefit from the projects. The study adopted the Yamane Taro formula to formulate a sample size.

According to Yamane’s model (1967);

$$n_s = \frac{N}{\{ 1+N (e^2) \}} \tag{1}$$

Where; n_s -sample size; N –population size; e -precision level (at 0.95 confidence interval), $e = 0.05$

$$n_s = \frac{300}{\{ 1+300 (0.05^2) \}}$$

$$n = 171$$

Sample size =171 respondents

Primary data was collected from respondents using a method of self-administered questionnaires.

6. Reliability test of the Data Collection Instrument

Reliability measures the level to which the items under consideration actually measure the same thing with similar conditions without biasness or error. Cronbach’s alpha test was run for the items in each of the variables in the questionnaire. Cronbach’s alpha is a reliability test technique that requires only a single test administration to provide a unique estimate of the reliability for a given test. According to George & Mallery,

(2003) the alpha is an average value of the reliability coefficients was obtained for all possible combinations of items when split into two half-tests. For this study, the questions in the two variables for the 11 pre-test questionnaires were tested for reliability. This is shown in Table 1;

Table 1: Reliability Tests Results

Variable	Number of Items	Cronbach's Alpha	Conclusion
Supplier Sourcing	6	0.739	Reliable
Ward Development Project Performance	6	0.763	Reliable
Overall Consistency $\alpha= 0.7402$			

For supplier sourcing, there were six items under scrutiny. The items in each of the variables were given codes in ascending order. The questions were then subjected to Cronbach's alpha test and where a question was not contributing to reliability, it was dropped until the threshold of 0.7 was achieved. Out of the six items none was expunged because they all seemed to contribute to the reliability of the tool.

7. Descriptive Statistics

The study objective was to find out the influence of supplier sourcing on performance of ward development projects. A scale of 1 to 5 where; 1=SD - Strongly Disagree 2=D - Disagree, 3=N-Neutral, 4=A-Agree and 5=SA- Strongly Agree. Mean and standard deviation were calculated for ease of comparison and generalization of findings.

Table 2: Supplier Sourcing

Statement	%	1	2	3	4	5	Mean	StD
The ward administrators invites all supplier to fair bidding process	%	4.29	5.24	14.76	28.10	47.62	4.10	1.10
The ward administrators selects the most responsible bidder	%	4.29	6.19	20.00	70.00	5.71	3.49	0.72
The ward administrators awards contracts based on supplier capacity	%	3.33	2.86	17.62	46.19	30.00	3.97	0.94
Supplier selection process is conducted as based on the procurement manual and public procurement and Asset Disposal Act 2015	%	3.81	5.24	21.43	70.05	9.52	3.47	0.63

There is supplier training conducted on the essence of quality service delivery	%	21.3	14.5	3.6	42.5	18.1	3.21	1.45
There is frequent supplier appraisal	%	21.3	17.6	2.7	45.2	13.1	3.11	1.41

The finding is shown in Table 2, provided that the ward administrators invites all supplier to fair bidding process with a mean score of 4.10 and standard deviation of 1.10 where, 47.62% of the respondents strongly agreed and 28.10% of the respondents agreeing. The study indicated that the ward administrators selects the most responsible bidder where 46.19% of the respondents strongly agreed with a mean score of 3.49 and standard deviation of 0.72.

The study provided that the ward administrators awards contracts based on supplier capacity with a mean score of 3.97 and standard deviation of 0.94 where 30.00% of the respondents strongly agreed and 46.19 agreeing.

On the statement that there is supplier training conducted on the essence of quality service delivery it was represented with a mean of 3.21 and a standard deviation of 1.45. On the factor that there is frequent supplier appraisal was indicated with a mean of 3.11 and a standard deviation 1.41. The study revealed that supplier selection process is conducted as based on the procurement manual and public procurement and Asset Disposal Act 2015 with 70.05% of the respondents agreeing and 9.52% of the respondents agreeing. The statement was supported by mean score of 3.47 and standard deviation of 0.63. From the study, it was observed that supplier sourcing enhances performance of ward development funds.

The study results are in agreement with Westing and Fine (1995), effective supplier sourcing plays a crucial role in assessing the capabilities of suppliers who assert their ability to provide goods or services. Allocating time and resources towards the identification of a dependable supplier is a prudent decision in the context of long-term planning, as it enables following orders to be executed in a more economically advantageous manner and fosters a heightened level of confidence. Another advantage is the favourable working connection that exists between the procurement department and the user departments. According to the writers, a dependable supplier is a valuable resource for any organization that utilizes its services. Suppliers of this nature play a pivotal role in the attainment of success for enterprises. They demonstrate exceptional proficiency in assisting with product development, conducting cost-benefit analyses, and ensuring timely delivery of products that meet the appropriate quality standards, all of which they extend as services to their clientele.

8. Ward Development Projects Performance

The study's main objective is to assess the influence of the ward development projects performance. Scale of 1 to 5 where; 1= SD - Strongly Disagree 2=D - Disagree, 3=N - Neutral, 4=A - Agree and 5= SA - Strongly Agree. Mean and standard deviation were calculated for ease of comparison and generalization of findings.

Table 3: Ward Development Projects Performance

Statement	%	1	2	3	4	5	Mean	StD
Delay of dispute resolutions has very high impact on ward development project timely delivery	%	3.33	5.71	9.52	41.90	39.52	4.09	1.01
Fluctuation costs have least implication on ward development project cost.	%	5.71	6.67	3.81	75.71	8.10	3.74	0.91
Selection of domestic sub-contractors has least impact on quality performance.	%	0.95	5.71	8.57	26.19	58.57	4.36	0.93
Technical and managerial expertise has an impact on ward development projects performance	%	5.24	0.95	17.62	43.81	32.38	3.97	1.00
Actual times for completion of planned tasks against schedule greatly influence time performance	%	2.86	4.76	21.90	60.95	9.52	3.70	0.82

The findings indicated that delay of dispute resolutions has very high impact on ward development project timely delivery which had a mean of 4.09 and standard deviation of 1.01 with 41.90% of the respondents agreeing and 39.52% of the respondents strongly agreeing to the statement that there is very high impact on ward development project timely delivery.

The findings indicated that fluctuation costs have least implication on ward development project cost with a mean score of 3.74 and standard deviation of 0.91 where 75.71% of the respondents agreed and 8.10% of the respondents strongly agreed to the statement that fluctuation costs have least implication on ward development project cost.

The respondents moderately indicated that selection of domestic sub-contractors has least impact on quality performance had a mean of 4.36 and standard deviation of 0.93 with 26.19% of the respondents agreeing and 58.57% of the respondents strongly agreeing to the statement.

The study indicated that technical and managerial expertise has an impact on ward development projects performance with a mean score of 3.97 and standard deviation of 1.00 where 43.81% of the respondents agreed and 32.38% of the respondents strongly agreed to the statement.

The findings further indicated that actual times for completion of planned tasks against schedule greatly influence time performance with a mean of 3.7 and a standard deviation of 0.82. From the findings, the results revealed that majority of the respondent agreed that procurement practices influences performance of ward development funds.

9. Correlation Analysis

Correlation analysis shows the direction, strength and significance of the relationships among the variables of study (Sekaran, 2000). To establish whether there was a relationship between the variables, a correlation analysis was conducted. The correlation analysis shows the direction, strength, and significance of the relationships among the variables of the study. A positive correlation indicates that as one variable increases, the other variables also increases. On the other hand, a negative correlation indicates that as one variable increases the other variable decreases (Sekaran, 2003).

The model that was to be fitted is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon \tag{2}$$

Where: -

Y = Performance of Ward Development Projects

X_1 = Supplier Sourcing

β_0 = The Constant Term

β = Coefficient of independent variables

ε = Error term which was assumed to have a mean of zero and a constant variance.

Table 3 shows results of the correlation analysis.

Table 3: Correlation between Study Variables

	Y	X_1
Y	1	
X_1	.594***	1

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Supplier sourcing (X_1) is positively and significantly related to performance of ward development projects as shown by the correlation coefficient of 0.594 ($p < 0.01$). This implies that there is a moderate but significant positive association between supplier sourcing and performance of ward development projects.

10. Summary of findings

The study findings showed that supplier sourcing has a positive significant effect on performance of ward development funds. This implies that when all factors are held constant, a unit increase in supplier sourcing leads to a significant increase in performance of ward development funds. The study highlighted supplier sourcing is positively and significantly related to performance of ward development funds. This implies that

there is a moderate but significant positive association between supplier sourcing and performance of ward development funds.

The study concluded that supplier sourcing is positively and significantly related to performance of ward development projects. This implies that there is a moderate but significant positive association between supplier sourcing and performance of ward development projects.

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