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**Ibrahim, D. Y., & Mutuku, M. K.**

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<sup>1</sup> Ibrahim, D. Y., & <sup>2</sup> Mutuku, M. K.

<sup>1</sup> Master Student, Department of Management Science, Kenyatta University [KU], Kenya

<sup>2</sup> Doctor, Lecturer, Department of Management Science, Kenyatta University [KU], Kenya

ORCID: <https://orcid.org/0000-0003-0662-7157>

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### ABSTRACT

*This study sought to investigate influence of supplier relationship management on performance of road construction projects in Wajir County, Kenya. Stewardship theory was used to anchor the study. The study used a descriptive research design. The study target population was Wajir County Department of Roads and Transport. A census of 50 respondents, with 5 project managers and 45 project team members was considered. A semi-structured questionnaire was used to collect data. A pilot study involving six respondents was conducted. Descriptive statics such as mean and standard deviation and inferential statistics such as regression analysis employed for data analysis. From the findings, regression model coefficients indicated that supplier relationship management positively influenced performance of road construction projects in Wajir County. This study concluded that supplier relationship management has a positive correlation with performance of road construction projects in Wajir County, Kenya. The study recommended the county government of Wajir to focus on supplier relationship management practices as they positively and significantly affect performance of road construction projects. In this regard, it is important to promote a positive supplier relationship because it results in an exchange of ideas and feedback, cost savings, identification of waste causes and ways to eliminate them, development of a good rapport with the provider, and an improvement in supply chain performance.*

**Keywords:** *Supplier Relationship Management, Performance of Road Construction Projects, Wajir County, Kenya*

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## INTRODUCTION

Procurement management practices are primarily concerned with the strategies used while making procurement choices. Procurement management practice is also defined as the method involved with acquiring products for a company in accordance with established policies guiding the selection of products, suppliers, and techniques with the goal of employing sound business methods that maximize the organization's value (Mokogi, Mairura & Ombui, 2015; Ndei & Mutuku, 2021). According to Quesada, González, Mueller, and Mueller (2018), accurately dealing with all procurement processes guarantees that corporate tasks work without a hitch, however it likewise sets aside cash, time, and assets. Procurement executives ensure that goods and services are secured accurately for projects to run flawlessly and successfully. As a result, effective procurement management is critical for avoiding costly delays and errors

Procurement ought to be emphatically associated with the turn of events and execution of Sustainable Procurement Policies, with an exceptional accentuation on how ecological issues, as well as issues connecting with different parts of society and the economy, can be coordinated into obtainment process exercises (Vaidya & Campbell, 2016). According to Liu, Xue, Yang, and Shi (2019), it is vital to consider a wide range of performance indicators when determining organizational performance. Quality, efficiency, productivity, profitability, and sustainability should all be considered when measuring organizational performance. Procurement should be viewed as an integral aspect of an organization's overall strategy.

Supplier relationship management serves as a focal point between the organization and the end users, and it is an organized way to determining what they need and want from a supplier, as well as developing and managing the company-to-company link to meet these demands (Jiang, Henneberg & Naude, 2016). According to Grudinschi, Sintonen, and Hallikas (2019), all around oversight joint efforts among purchasers and providers are helpful for

supporting cooperative familiarity and obtainment viability. Therefore, organizations assume a significant part in the general exhibition of a venture by choosing the most appropriate provider and assessing are important obtainment processes for a project's success, which adds to effective supply chain management.

A well-designed information exchange framework assists project managers in making sound judgments, implementing appropriate strategies, and completing projects on time and within budget (Kumaraswamy & Anvuur, 2018). Henderson (2019) observes that monitoring quality and assessing communication procedures inside a project aid in improving the overall efficiency of project management, and hence its performance. These inside correspondence examination models are an immense assistance in recognizing internal and external factors that impact the volume and nature of data trade all through projects, as well as how to bargain with the special difficulties that have arisen as a result of the emergence of virtual teams.

## LITERATURE REVIEW

This study was founded by Donaldson and Davis' (1991 & 1993). Stewardship theory is a novel way of looking at the current links among proprietorship and the board in an organization. It emerges as a critical counterbalance to Agency Theory. According to this notion, a steward optimizes shareholder utility through safeguarding and maximizing shareholder capital through the firm's performance. In this context, stewards are chiefs who endeavor to safeguard and boost incomes for investors. Stewardship theory emphasizes management's position as stewards, with management's priorities imbedded in the company. This hypothesis is relevant to the review since it underscores the significance of representatives operating freely in order to maximize shareholder returns. As a result, the idea supports the goal of training needs assessment in enabling employees to act autonomously through training and, as a result, optimize shareholder profits.

Mumelo et al. (2017) assessed the effect of provider connections on the exhibition of limited scope firms in Bungoma Town, Kenya. The review's objective was to decide what provider connections mean for SSE execution in Bungoma town. A relationship configuration was utilized in the review. The objective populace comprised of 1011 entrepreneurs. Essential information was accumulated through a survey, while auxiliary information was assembled from big business records, mobile company reports, and publications. The study's findings demonstrated that provider connections well affect the progress of private companies. It was recommended that SSEs be urged to completely coordinate data innovation into their activities and to advance data trade all through the inventory network in order to improve overall performance. Supplier Relationship Management (SRM) is crucial in today's dynamic and competitive climate since it ensures the supply of trustworthy and consistent deliveries. For such a link to be fruitful and long-lasting, it must benefit all parties involved, including purchasing and supply firms.

Wambani (2017) assessed the effect of provider relationship the executives on the functional execution of sugar delivering endeavors. The reason for the review was to examine the impacts of provider connections on the functional execution of sugar creation endeavors in Kakamega County. A graphic cross-sectional study research configuration was utilized in the review. The review zeroed in on three sugar creation organizations in Kakamega

County. A survey was utilized to gather data. The review's discoveries exhibited a positive and critical relationship between provider relationship the board and functional achievement.

Chepkorir (2017) examined how the management of supplier relationships affects procurement performance using Almasi Beverages Limited as an example. Almasi Beverages Limited provided 426 respondents for the target population. That's what the review's discoveries uncovered Almasi Beverages Limited teaches its suppliers by subjecting them to quality requirements. According to the findings of the study, organizations classify their suppliers into bunches in view of value improvement, with quality improvement being underscored all through the acquirement cycle to aid in supplier relationship management and procurement performance.

#### METHODOLOGY

The study used a descriptive research design. According to Stangor (2014), descriptive research design is a way of assessing people's characteristics, reporting and observation behaviors, awareness of programs, attitudes or ideas, and needs, and their relevance to present the current state of occurrence. The population is defined as "the total set of individuals or items under investigation in any field of study that have a common trait." Wajir County Roads & Transport Department was chosen as the target population. As shown in Table 1, the overall number of respondents were 50.

**Table 1: Target Population**

| Category            | Population | Percentage |
|---------------------|------------|------------|
| Project manager     | 5          | 10         |
| Project team leader | 45         | 90         |
| <b>Total</b>        | <b>50</b>  | <b>100</b> |

**Source: Researcher (2022).**

Internal consistency was utilized as a benchmark for instrument reliability in this study, and it was assessed using the Cronbach's Alpha scale, which ranges from 0 to 1 and indicates the closeness for a set of items that are in a series.

Cronbach's Alpha values larger than a specific threshold, according to Ali and Yusof (2011), indicate items assessing construct and hence instrument reliability. Cronbach's Alpha of 0.7 was used as the internal consistency and hence

reliability level in this investigation (Mutuku, 2019). In this case, variable items that are above this internal consistency threshold were kept, and an overall value of greater than 0.7 was adopted to confirm that the instrument is reliable. The questions were distributed directly by the researcher to all respondents. The responders were accorded two weeks to complete the surveys. The researcher likewise visited the respondents to remind them of the need of finishing the studies to get a high response rate. Descriptive statistics such as mean and standard deviations were used to evaluate quantitative data. This was accomplished by generating and presenting data in the form of graphs, charts, tables, and figures using SPSS. Inferential analysis was used by producing the correlation and regression outputs.

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

Where; Y = Project performance

$X_1$  = Supplier relationship management

$\beta_1$  = Coefficients

$\epsilon$  = Error term

## FINDINGS AND DISCUSSION

### Descriptive Findings

For the purpose of summarizing data on the responses to the study's numerous variables, descriptive statistics, including mean and standard deviation, were used. Due to the fact that standard deviation values indicate the degree of response differences, the average responses to each of the variables are also presented in this section. This study determined the influence of supplier relationship management on performance of road construction projects in Wajir County. The average responses are as shown on table 2 based on a Likert scale of 1-5 using mean and standard deviation.

**Table 2: Descriptive Results on Supplier Relationship Management**

| Statement  | 1    | 2     | 3     | 4     | 5     | Mean | Std Dev |
|--|------|-------|-------|-------|-------|------|---------|
| A positive supplier connection has resulted in the exchange of ideas and feedback, which has helped to improve operations.               | 4.5% | 2.3%  | 31.8% | 40.9% | 20.5% | 3.70 | 0.98    |
| Good supplier ties have resulted in cost reductions.   | 4.5% | 6.8%  | 29.5% | 36.4% | 22.7% | 3.66 | 1.06    |
| The County has been able to identify waste causes and solutions to eliminate them thanks to a supplier relationship management platform. | 4.5% | 11.4% | 22.7% | 29.5% | 31.8% | 3.73 | 1.17    |
| The improvement in communication has resulted from the creation of a positive relationship between the County and the provider.          | 9.1% | 11.4% | 31.8% | 31.8% | 15.9% | 3.34 | 1.16    |
| The supplier relationship management strategy has strengthened the County's supply chain.  | 4.5% | 2.3%  | 34.1% | 31.8% | 27.3% | 3.75 | 1.04    |

**Source: Research Data (2022).**

As indicated on table 2 above, the largest percentage of the respondents, 40.9, agreed that a positive supplier connection has resulted in the exchange of ideas and feedback, which has helped to improve operations. This is also confirmed by a mean of 3.7 whereas a standard deviation of 0.98 is small indicating that responses were not spread out

from the stated mean. on whether good supplier ties have resulted in cost reductions, the largest fraction of respondents 36.4 percent, agreed and this was confirmed by a mean of 3.66. The next claim sought to find out whether the County has been able to identify waste causes and solutions to eliminate them thanks to a supplier relationship

management platform. In this case, a significant part of the sample, 31.8% strongly agreed while a mean of 3.73 shows that overall, respondents moderately agreed. However, the data around the mean had a lot of volatility and was widely dispersed with standard deviation of 1.17. On whether the improvement in communication has resulted from the creation of a positive relationship between the County and the provider, majority of respondents, mean 3.34 and standard deviation of 1.16 moderately agreed as only 9.1 percent strongly disagreed. The final statement was intended to determine whether the supplier relationship management strategy has strengthened the

County's supply chain. In this regard, the largest proportion of respondents, 34.1 percent, moderately agreed. This is also confirmed by a mean of 3.75 while only 2 percent of the sampled participants strongly disagreed.

### Inferential Analysis

#### Regression Analysis Results

A multiple regression model was employed with summary findings shown in table 3 to determine the effect of supplier relationship management on the performance of road construction projects in Wajir County, Kenya.

**Table 3: Model Summary**

| Model Summary |                   |          |                   |                            |
|---------------|-------------------|----------|-------------------|----------------------------|
| Model         | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1             | .432 <sup>a</sup> | .187     | .167              | .6877860                   |

a. Predictors: (Constant), Supplier relationship management

**Source: Research Data (2022).**

The model summary results indicate that the procurement management practices had a strong positive influence on performance of road construction projects in Wajir County as shown by a joint Pearson correlation of 0.432. The coefficient of determination (R-square) is 0.187 implying that

supplier relationship management accounts for up to 18.7% of the variation in performance of road construction projects in Wajir County. The results on significance of the model are presented in table 4 below.

**Table 4: Model Significance**

| ANOVA <sup>a</sup> |            |                |    |             |       |                   |
|--------------------|------------|----------------|----|-------------|-------|-------------------|
| Model              |            | Sum of Squares | df | Mean Square | F     | Sig.              |
| 1                  | Regression | 4.564          | 1  | 4.564       | 9.647 | .003 <sup>b</sup> |
|                    | Residual   | 19.868         | 42 | .473        |       |                   |
|                    | Total      | 24.432         | 43 |             |       |                   |

a. Dependent Variable: Project Performance

b. Predictors: (Constant), Supplier relationship management

**Source: Research Data (2022).**

The results indicate that the overall model was statistically significant. Further, the results imply that procurement management practice is a good predictor of performance of road construction projects in Wajir County. This was supported by an F statistic of 9.647 higher than the F (4, 39) critical value of 2.46 and the reported p value (0.000)

which was less than the conventional probability of 0.05 significance level. This suggests that the supplier relationship management is an appropriate predictor of the change in performance of road construction projects in Wajir County, Kenya. Regression coefficients are presented in Table 5.

**Table 5: Regression Coefficients**

| Model | Coefficients <sup>a</sup>        |            |                           |      | t     | Sig. |
|-------|----------------------------------|------------|---------------------------|------|-------|------|
|       | Unstandardized Coefficients      |            | Standardized Coefficients |      |       |      |
|       | B                                | Std. Error | Beta                      |      |       |      |
| 1     | (Constant)                       | 1.242      | .751                      |      | 1.654 | .106 |
|       | Supplier relationship management | .635       | .205                      | .432 | 3.106 | .003 |

a. Dependent Variable: Project Performance

Source: Research Data (2022).

Thus, the optimal regression model with significant only coefficients is:

$$\text{Road construction project performance} = 1.242 + 0.432 \text{ Supplier relationship management}$$

The regression results as shown in Table 5 indicated that that supplier relationship management positively and significantly influenced performance of road construction projects in Wajir County, Kenya as shown by beta value of 0.364 and p-value of 0.046. This implies that a positive change in supplier relationship management would result to a significant improvement in performance of road construction projects in Wajir County if all other factors are held constant at zero. Mumelo et al. (2017) suggested that supplier relationship management ensures the supply of trustworthy and consistent deliveries which benefit all parties involved, including purchasing and supply firms thereby improving project performance. Wambani (2017) also exhibited a positive and significant relationship between provider relationship and functional achievement of a project.

### CONCLUSIONS AND RECOMMENDATIONS

The aimed to determine the ways in which supplier relationship management influences performance of road construction projects whereby descriptive findings revealed that majority of the respondents moderately agreed that a positive supplier connection has resulted in the exchange of ideas and feedback, which has helped to improve operations, good supplier ties have resulted in cost reductions, the County has been able to identify waste causes and solutions to eliminate them

thanks to a supplier relationship management platform, improvement in communication has resulted from the creation of a positive relationship between the County and the provider and the supplier relationship management strategy has strengthened the County's supply chain. A positive and statistically significant correlation between supplier relationship management and performance of road construction projects was obtained. Further, regression coefficients indicated that supplier relationship management positively influenced performance of road construction projects, this effect being statistically significant. Therefore, the study concluded that supplier relationship management positively and significantly influenced performance of road construction projects in Wajir County. In this case, a positive supplier connection leads to exchange of ideas and feedback, results in cost reductions and identification of waste causes and solutions to eliminate them, creation of a positive relationship between with the provider and strengthens supply chain performance.

The study recommended Wajir County to focus on supplier relationship management practices as they positively and significantly affect performance of road construction projects. In this regard, it is important to promote a positive supplier relationship because it results in an exchange of ideas and feedback, cost savings, identification of waste causes and ways to eliminate them, development of a good rapport with the provider, and an improvement in supply chain performance. In order to further improve the performance of road construction projects, it is also necessary to

pay attention to information sharing practices because they foster a sense of belonging among employees, allow for the incorporation of procedural changes into project management,

ensure that project information is disseminated widely, quickly, and effectively, as well as encourage quicker decision making.

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