Supplier Relationship Management Practices, Procurement Ethics and Supply Chain Performance in County Governments

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ABSTRACT

Purpose: The broad objective was to establish the moderating effect of Procurement ethics on the relationship between supplier relationship management practices and supply chain performance of selected Kenyan County Governments.

Design/Methodology/Approach: This study utilized descriptive survey research design and targeted 112 procurement staff. Stratified and simple random techniques were used. Structured questionnaires were employed for data collection. For data analysis descriptive as well as inferential statistics were utilized.

Findings: Findings revealed that Procurement ethics had a significant moderating effect on the association between supplier relationship management practices and supply chain performance of Kenyan Selected County Governments.

Implications/Originality/Value: The study makes a contribution on the critical role procurement ethics plays in the link between supplier relationship management practices and performance of supply chain. County governments should ensure procurement ethics such as integrity, accountability and transparency are adhered to. The findings may guide in the development and implementation of procurement ethics policies.

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Introduction

According to Awasthi and Kannan (2016) supplier relations has become an area of interest in strategic supply chain management. Supplier relationship management is beneficial to an organization as it aids in improving product quality and lowering lead times (Mitra & Datta, 2014). According to Forkmann, Henneberg, Naude and Mitrega (2016) management of supplier relations enhances supplier engagement such that the end users’ priorities are known and suppliers get to know how to attain the priorities. Management of supplier relations is highly integrated thus
seeking to address both buyers and suppliers side (Forslund, 2015).

A study by Moore (2010) found that supplier relationship practices affected procurement performance in Japan’s automotive industries. Supply chain performance and supplier relationship management have a key role on the general organizational performance (Gadde, Amolo & Gordon, 2010). In South Africa, supplier relations in public sector has been curtailed by laws thus limiting the cooperation level. Moreover, short term contracts are given to suppliers and such contracts expire even before the suppliers enjoy full benefits (Naude, Ambe & Kling, 2013). According to Akenroye et and Aseka (2012) supplier relationships have yielded much in organizations in relation to returns. Similarly, Courtsen and Felde (2015) noted that supplier relationship improved performance of some given firms.

Studies done in Kenya have found that supplier relationship management (SRM) impacts on performance (Mumelo, Selfano & Onditi, 2017; Mwangi & Muli, 2020). Furthermore, Kosgei and Gitau (2016) confirmed that supplier relationship influenced procurement competitiveness in in terms of service quality, time management, innovativeness in supply chain and price negotiation ability. The Kenyan system of governance has the national government and county governments. The study bases its argument on the devolved systems that undertake one on one procurement activities. Limited studies have been carried out on public procurement SRM on especially within county governments. This study aims to significantly contribute insights in this scarce area of study in Selected County Governments in Kenya’s Nyanza Region.

Problem Statement
According to World Bank, performance of supply chain has declined resulting to a 4.7% decrease in the global GDP (WB, 2013). According to Owalla (2012) alleged corruption cases to the tune of 50% in devolved governments have been linked to supplier relations. Furthermore, Selebwa and Moronge (2018) noted that poor performance in regards to procurement function, was a common problem facing county governments. The procurement Act provides guidelines for supplier relationship although there is still the challenge of poor relations with the suppliers including opportunistic tendencies as well as distrust resulting to value loss (PPRA, 2020).

Studies have established that supplier relationship management impacts on performance (Al-Abdallah, Abdallah & Hamdan, 2014; Mwangi & Muli, 2020; Opaleye, Ojelade & Aremu, 2020). On the contrary, a study by kiplagat and kiarie (2015) established that the association between SRM and performance was insignificant. Further majority of the studies focused on the direct association between supplier relationship management and performance without considering moderators. This study will therefore analyze the moderating effect of Procurement ethics on the relationship between supplier relationship management practice and supply chain performance in County Governments.

Objective of the Study
To establish the moderating effect of Procurement ethics on the relationship between supplier relationship management practices and supply chain performance in County Governments.

Research Hypothesis
H0: Procurement ethics has no significant moderating effect on the relationship between supplier relationship management practices and supply chain Performance in County Governments.
Literature Review
Theoretical Framework
Social Exchange Theory
Supplier relationship management is guided by Social Exchange Theory opined by Emerson (1976). The theory asserts that interactions generate obligations on the part of parties interacting. In an organization employees relate with each other to ignite rewards and avoid penalties. This insinuates that employees benefit mutually basing on the engagement terms (Cropanzano & Mitchell, 2005). Individuals engage freely on basis of social exchanges anchored on norms, reciprocity, exchanged resources and relationship types that have developed over time. County governments therefore build its relationship roots on social exchange theory.

Institutional Theory
Meyer and Rowan (1977) contended that the surrounding under which an organization functions improves performance. Bouaine and Hrichi (2019) alludes that main elements of institutional theory are attached to performance of an organization. It hugely draws and banks on public procurement Act activities. The organizational environment will determine the supplier trust, the supplier development, evaluation process and how information would be shared. The theory explains procurement ethics conduct, standards, practices and new forms of organization. Institutional model is vital for this study in that it clearly explains out the policy function of Public Procurement ethics and the tenets of supplier relationships.

Conceptual Review
Supplier Relationship Management Practices
Supplier Relationship Management (SRM) entails developing as well as managing associations including buyer-supplier cooperation (Schuh et al., 2014). SRM is needed by firms for gaining competitive advantage (Tran, 2015). Better supplier relations contributes to an increase in innovation capacity (Courtsen & Felde, 2015). SRM includes practices such as Supplier segmentation, supplier information sharing, lead time, duration of relationship, supplier selection, evaluation, collaboration, development, supplier management (Al-Abdallah, Abdallah & Hamdan, 2014; Mumelo, Selfano & Onditi, 2017; Mwangi & Muli, 2020; Onyango, 2015; Park et al., 2010).
In this study aspects of supplier relationship management included information sharing, trust management, supplier selection and evaluation and supplier development. According to Khan and Siddiqui, (2018) information sharing entails exchange of data between parties such as the suppliers and buyers in given firms. Supplier Trust Management Practice entails the loyalty, goodwill and supplier competence that generates organization performance (Mungai, 2014). Supplier evaluation entails the procedural approaches undertaken to ensure the supply chain process is effective (Mungai, 2014). Supplier Development Management Practice is the energy put in place by a company to improve performance standards of suppliers (Ochieng, 2014).

Procurement Ethics
This is a purchasing and supplies policy behavioral approach that has a stipulated conduct (Ochieng, 2014). Studies have shown that procurement ethics improve supply chain performance (Onyinkwa, 2015; Machoka, 2016). Adoption of ethical approach in procurement is vital and implementing it makes the firm to realize benefits attributed to moral behaviour. This calls for united efforts by all stakeholder to see that the procurement process follows the due legal requirements. Furthermore upright employee behavior should be monitored to ensure professionalism is at a higher level for all procurement staff. This will ensure the organization gains reputation in the global sector and hence supplier trust among key supplier relationship practice will be practicable and realistic (Onyinkwa, 2015). Indicators of procurement ethics used in this study were integrity, accountability and transparency.
Supply Chain Performance
According to Hohenstein, Feisel and Hartmann (2014) supply chain performance (SCP) refers to an extension of supply chain activities that enables an organization to meet the end users requirements such as availing the products and on time delivery of products. Indicators of supply chain performance in this study were efficiency and effectiveness, quality improvement and customer satisfaction.

Empirical Review on Supplier Relationship Management Practice, Procurement Ethics and Supply Chain Performance
A study conducted in manufacturing firms of Japan, Korea, USA, and Italy on supplier relationship management and competitive performance and established that supplier partnership/development and reduction of supplier lead time significantly impacted on competitive performance (Al-Abdallah, Abdallah & Hamdan, 2014). A study done in Nigeria’s publicly traded food and beverage companies proved that methods of supplier relationship management influenced performance (Opaleye, Ojelade & Aremu, 2020).

Kiplagat and Kiarie (2015) studied the effect supply chain performance had on supply chain performance at a Kenyan state corporation. The study focused on supplier evaluation and selection, supplier performance measurement, supplier identification and supplier relationship management and the findings revealed that supplier evaluation and selection and performance management were significant while supplier identification and relationship management were insignificant.

Supplier relationship management with specific focus on trust, mutual goals, communication and commitment was positively linked to performance of Kenya airways (Kosgei & Gitau, 2016). Management of supplier relations through sharing of information, lead time and duration of the relationship positively and significantly influenced small scale enterprises performance in Kenya (Mumelo, Selfano & Onditi, 2017). Mwangi and Muli (2020) investigated the influence supplier relationship management had on Kenyan manufacturing firm’s performance. The study was done in Food and Beverage firms. The study revealed that supplier segmentation, information flow, collaboration as well as supplier development positively and significantly influenced performance thus implying that supplier relationship management is a determinant of organizational performance. Using descriptive research design, Onyango (2020) conducted a study in Kenyan alcoholic beverage companies on the effect SRM had on supply chain performance and noted that supplier collaboration and supplier selection and evaluation significantly affected supply chain performance. However supplier development was not significant. Data was collected using close ended questionnaire. From the reviewed literature it can be noted that studies have been done on the effect of SRM have on performance. Most studies focused on the direct effect without taking into consideration moderators.

There’s an array of studies on the effect of procurement ethics on performance for instance studies by Ndolo and Njagi (2014), Nato, Miroga and Otinga (2021) and Odero and Machuki (2021) done in the water sector and County government respectively which established that procurement ethics influenced performance. Syengo (2015) explored the procurement ethical practices affecting public procurement at KRA and found implementation of procurement ethical conduct had a positive significant influence on public procurement. Similarly, Machoka (2016) found that procurement ethics enhanced project completion rate, better funds utilization and also reduced poverty levels. The studies have focused on direct effect of ethical practices. However, this study focused on moderating effect of procurement ethics on the relationship between supplier relationship management practice and supply chain performance.

Research Methodology
The study utilized descriptive survey research approach. The study targeted 112 respondents
(procurement staff) in County governments located in Kenya’s Nyanza region. Specifically Migori, Kisumu and Homabay county governments. The sampling techniques used in the study were stratified and also simple random. Yamane’s formula was used to get the sample size which was 88. Structured questionnaires were then used to collect data. Piloting of the study was conducted in Kakamega County government whereby 9 respondents who were procurement staff were selected. Reliability was tested using cronbach alpha test. Content validity was utilized to test validity whereby the questionnaire was ascertained by a procurement manager and academic supervisors. Both descriptive as well as inferential statistics were utilized for data analysis. Descriptive statistics used were mean and standard deviation while as for inferential statistics hierarchical regression was employed. Results presentation was in tabular form. The following hierarchical regression model was applied:

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

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

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

Where;

$Y$ = supply chain Performance

$X_1$ is Supplier information sharing management practice

$X_2$ is Supplier trust management practice

$X_3$ is Supplier evaluation management practice

$X_4$ is Supplier development management practice

$\beta_0$ = the constant

$\text{B}_1$-$4$ = the regression coefficient

$M$ = Moderator (Procurement Ethics)

$\varepsilon$ = Error term

**Results and Discussion**

**Rate of response**

The response rate attained was 86.4% which is considered desirable. Thus out of 88 questionnaires issued, 76 were duly filled and returned.

**Reliability Results**

Reliability tests the accuracy of the results that were given during data collection. The Cronbach’s Alpha ($\alpha$) should be more than 0.7 and this was attained for all the variables as indicated in table 1 as follows;

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach Alpha</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier relationship management</td>
<td>0.812</td>
<td>5</td>
</tr>
<tr>
<td>Procurement Ethics</td>
<td>0.803</td>
<td>5</td>
</tr>
<tr>
<td>Performance of Supply Chain</td>
<td>0.837</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Research data (2022)

**Descriptive Statistics for study variables**

Descriptive statistics was conducted to ascertain respondents agreement level in regards to statements on the study variables. The results are indicated in table 2;

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier relationship management practice</td>
<td>3.68</td>
<td>0.96</td>
</tr>
<tr>
<td>Procurement ethics</td>
<td>3.63</td>
<td>1.06</td>
</tr>
<tr>
<td>Supply chain performance</td>
<td>3.65</td>
<td>0.89</td>
</tr>
</tbody>
</table>

Source: Research data (2022)
According to table 2 above on descriptive results, most respondents were in agreement with statements on supplier relationship management (M=3.68, SD=0.96), procurement ethics (M=3.63, SD=1.06) and supply chain performance (M=3.65, SD=0.89). This implies that the county governments engage in supplier relationship management practices and that procurement ethics is a common practice.

**Inferential statistics Results**

**Results on hierarchical Regression Analysis**

The analysis was done to examine the moderating effect of procurement ethics on Supplier Relationship Management practices and supply chain performance. The results are indicated in Table 4.1.

![Table 4.1: Model Summary](image)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. Error of the Estimate</th>
<th>R² Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.810a</td>
<td>.657</td>
<td>.560</td>
<td>.24480</td>
<td>.657</td>
<td>133.603</td>
<td>4</td>
<td>71</td>
<td>.000</td>
</tr>
<tr>
<td>2</td>
<td>.893b</td>
<td>.797</td>
<td>.791</td>
<td>.31632</td>
<td>.140</td>
<td>7.893</td>
<td>4</td>
<td>71</td>
<td>.000</td>
</tr>
<tr>
<td>3</td>
<td>.901c</td>
<td>.812</td>
<td>.804</td>
<td>.23693</td>
<td>.015</td>
<td>7.918</td>
<td>1</td>
<td>71</td>
<td>.006</td>
</tr>
</tbody>
</table>

Source: Field data (2022)

In the first model, in table 4.1 above, the R² is 0.657 which implies that 65.7% of the changes in supply chain performance (Dependent Variable) could be attributed to supplier relationship management practices (Independent Variable). On the second model, after introduction of procurement ethics, the R² increased to 0.797 which implied that 79.7% of the changes in supply chain performance (Dependent Variable) could be attributed to supplier relationship management practices (Independent Variable). As for the third model where the interactive term (interaction between supplier relationship management practices and procurement ethics) was introduced the R² further increased to 0.812.

![Table 4.2: Analysis of Variance](image)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>24.020</td>
<td>4</td>
<td>8.007</td>
<td>133.603</td>
<td>.000</td>
</tr>
<tr>
<td>1</td>
<td>Residual</td>
<td>6.113</td>
<td>71</td>
<td>.060</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>30.132</td>
<td>75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regression</td>
<td>24.463</td>
<td>4</td>
<td>6.116</td>
<td>108.948</td>
<td>.000</td>
</tr>
<tr>
<td>2</td>
<td>Residual</td>
<td>5.670</td>
<td>71</td>
<td>.056</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>30.132</td>
<td>75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regression</td>
<td>25.463</td>
<td>4</td>
<td>6.116</td>
<td>105.057</td>
<td>.000</td>
</tr>
<tr>
<td>3</td>
<td>Residual</td>
<td>4.670</td>
<td>71</td>
<td>.056</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>30.132</td>
<td>75</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field data (2022)

Table 4.2 provides ANOVA results which shows a statistically significant overall model for model 1, 2 and 3.
### Table 4.3: Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>T</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.769</td>
<td>.174</td>
<td>4.422</td>
</tr>
<tr>
<td></td>
<td>S inform sharing</td>
<td>.309</td>
<td>.062</td>
<td>.273</td>
</tr>
<tr>
<td></td>
<td>S trust mg</td>
<td>.478</td>
<td>.076</td>
<td>.454</td>
</tr>
<tr>
<td></td>
<td>S evaluation mg</td>
<td>.342</td>
<td>.067</td>
<td>.356</td>
</tr>
<tr>
<td></td>
<td>S development mg</td>
<td>.341</td>
<td>.066</td>
<td>.354</td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>.108</td>
<td>.354</td>
<td>.305</td>
</tr>
<tr>
<td></td>
<td>S inform sharing</td>
<td>.358</td>
<td>.063</td>
<td>.236</td>
</tr>
<tr>
<td></td>
<td>S trust mg</td>
<td>.484</td>
<td>.073</td>
<td>.448</td>
</tr>
<tr>
<td></td>
<td>S evaluation mg</td>
<td>.488</td>
<td>.084</td>
<td>.508</td>
</tr>
<tr>
<td></td>
<td>S development mg management</td>
<td>.499</td>
<td>.082</td>
<td>.501</td>
</tr>
<tr>
<td></td>
<td>Procurement Ethics</td>
<td>.486</td>
<td>.173</td>
<td>.187</td>
</tr>
<tr>
<td>3</td>
<td>(Constant)</td>
<td>.109</td>
<td>.354</td>
<td>.305</td>
</tr>
<tr>
<td></td>
<td>Supplier information sharing</td>
<td>.360</td>
<td>.063</td>
<td>.236</td>
</tr>
<tr>
<td></td>
<td>Supplier trust management</td>
<td>.571</td>
<td>.073</td>
<td>.448</td>
</tr>
<tr>
<td></td>
<td>Supplier evaluation management</td>
<td>.489</td>
<td>.083</td>
<td>.508</td>
</tr>
<tr>
<td></td>
<td>Supplier development management</td>
<td>.498</td>
<td>.081</td>
<td>.501</td>
</tr>
<tr>
<td></td>
<td>Procurement Ethics SIS x PE</td>
<td>.487</td>
<td>.172</td>
<td>.186</td>
</tr>
<tr>
<td></td>
<td>STM x PE</td>
<td>.041</td>
<td>.071</td>
<td>.241</td>
</tr>
<tr>
<td></td>
<td>SEM x PE</td>
<td>.052</td>
<td>.081</td>
<td>.451</td>
</tr>
<tr>
<td></td>
<td>SDM x PE</td>
<td>.049</td>
<td>.089</td>
<td>.510</td>
</tr>
</tbody>
</table>

Source: Research Data (2022)

In model one in table 4.3 above, supplier relationship management practices (supplier information sharing, supplier trust management, supplier evaluation management and supplier development management) positively and significantly influences supply chain performance. In model two on introduction of procurement ethics, findings show that both supplier relationship management practices and procurement ethics positively and significantly influences supply chain performance. In model three regarding the interaction term findings show that the interaction between supplier relationship management practices and procurement ethics positively and significantly influences supply chain performance. Hence procurement ethics moderates the relationship between supplier relationship management practices and performance of supply chain.

Substituting the regression model:

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + M + \beta_1 X_1 M + \beta_2 X_2 M + \beta_3 X_3 M + \beta_4 X_4 M + \varepsilon \]

Then becomes:

\[ Y = 0.109 + 0.308 + 0.571 + 0.489 + 0.498 + 0.487 + 0.410 + 0.592 + 0.491 + 0.501 + \varepsilon \]

We therefore reject the null hypothesis which states that Procurement ethics has no significant moderating effect on the relationship between supplier relationship management practices and supply chain Performance.

The findings agree with Syengo (2015) who explored the procurement ethical practices affecting public procurement at KRA and found implementation of procurement ethical conduct had a positive significant influence on public procurement. Similarly, Nato, Miroga and Otinga (2021) proved that procurement ethics influenced procurement performance. Machoka (2016) also found that procurement ethics enhanced project performance.
Conclusion
The study concludes that Procurement ethics moderates the association between supplier relationship management practices and supply chain performance. This indicated that Procurement ethics moderates the relationship through integrity, accountability and transparency and results to increase in supply chain performance in terms of efficiency, effectiveness, quality improvement and customer satisfaction. The study makes a contribution on the critical role procurement ethics plays in the link between supplier relationship management and performance of supply chain. The government including policy makers such as the public procurement regulatory authority may be informed by the study findings on the importance of procurement ethics and thus develop and implement policies on the same.

Recommendations
To improve supply chain performance, County Governments should embrace supplier relationship management practices such as Supplier information sharing, Supplier trust management, Supplier evaluation management and supplier development practice. The study further recommends for provision of well stipulated ethical conduct guidelines for procurement staff to enable them enhance performance and this could be achieved through integrity, accountability and transparency. The study also recommends for creation of awareness on procurement ethics through seminars and workshops.

Suggestions for further research
Current study was done in Nyanza region Kenya. Further studies can be done in other regions in Kenya. Other studies should be done using other moderating variables such as policies and regulations. Similar studies could be undertaken in other organizations such as universities, hospitals and other parastatals as this study focused on County government.

References


