

ROLE OF PROCUREMENT PLANNING PRACTICES ON PERFORMANCE OF STATE CORPORATIONS IN RWANDA: A CASE OF RWANDA ENERGY GROUP

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Abstract: Over the past decades procurement planning has been attracting great attention from practitioners, academicians and researchers due to poor performance resulting from non-adherence to proper procurement planning. Literature suggests that Procurement Planning is one of the primary functions of procurement with a potential to contribute to the success of operations and improved performance. This study therefore sought to examine the relationship between procurement planning practices on procurement performance in state corporations. To achieve this the study determined the effect of proper need assessment on procurement performance, determined the effect of procurement cost estimation on procurement performance, determined the effect of quality specification of goods on procurement performance and determine the effect of risk management on procurement performance. This study adopted a descriptive survey research design. The study targeted 124 employees of REG working on Rwanda Electricity Access Roll-Out Program (EARP) and the sample size was 95. Stratified random sampling method was used. A modified Likert scale questionnaire was developed divided into three parts. A pilot study was carried out to refine the instrument. The quality and consistency of the study was further assessed using Cronbach's alpha. Data analysis was performed on a PC computer using Statistical Package for Social Science (SPSS Version 21) for Windows. Analysis was done using frequency counts, percentages, means and standard deviation, regression, correlation and the information generated was presented in form of graphs, charts and tables.

Keywords: Procurement Planning Practices, Performance of State Corporations.

1. INTRODUCTION

Poor procurement planning has been one of the major stumbling blocks to the economic development of Africa and it has been clear that a number of African countries have not paid adequate attention to the proper management of public resources (Bianchi & Guidi 2010). An efficient public procurement system is vital to the advancement of African countries and is a concrete expression of the national commitment to making the best possible use of public resources. Additionally, general public procurement professionals have confronted a constantly changing environment typified by rapidly growing technologies, increasing product choice, environment concerns, and the complexities of international and regional trading agreements (Khi, 2009). A well-functioning procurement system is built on certain benchmarks, which revolves around four pillars--legislative and regulatory framework, institutional framework and management capacity, procurement functions, market practices, and integrity of procurement practices (Agaba & Shipman, 2016).

2. STATEMENT OF THE PROBLEM

Public procurement is more listed as fundamental for service delivery in less developed developing countries (Basheka & Bisangabasaija, 2010) and represents a significant percentage of total expense. Accountability and transparency are made necessary by the enormous amount of money committed to public procurement and the certainty that these funds come

from public reserves (Hui, 2011). Several nations both the developed and under-developed have accordingly put in place procurement changes involving laws and regulations. Regulatory compliance, however, persists as the major hindrance to it remains inadequate De Boer & Telgen, (2008) contend that non-compliance predicament afflicts countries in the European Union as it does to third world countries. Gelderman *et al.*, (2016) further supports the argument by confirming that acquiescence in government procurement is a key problem. Hui (2011) found out that procurement officials were accused of remissness and non-compliance with procurement policies and systems in Malaysia while investigating procurement problems.

Regardless of the effort by the governments of developing countries, like Kenya and development partners like the World Bank to improve performance of the procurement function, public procurement is still marred by shoddy works, poor quality goods and services (Basheka, 2009). Failure to implement or delayed implementation of recommended performance standards has resulted in unnecessarily high operation costs, uncoordinated business activities, and failure to attract and retain experienced and skilled personnel in the procurement positions, thus affecting the function's performance (The World Bank Country Procurement Assessment Report, 2004). PPOA Manual (2009), states that adequate planning and prioritization of needs by each procuring entity is an essential prerequisite to effective procurement for the following reasons: Funding for procurement is unlikely to be sufficient to meet all requirements, and scarce financial resources must be allocated to meet the priority public services before less essential needs; and publication of realistic annual procurement plans allows the private sector to respond more effectively to the requirements and specifications of government, through investment in staff and equipment, manufacture and importing of goods, and financial planning. Rwanda energy group procurements have been termed to be weak since procurement planning was not put in place. The organization's expenditure has been extravagant and inadequate as revealed by the past minutes obtained. The organization has not been able to adequately provide good expenditure of their allocated budget which is attributed to lack of proper procurement planning. There is a need for procurement planning as it assists procurement entities fulfil their requirements and needs in terms of procurement and hence achieves their service delivery objectives (performance).

3. OBJECTIVES OF THE STUDY

The general objective of the study was to investigate the effect of procurement planning on procurement performances of state corporations in Rwanda.

Specific objectives

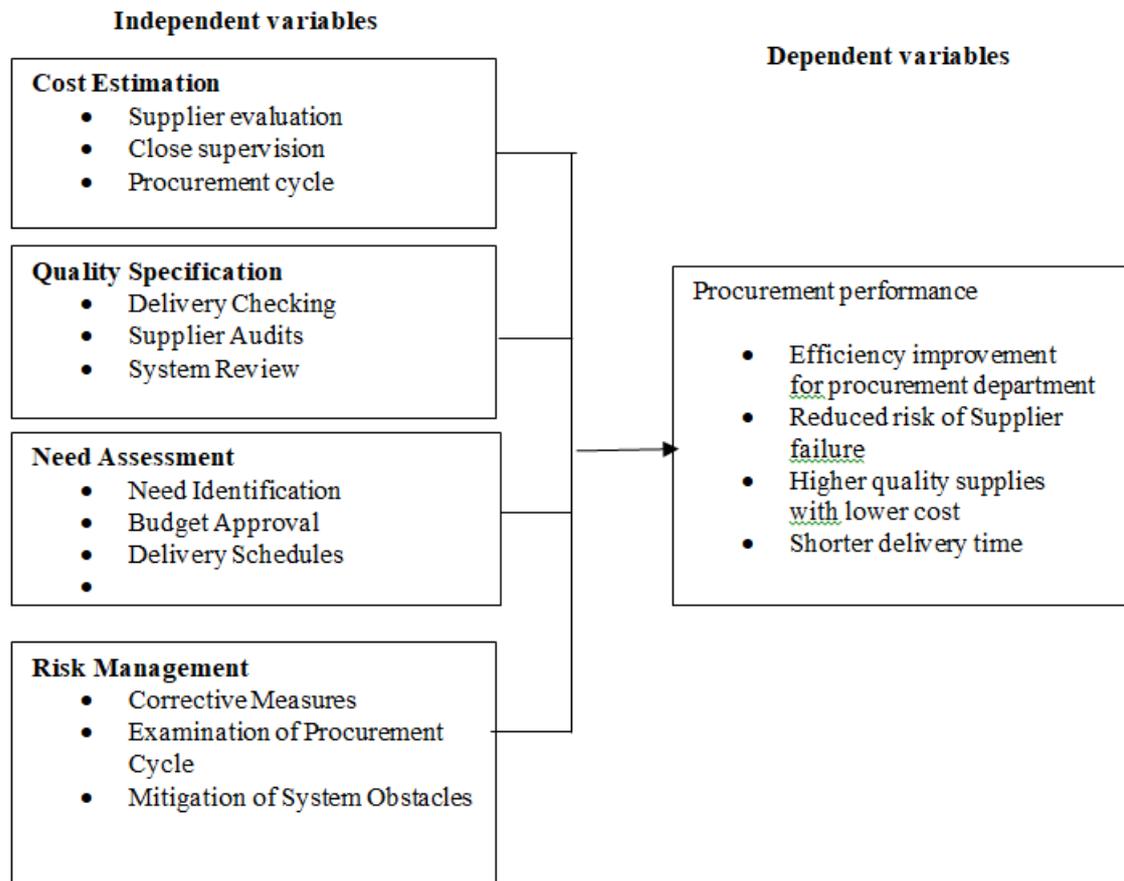
The specific objectives of the study were:

1. To determine the role of procurement cost estimation on procurement performance of state corporations in Rwanda.
2. To establish the role of quality specification of goods on procurement performance of state corporations in Rwanda.
3. To examine the role of proper need assessment on procurement performance of state corporations in Rwanda.
4. To determine the role of risk management on procurement performance of state corporations in Rwanda.

4. RESEARCH METHODOLOGY

1. **Research Design:** This study used a survey research design. Surveys are suitable in gathering data whose intention is to describe the nature of the existing condition.
2. **Target Population:** The study targeted the 124 members of staff working in various departments from Rwanda energy group dealing with Electricity Access Roll out Program (EARP).
3. **Sample Size:** A sample size of 95 respondents was determined from a total population of 124 individuals using the formula by Yamane (1967).
4. **Data Collection Instruments:** Primary data were collected through scheduled interviews with the identified target managers in the state corporations. The researcher also employed the use of email questionnaires to fit into the need for convenience for the busy managers.
5. **Data Analysis and presentation:** Correlation analysis with one tailed significant test was used to test the correlation between individual indicators of procurement planning and procurement performance while a multiple regression was

used to test the overall effect of procurement planning on procurement performance. ANOVA test was conducted to test the statistical significance of the overall effect of procurement planning on procurement performance.



6. RESEARCH FINDINGS

6.1 Procurement Cost Estimation on Institution's performance

The study has established that cost estimation has been considered to be among the effects of procurement planning which is agreeable by the sampled population. 30% of the population recommends that is the major factor affecting procurement planning therefore it must be put into consideration when the plan is being prepared. All procurements by any institution are it private or public is requirements given to the procurement office will determine the amount of money to be allocated. Thus, procurement planning is affected by the quality specification provided by the user departments. If the quality of the items to be procured is poor, then the procurement plan will also be poor.

Table 1: Procurement Cost Estimation on Institution's performance

Statements	Mean	Std Dev
Corrective actions are taken once discrepancy is identified in these processes	3.52	0.863
Supplier evaluation is periodically undertaken to ensure good quality of the goods and services	3.87	0.794
Close supervision of purchases is done as a way of controlling costs	3.29	1.096
Market survey is conducted perpetually to ensure accuracy in cost estimate	3.56	1.344
Obstacles in the procurement process are mitigated in a timely manner	3.75	0.784
Discrepancy identified are corrected in these processes	4.00	1.097

The researcher established that corrective actions are taken once discrepancy is identified in these processes as indicated by mean of 3.52, this is strong but with level of dispersion of 0.863 shows that less controls are in place to ensure cash

budgets are well prepared. Hence the need of state corporations' management to ensure stronger controls are in place during preparation of cash budgets and this will be well represented by a smaller standard deviation. Researcher also established that Supplier evaluation is periodically undertaken to ensure good quality of the goods and services as shown by a mean value of 3.87, which shows supplier evaluation is done and taken seriously in the state corporations. The researcher also established there was Market survey is conducted perpetually to ensure accuracy in cost estimate as indicated by mean of 3.56 and 1.344. The researcher established that obstacles in the procurement process are mitigated in a timely manner as indicated by mean of 3.75. This raises a great concern in the cash management of the state institutions. Lastly, the researcher established the level of dispersion was very high as reviewed by standard deviation of 1.097 hence it poses a high risk in the management of cash in state corporations. Hence the need of establishing good mechanism to encourage proper checks on discrepancy that are identified and corrected in these processes.

6.2 Quality Specification of Goods on Institution's performance

The study revealed that procurement manager and procurement officers are engaged in quality specification as a way of ensuring that the outcomes of services to the public are high. Respondents indicated that with quality services and goods supplied to parastatals, these organizations can assure the public of service delivery second to none. They opined that poor services and sub-standard goods supplied to them translate to poor services offered by them to the public. The mean scores and standard deviations of the elements under quality specifications are shown in Table 1 here below

Table 1: Quality Specification of Goods on Institution's performance

Statements	Mean	Std Dev
Consultation and information gathering to ensure high quality goods.	3.87	0.794
The user departments clearly specify quality of the required goods and services	3.29	1.096
Planning and analysis is done before commencement of specification development	3.56	1.210
User and management involvement in specification development	3.75	0.784
Supplier evaluation is periodically undertaken to ensure good quality of the goods and services.	4.00	1.344
Obstacles in the procurement process are mitigated in a timely manner	3.56	1.054

The researcher established that consultation and information gathering to ensure high quality goods as indicated by mean of 3.87, this is strong but with level of dispersion of 0.794. Researcher also established that the user departments clearly specify quality of the required goods and services as shown by a mean value of 3.29, and standard deviation of 1.096. The researcher also established there was planning, and analysis is done before commencement of specification development as indicated by mean of 3.56 and 1.210. The researcher established that User and management involvement in specification development as indicated by mean of 3.75. This raises a great concern in the cash management of the state institutions. Lastly, the researcher established the level of dispersion was very high as reviewed by standard deviation of 1.097 hence it poses a Supplier evaluation is periodically undertaken to ensure good quality of the goods and services. Hence the needs of establishing good mechanism to overcome obstacles in the procurement process are mitigated in a timely manner between quality specification and institutional performance concurring with the finding of (Adamson, 1988; Davis, 1992; Feldman, 1991). The importance of procurement planning has been recognized and most researchers agree that procurement planning supports activities and the quality specification of the product which has a key link to organizations performance. Edvardsson (1998) contends that specification is an integral part of the procurement function. Without a quality specification the process can be filled with pitfalls and obstacles for the purchasing department. He lists the characteristics of a good specification as follows; Identifies the minimum requirements of the end user, allows for a fair and open procurement process, provides for testing/inspection to insure the goods/services received meet the standard set forth in the specification and provides equitable award at the lowest possible cost.

Agaba (2007) contends of poor accountability measurement within the public procurement as the major reason why service quality is compromised within the public service. This has become obvious reason why entities fail in achieving important goal of satisfying the internal users. Accountability is important both in itself and as a means to improving perceived service quality of both public and private organizations (Mustafa, 2005)

6.3 Need Assessment on Institution's performance

Need assessment is the determinant of the institution requirements and then budget developed for it for the institution at any given point guided by the availability of funds an organization can finance. Therefore, procurement planning depends on the cost or budget of the institution. The study findings reveal that respondents agreed that needs assessment affects performance in government parastatals. The means and standard deviations of each element are tabulated in Table 2

Table 2: Proper Need Assessment on Institution's performance

Statements	Mean	Std Dev
The business need is clearly defined by the responsible personnel in the unit /department	3.29	1.096
Thorough needs assessment is undertaken by respective heads for goods and services needed	3.56	1.210
Market analysis is carried out to determine where to procure from	3.75	0.784
Budget approval is obtained for the required items before purchase in the organization	4.00	1.344
Reviews of the procurement system are done at regular intervals	3.56	1.054
Delivery schedules that fit in the organization requirements are drawn with the suppliers	3.75	0.784

The researcher established that the business need is clearly defined by the responsible personnel in the unit /department as indicated by mean of 3.29; this is strong but with level of dispersion of 1.096. Researcher also established that thorough needs assessment is undertaken by respective heads for goods and services needed as shown by a mean value of 3.29, and standard deviation of 1.096. The researcher also established Market analysis is carried out to determine where to procure from as indicated by mean of 3.56 and 1.210. The researcher established that Budget approval is obtained for the required items before purchase in the organization as indicated by mean of 3.75. Reviews of the procurement system are done at regular intervals as indicated by mean of 3.56. Lastly, the researcher established the level of dispersion was very high as reviewed by standard deviation of 1.097 hence it poses a delivery schedules that fit in the organization requirements are drawn with the suppliers. Agreeably Mamiro (2010) in his findings underscores these facts and concludes that one of the major setbacks in public procurement is poor procurement planning and management of the procurement process which include needs that are not well identified and estimated, unrealistic budgets and inadequacy of skills of procurement staff are responsible for procurement problems in an institution

6.4 Risk Management of Goods on Institution's on performances

Study findings reveal that risk management greatly affects service delivery at state corporations. Respondents indicated that if risks are not foreseen and mitigated, government agency risk losing a lot of money. This money, they argued can be used to offer other services to the public. Risk management helps these corporations avoid court cases, delayed supply of goods and services just but to mention a few. The mean score and standard deviations of the elements under risk management are shown in Table 4.8.

Table 3: Risk management on Institution's performance

Statements	Mean	Std Dev
Level of transparency and accountability of procurement funds are periodically reviewed.	3.29	1.096
Organizations level of compliance to procurement act and its regulation are adhered to	3.56	1.210
The organization examines the procurement cycle to prevent fraud	3.75	0.784
Reviews of the procurement system are done at regular intervals	4.00	1.344
Corrective actions are taken once discrepancy is identified in these processes	3.56	1.054
Periodic supplier audits are undertaken to correct compliance errors	3.75	0.784
What is the level of minimization of procurement expenditure	3.29	1.096
Received goods and services are checked against the local purchase order	3.56	1.210
The technical abilities of the suppliers are evaluated before contract awarding	4.00	1.344

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6.5 Procurement performance

Respondents indicated that procurement planning affects performance in state corporations. They noted that proper planning before procuring goods and services ensures that these corporations get the best goods and services at competitive rates. They argued that organizations risk losing money whenever goods and services are procuring haphazardly. They argued that it is only through proper planning that organizations are able to draft clear terms of reference for procurement as well as statements of work for service delivery. The mean scores and standard deviations for element under procurement planning are indicated in Table 4

Table 4: Institution's performance

Statements	Mean	Std Dev
The organization is efficient and effective in- procurement performance	3.29	1.096
Procurement planning helps budgetary proposals that seek to approval procurement performance.	3.56	1.210
Procurement planning identifies sources of funding hence procurement performance	3.75	0.784
Procurement planning ensures that the organization makes clear Terms of Reference (TOR) for procurement performance	4.00	1.344

Basheka, (2008) in his findings concludes that planning is a process that consists of many steps and the bottom line is that planning is not concerned with future decisions but rather with the future impact of decisions made today. The results further revealed that the departments prepared annual procurement plans and that the procurement plans were prepared, and the goals set participatory. Procurement plans therefore influence procurement performance in the sense that they provide focused and efficient utilization of available resources, help in budgeting and planning and therefore with adequate provision of funds due to procurement plans, performance is assured

6.6 Procurement Planning Practices and Institutions performance

The regression model applied the multiple linear regression equation: $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$ where Y= Performance; X_1 =Cost Estimation; X_2 = Quality Specification; X_3 = Needs Assessment; X_4 = Risk Management; $\beta_1, \beta_2, \beta_3, \beta_4$ = Coefficients of determinations (R²); β_0 = Constant, and; ϵ = Error term. The R square (R²) measured the correlation between procurement planning practices and performance of an institution. The regression model was computed at 95% confidence level. The regression analysis shows that the slope of the curve or coefficient of determination (R square) is equal to 0.633. P-Value = 0.000 < 0.05 means that the model is significant at the 5-percentage significance level.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.792 ^a	.630	.592	.130

a. Predictors: (Constant), Cost Estimation, Quality Specification, Needs Assessment and Risk Management

Table 5 shows that the coefficient of determination R square is 0.630 and R is 0.792 at 0.05 significant level. The coefficient of determination indicates that 63.0% of the variation in the dependent variable procurement performance is explained by the independent variables (Cost Estimation, Quality Specification, Needs Assessment and Risk Management).

Table 6: ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.5975 ^a	3	.5975	16.374	.000 ^b
	Residual	8.099	51	.017		
	Total	8.6965	54			

a. Dependent Variable: Performance

b. Predictors: (Constant), Cost Estimation, Quality Specification, Needs Assessment and Risk Management

Table 6 presents the results of Analysis of Variance (ANOVA) on procurement planning versus performance. The ANOVA results for regression coefficient indicate that the significance of the F is 0.00 which is less than 0.05. This implies that there is a positive significant relationship between procurement planning and performance that the model is a good fit for the data.

7. CONCLUSIONS

Based on the above findings it can therefore be concluded that there was a significant statistical relationship between procurement planning and performance. Staff competence which is shown in the professionalism while coming up with the cost estimates and quality specification in the procurement plan as shown in the findings. Factors affecting procurement planning was identified as need assessment, cost estimation and quality specification; other factors identified included: Financial capacity of an institution, professionalism, Management style, Availability of the procurement office, market price and quality of the items to be procured.

Some identified factors are very vital to institution procurement process. Lack of proper planning through effective identification of user needs in an organization creates an avenue of unethical practices in procurement department such as corruption and improper use of resources, excess budget votes therefore integration of procurement planning into budgetary process is important in an institutional framework. The bottom line in procurement planning is that planning is not about the future decision but the impact of decision today, the goals must be set participatory by all users this will influence procurement performance and effective utilization of available resources and budget allocation. State corporations need to put in place rigorous measures to ensure that procurement is based on carefully crafted plans that take into consideration the regulations of the procurement and disposal Act. Procurement should be a process for ensuring that citizens access the best services and not a conduit for stealing from state coffers

8. RECOMMENDATIONS

Findings revealed that procurement competences and most especially key personal competences highly predicted perceived performance of user departments and the institution as a whole... This therefore calls for the PPOA to carryout competences profile for all procurement cadres working in the public sector institution in all counties from time to time. Special emphasis should be put in developing key personal competences which are not clear in Public sector organization reform Agenda. Such profile can be used for major human resource functions such as recruitment and selection, performance management and training and development of procurement officers with an aim of ensuring quality employees. Procurement practitioners' Association should be established where representatives from centers of expertise and various procuring entities should meet regularly to inform test and develop policies and where appropriate operationalize issue

There is need for all users of organization department to develop the resource requirements needs for their department to allow procurement department proper budgetary allocation vote to the needs of the department to avoid wastages of resources and where over spending without planning a risk factor for procurement professionals. The Researcher recommends the current study to be replicated in other public sectors to enable the readers acknowledge the area of study. This was not considered in the study hence is a viable area where a similar study can be carried out in order to establish whether the results would be the same or otherwise. The current study only looked at only one public institution which is not a full representation of the public sectors.

9. AREAS FOR FURTHER RESEARCH

Through this study the researcher has gained a deeper insight on how organizations can achieve successful procurement planning and the benefits in doing so, but there are some areas in which the researcher believes more research is needed to fully understand the nature of procurement planning. The results of analysis show the effect on procurement planning and

institutional performance. The future research should also be carried out to explore variables affecting perceived service quality, ethics, transparency, procurement performance, and value for money in public institution procurement planning process. Future studies should focus on the effect of procurement planning practices on service delivery in the civil service as well as the effect of procurement practices on the performance of private corporations.

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