



INFLUENCE OF PROCUREMENT RISK MANAGEMENT ON PROCUREMENT PERFORMANCE IN PUBLIC UNIVERSITIES IN KENYA

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Abstract

In the contemporary business environment procurement risk management is the panacea of operational and transactional impediments in public universities in Kenya. Over the years public universities in Kenya have faced immense challenges when undertaking upstream supply chain activities. These challenges comprise price fluctuations, logistical risks, volatility of demand and lack of visibility and control procedures. The backdrop of these phenomenon, have resulted to incomplete projects and legal ramifications in public universities in Kenya. This study explored the influence of procurement risk management in public universities in Kenya. Descriptive research survey design was adopted, whereby the target population comprised all public universities in Kenya. A census method formed the basis of the study and all the 31 chartered public universities were selected. A self-designed questionnaire was structured for the study which included closed-ended and open ended questions. Descriptive

*statistics measures of central tendency were used and statistical output was generated using SPSS version 22. Inferential statistics was also used to infer correlation analysis as well as multiple linear regression. The results indicated that procurement risk management and procurement performance had R of 0.440 and p -value of 0.000 at 95% confidence levels. The coefficient value was between 0.30 to 0.49 and therefore, this signified a medium correlation between procurement risk management and procurement performance. Further, the results indicated that, a unit change in procurement risk management would lead to change in procurement performance by 0.173 units. This implies that 1% change in procurement risk management leads to 17.3% change in procurement performance in public universities in Kenya *ceteris paribus*. The study recommends that institutions of higher learning in Kenya should establish risk management action plans to avert any crisis in the holistic supply chain process.*

Keywords: Procurement Risk Management, Ripple Effects, Continuous Improvement, Procurement Performance, Public Universities

INTRODUCTION

The ripple effects of procurement risks have necessitated the need for tactical and strategical plans in public universities in Kenya in order to avert any imminent crisis in the procurement process. Basically, a risk is the possibility of an event occurring that have adverse effect in business affairs. In the context of procurement risk, it is the possibility that the outcome will be different from the envisioned results of the procurement plans (Akintola, 2008). The dominant commercial approach of twenty first century is purely centered on establishing cost-efficiency in the procurement process. Whilst this approach is of importance in predictable markets, paradoxically, this method could turn out to be impracticable as impulsiveness of requirements escalates. The perennial problem in the current business set up is how to strike a balance on lean supply and agile response or perhaps how to define and inculcate the best approach when a trade-off exists (Bernard, 2007). Davidson (2008) postulates that increasing a range of products and services creates a scenario where the projection of demand becomes unreliable. Public universities in Kenya therefore, need to embrace proactive measures to identify procurement risks, analyze them and design appropriate responses. In fullness of time the responses might mitigate risks, or perhaps minimize the severity in case the risks are uncontrollable (Lee, 2007).

PROCUREMENT RISK MANAGEMENT ON PROCUREMENT PERFORMANCE

Ukalkar (2007) defines procurement risk management as the measures put in place by organizations to identify potential events that may affect adversely the acquisition process and set up of strategical plans geared to avoid or minimize risks in procurement of goods, services and works. Just like other institutions or organizations in the market, public universities in Kenya are not immune to peril events and therefore, procurement risk management should be factored all the time. It is a common practice in all institutions of higher learning to introduce performance metrics in procurement process. However, the impending procurement risks in the market can reduce such parameters to an exercise in futility if proper modalities are not adhered to deter such undesirable events (Christopher, 2018).

Tomlin (2006) asserts that procurement risk management can leverage a company to establish long-term competitive advantage by deploying resources properly, with regard to: ascertaining the right product quality, lead time minimization, stock optimization and supplier development. This development can be enhanced by harnessing the contingency plans, internal controls and risk sharing tactics with the public universities strategic plans. The common trait in procurement risk management is that it takes the holistic commercial game plan into consideration. It aligns stakeholders' business objectives and challenges with one's resulting actions and provides a different set of action plans to create unique value in the holistic procurement function (CIPS, 2013).

Apleberger (2007) affirms that the intricate phenomenon in procurement function is how to ensure a seamless procurement process all the time in line with the expectations of the public universities interests. With the advent of technology, conventional procurement processes are turning out to be obsolete and it is prudent for procurement officers in public universities to devise relevant ways and means to ensure value for money in these institutions of higher learning. Procurement risk management calls for a paradigm shift in all matters that are core to organizations in that what is deemed to be detrimental to the success of institutions is omitted henceforth. Procurement risk management strategies should be utilized in public universities in order to reengineer cost effective procurement processes that also addresses customers requirements since these are fundamental attributes of procurement performance (Shockley, 2010).

LITERATURE REVIEW

According to Kisaka (2014) it is worthwhile to rank the risk drivers in the order of importance in order to determine what, when and where to prioritize when addressing risk related issues in procurement. This is not only a proactive approach towards risk mitigation but it is also a

systematic procurement structure that creates a positive trajectory towards a sustainable risk management. Chemoiwo (2016) alluded that supplier appraisal is the most influential strategy towards procurement performance in public universities since it provides the unequivocal information based on suppliers performance. As a result the public universities have the leeway to determine the suppliers who meet the set procurement standards.

Procurement risk management framework plays a crucial role on the enactment of procurement procedures in public sector. According to Kamoni, Rotich and Ochiri (2018) the essential aspects in managing procurement risks are government assurance on provision of contractual guarantees on various projects as well as stakeholders involvement and management in the holistic contract management process. The best practices in procurement risk management emphasis the need for operational and transactional efficacy on contract management activities (CIPS, 2013).

Okonjo (2014) suggests that there is a notable connection between procurement risk management and procurement performance and to this extent, public universities should invariably endeavor to consolidate these key approaches and embed them to the outlined procurement strategies. This is a well thought approach towards mitigating risks in procurement function since all the stakeholders in the public universities are involved. It is important to note that procurement risks are very dynamic and therefore, a continuous improvement mechanisms should take a center-stage all the time to facilitate uninterrupted flow of activities.

METHODOLOGY

This study adopted a descriptive research survey design. This is a research design that shows the state of affairs as it exists at the present (Mugenda & Mugenda, 2003). The data was obtained from all the 31 public chartered universities in Kenya. The data was based on July 2013-June 2018 fiscal years whereby procurement officers, finance officers, legal officers and registrar-administration and planning were selected for the study. A census method was applied whereby all the 124 selected respondents were involved in the study. The data was obtained through a self-designed questionnaire that comprised closed-ended and open-ended questions. Further, the respondents gave their opinion in a likert-scale form whereby the resultant measures meant: 5=Strongly Agree, 4=Agree, 3=Neutral, 2=Disagree, 1=Strongly Disagree. Descriptive statistics measures of central tendency were used and statistical output was generated using SPSS version 22. Inferential statistics was also used to infer correlation analysis as well as multiple linear regression. Hypothesis test was also conducted to derive statistical inferences where the rule of the thumb is that if the probability value observed is less

than the set alpha (α) that is the confidence level of 0.05, then the null hypothesis is rejected and if the $p\text{-value} > 0.05$, we fail to reject the null hypothesis (Sekaran, 2010).

ANALYSIS AND RESULTS

Descriptive Statistics

The descriptive statistics aided the researcher to describe the dispersal of scores using statistics in line with procurement risk management on procurement performance in public universities in Kenya. The analysis of the results are depicted in table 1 below.

Table 1: Procurement risk management on procurement performance in public universities

Procurement Risk Management	Mean	Standard Deviation
We have a vibrant supplier data base that act as the reference point in procurement	4.4	0.744
We are in constant contact with our suppliers as a contingency plan tactic of understanding the changes in the market	3.88	0.862
We have in built quality control systems to verify all consignments from our suppliers	4.18	0.760
We emphasize segregation of responsibilities to all the staff who participate in procurement processes	4.55	0.667
Only specified employees are mandated to generate requisitions to initiate the procurement process	4.24	1.066
We encourage multiple sourcing as a means of diversifying risks	4.48	0.710
We outsource non-core activities as a strategy for risk sharing	4.10	1.075

The statement that public universities always emphasize segregation of responsibilities to all the staff who participate in procurement processes was the highly rated with a mean of 4.55 and with a standard deviation of 0.667. The statement that universities encourage multiple sourcing as a way of diversifying risks came second with a mean of 4.48 and a standard deviation of 0.710. Further, the statements that public universities have vibrant supplier data base and that only specified employees are mandated to generate requisitions to initiate procurement process came third and fourth with a mean of 4.4 with a standard deviation of 0.744 and a mean of 4.24 with standard deviation of 1.066 respectively. The results of the study also showed that public universities have inbuilt quality control systems and also outsource non-core activities as a strategy for risk sharing. The former statement was ranked fifth with a mean of 4.18 with a standard deviation of 0.760 while the latter statement was ranked sixth with a mean of 4.10 with

a standard deviation of 1.075. Lastly, the statement that public universities are in constant contact with the suppliers was ranked seventh with a mean of 3.88 with a standard deviation of 0.862.

Inferential Statistics

Inferential statistics was applied to allow the researcher make inferences and generalization from the data drawn from the population. In line with this study correlation analysis was used to establish strength relationships between the explanatory variable and dependent variable. In particular Pearson correlation was applied to establish the strength of the linear relationship. Further, regression analysis was also conducted to establish the relationship between the independent variable and the dependent variable see the results of the study Table 2, 3 and 4 below.

Table 2: Pearson Product Moment Correlation

Variables		Procurement Performance	Procurement Risk Management
	Pearson Correlation	1	0.440**
	Sig. (2-tailed)		0.000
	N	104	104
Procurement risk management	Pearson Correlation	0.440**	1
	Sig. (2-tailed)	0.000	
	N	104	104

**Correlation is significant at the 0.01 level (2-tailed)

The results showed that procurement risk management and procurement performance in public universities in Kenya had R of 0.440 and p-value of 0.000 at 95% confidence levels. The coefficient value was between 0.30 to 0.49 and this signified a medium correlation between the independent variable and dependent variable hence the variables are associated.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.440 ^a	0.194	0.186	3.31656

a. Predictor: (Constant), Procurement risk management

Adjusted R square was computed as the preliminary test for linear regression model adopted in the study. The adjusted R square was 0.186 accounting for 18.6% of variations in procurement

performance in public universities in Kenya at 5% significance level. Therefore, the explanatory variable slightly influences procurement performance in public universities in Kenya. This confirms that there are other crucial factors that affect procurement performance.

Table 4: Regression Analysis

Model	Unstandardized		Standardized		Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta	t	
1 (Constant)	14.473	3.056		4.735	0.000
Procurement risk management	0.505	0.102	0.440	4.954	0.000

a. Dependent Variable: Procurement performance

The regression analysis implied that, holding other factors constant procurement performance had a constant of 14.473. This shows that procurement performance is deemed to change by 14.473 units holding other factors constant in the model. Similarly, the regression results also indicates that procurement risk management had a statistically significant influence on procurement performance ($p\text{-value } 0.000 < 0.05$). Further, a unit change in procurement risk management would lead to change in procurement performance by 0.440 units and this implies that 1% change in procurement risk management results to 44.0% change in procurement performance in public universities in Kenya *ceteris paribus*.

DISCUSSION CONCLUSIONS AND RECOMMENDATIONS

From the analysis, segregation of responsibilities to the staff who participate in the procurement process and adoption of multiple sourcing as a means of diversifying risks formed the fundamental action plans applied often by public universities in Kenya to counter procurement risks. The general conclusion of the study is that procurement risk management moderately influences procurement performance in public universities in Kenya. The study recommends that public universities should come up with risk management strategies to avert any crisis in procurement process. Further, the universities should complement the established strategies by developing risk management plans based on the decision to avoid, assume or transfer the procurement risks. This approach can be deduced through procurement risk process that include; risk identification, risk analysis, risk ranking, risk mitigation and risk monitoring. In the same breadth, universities should identify risk factors associated with each procurement process, examine the probability of the risk occurring and consider the impeding impacts.

SCOPE FOR FURTHER STUDIES

This study sought to assess the influence of procurement risk management on procurement performance in public universities in Kenya. Conversely, the study cannot be used to generalize in other sectors of the economy due to the nature and scope of procurement processes. The study therefore, recommends further studies in; Effect of procurement risk management on procurement performance in National Polytechnics in Kenya, Factors affecting procurement risk management in state corporations in Kenya and Determinants of effective risk management strategies on procurement performance in Private Universities in Kenya.

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