Analysis of Procurement Process Compliance and Procurement Performance. A Case of Districts in the Northern Province, Rwanda (2018-2019)

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Abstract: *The study examined the relationship between procurement process compliance and procurement performance of public procuring entities in Rwanda. The objective of the study was to assess the effects of procurement planning on procurement performance; to assess the effects of procurement sourcing and contract management on procurement performance and to assess the effects of procurement transparency on procurement performance of public procuring entities in Rwanda.*

A descriptive survey research design was adopted using quantitative methods and used closed ended questionnaire as a data collection instrument. The study targeted 94 respondents from five districts located in the northern province of Rwanda. Purposive and stratified sampling techniques were used to select respondents. Data was then analyzed on quantitative basis using Pearson's correlation, multiple linear regression analysis and descriptive statistics.

The regression model used was $LogY= \beta_0 + \beta_1 LogX_{it1} + \beta_2 LogX_{iit2} + \beta_3 LogX_{iiit3} + \varepsilon_t$ and multiple R (correlation) value obtained was 0.995 (99.5%). The model summary depicted from the regression analysis with multiple R (correlation) value of 0.995 (99.5%) indicated a highly positive relationship between the dependent and independent variables and, the overall contribution of the independent variables: procurement plan (P1), Procurement process (P2), and procurement transparency (or P3) to the procurement performance (or P4) which accounted for 99.04% ($R^2 = 0.9904$) of the variation in the procurement performance.

The research concluded that procurement planning, procurement process compliance and procurement ethics in public procurement had a great significance on procurement performance which led to confirm the relationship between capacity building in procurement and regulatory compliance of government Procurement entities in Rwanda. As a recommendation, procuring entities should continue to focus more on ensuring compliance to procurement regulations in public procurement to ensure a sustainable procurement performance.

Keywords: *Procurement planning, procurement process, procurement ethics and procurement performance.*

1. INTRODUCTION

Background

Public procurement, as a known and observed phenomenon in Rwanda, is one of the most government business activities most vulnerable to petty, grand, systematic and systemic corruption. Billions of tax payers' and donor funds and money get lost every year due to waste, fraud and corruption in public procurement system as non-compliant procurement practices crop the public procurement system (OAG, 2019).

The Government of Rwanda for the financial year 2018-2019 has lost funds due to non-compliance to public procurement process. Inefficient planning of procurement, long process of procurement process led to lack of funds for some projects from donors where it was identified 18 cases of projects worth 112,552,600,100Frw; Inefficient planning in identifying unnecessary items which led to idle assets worth Frw 17,210,605,457; Poor sourcing of contractors where it was incurred a loss

2,297,606,521Frw that resulted from the failure of contractors to execute the contracted works; Poor contract management where it was paid invoices amounting to 14,391,086,018Frw with delays ranging between 2 and 725 days. These delays proliferate the risk of delaying and abandoning the contracts; Poor contract management and monitoring which led to a total of 65 contracts valued at Frw 107,939,885,720 reported as either delayed or abandoned; Poor contract management and control where most entities did not recover amount of advance payment and performance securities worth 3,534,806,068Frw (OAG, 2019).

For Rwanda, ethics in public procurement is guided by the following major principles: transparency, competition, economy, efficiency, fairness and accountability. Unsuccessful bidders, after being notified of the evaluation results, have the rights to appeal to those results. In procuring entities, almost all purchasing decisions include factors such as delivery and handling, marginal benefit, and price fluctuations. Procurement ethics, like many other aspects of management, are top-down. This means that behaviors of top leaders or corporate staffs, and their ability to take decisions is influencing the staffs at lower levels. It is therefore better that those higher ranking staffs in an entity show good behaviors, fairness and be accountable in order to ensure that the procurement is well conducted (RPPA, 2016).

Several interventions aimed at ensuring performance in public procurement have been undertaken at procuring entities level where all staff involved in public procurement is regularly trained on public procurement law and regulations.

Statement of the Problem

The Government of Rwanda, for every financial year, experiences the loss of funds due to non-compliance to public procurement process and lack of ethical considerations in public procurement. The report of the auditor general of state finances for the financial year 2018-2019, shows that the government of Rwanda has lost almost 257,926,589,884Rwf due to non-compliance to procurement regulations and lack of ethics.

In Rwanda, public procurement process compliance and ethics are still at low level. For example, 47 out of 70 procuring entities audited by RPPA in the financial year 208-2019 have implemented the previous audit recommendations at a rate below 60% and recommendations of the office of the auditor general were implemented at a rate below 56% in 156 entities audited and these recommendations would help them to avoid any loss of public funds.

The aim of the public procurement law No 62/2018 of 25/08/2018 and ministerial order No 002/20/10/TC of 19/05/2020 on public procurement is to promote Economy, Competition, Fairness and Transparency, Efficiency and Accountability in procurement in public institutions with the main aim of ensuring efficient use of public funds. They also help procuring entities to comply with public procurement procedures.

Specific Objectives

The study has the following specific objectives:

I. To assess the effects of procurement planning on procurement performance in Rwanda;

II. To assess the effects of procurement sourcing and contract management on procurement performance in Rwanda ;

III. To assess the effects of procurement transparency to performance in procurement in Rwanda.

Research Questions

I. What are the effects of procurement planning on procurement performance in Rwanda?

II. What are the effects of procurement sourcing and contract management on procurement performance in Rwanda?

III. What are the effects of procurement transparency on procurement performance in Rwanda?

2. LITERATURE REVIEW

Theoretical Review

Agency theory

In this area of procurement, the theory, would be used by stakeholders involved in procurement to

better understand their usefulness in taking procurement related decisions in their cooperatives. This research project will be based on Jensen's and Mackling's Agency theory which states that, an agency relationship is a contract under which one or more persons (principals) engages another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent. When executing the tasks within the principal-agent relationship, the agent must choose actions that have consequences for both the principal and the agent. Since these outcomes can be either negative or positive for all actors, the chosen action of the agent affects the welfare of both. This relationship called principal- agent, is needed because the later called agent is having more needed skills and ability to undertake procurement tasks in an organization (Cane, 2004).

Neoclassic theory

In neoclassic theory of consumer and firm behavior an assumption is made that both consumers and firms have perfect information. This leads to markets with prices at equilibrium and optimal welfare levels. (Jehle & Reny, 2011) But in reality consumers and suppliers don't have perfect information always, hence we cannot develop a similar equilibrium theory for situations where the agents have imperfect information unless we take account of the strategic opportunities available to the agents involved (Jehle & Reny, 2011). A situation where agents possess different information is called a situation of asymmetric information. The strategic opportunities arising in these situations often lead to inefficient markets. In the presence of asymmetric information, the competitive outcome in a market may not be efficient and cause a situation in which both consumers and suppliers are worse off and the opportunities for Pareto improvements go unrealized (Jehle & Reny, 2011).

Theory of regulatory compliance

The theory of regulatory compliance deals with the role and significance of complying with rules or regulations. The theory named above, applies to many domains such as human resource, business, engineering and science although this study is focusing only to business related field. The theory of regulatory compliance was initiated in the early 1970s. It has now became more useful because the transparency has been politically motivated in all fields of activities. What is needful for the theory of regulatory compliance is that it focuses on setting the right regulations instead of having more unnecessary rules which don't serve an organization in nothing.

Empirical Review

Public procurement refers to the purchase by governments and state-owned enterprises of goods, services and works. As public procurement accounts for a substantial portion of the taxpayers' money, governments are expected to carry it out efficiently and with high standards of conduct in order to ensure high quality of service delivery and safeguard the public interest. However, the World Trade and Organization and the USA system refer to Public procurement as Government contracts or Public contracts (Arrowsmith et al 2011).

Procurement planning is one of the primary functions of procurement with a potential to contribute to the success of local government operations and improved service delivery. We can define it as a function that sets in motion the entire acquisition/procurement process of local governments (Basheka, 2010).

The law regulating the procurement is directly involved in procurement. The cycle of procurement is defined by its starting from identification of needs and its end of recording the procured supplies. The role and function of the head of procuring entity is to ensure close coordination with the budget process, commitment control, finance and expenditure management and audit (European Journal of Logistics, 2018).

Competition is another key principle of transparency. With reference to Estache and Limi (2009), rivalry is the single greatest significant aspect to cover the procurement prices and maybe discourage collusive bidding behavior and corrupt practices. Estache and Limi (2009) assume that amid 70 to 100 billion US dollars is consumed annually on the expansion of infrastructure in less developed countries.

Inadequate transparency will result to ineffective use of these resources most particularly, the suitability of infrastructure values.

Mukopi (2015) alluded that to ensure effective performance measurement, the measurement goals must represent the functional goals and metrics chosen must reflect a balance between the financial and non-financial measures that can help in decision making. In reference to Wittig (1999) ameliorations in procurement is having beneficial impacts of the country's overall economic situation. For many countries, government resources are used in procurement of goods, services or work infrastructures (Basheka, 2010). Procurement performance is an outcome of purchasing effectiveness and purchasing efficiency (Venkatesh et. al., 2003). Performance delivers the way for assessing how the institutions perform in order to achieve their goals. It also provides a guide on the improvement needed in the procurement (Gelderman, et. al., 2005).

Conceptual framework

Source: Researcher, 2020

Research Gaps

The study research is aimed to find out on how the procurement process compliance affects the procurement performance of the procuring entity. It is the main objective of this research to measure and assess the impacts of procurement planning, procurement sourcing and contract management, procurement transparency on the quality, delivery and cost of products. Indeed, the actions proposed will improve procurement in the entities thereby ensuring economy, effectiveness and efficiency.

3. RESEARCH METHODOLOGY

Research Design

This study was conducted through a descriptive survey research design. According to Wallen, (1993) a descriptive survey is to collect data from a population for the purpose to determine the current status of that population visa of different variables.

Target Population

A population refers to an entire group of individuals, events or objects having a common observable characteristic. This study employed a stratified purposive sampling in selecting the respondents from the population of this study which comprises the departments of procurement, finance and user department in all five (05) Districts located in the Northern Province in Rwanda. In every District, purposive selection was four (24) persons which means 8 person in procurement department, 8 person in finance department and 8 person from the customer service department.

Sample Size

Bailey, (2014) says that the population is universal objects over which research is to be carried out. The ideal practice in research would be to gather information from the entire population; this ensured maximum coverage of the population concerned in the research. Specifically, the target sample size of this study comprised of 94 employees who especially were selected in the department of finance, procurement and user department in every selected District of the Northern Province in Rwanda.

Sample Design

This study used the stratified random sampling design. To stratify means to categorize people into groups based on working department, such as finance, procurement and user department. This sampling method was used to select respondents from the population frame of every District of the Northern Province in Rwanda. This sampling technique is often used when one or more of the stratums in the population have a low incidence relative to the other stratums.

Data Collection Method and Instrument

The instrument used in collecting the data was a questionnaire. According to Kendall, (2012), the questionnaire is information-gathering technique that gathers information about, attitudes, beliefs, behaviors and characteristic from several respondents in the institution, who may be affected by given phenomenon or system. The questionnaires were filled and they provided free and fair responses from the respondents. The questionnaires used are closed questions, where the respondents were limited to specific answers. Therefore, the closed questions were used because they will provide data that are comparable for all respondents.

Data Analysis

The data analysis for this research study followed a quantitative approach; using Statistical Package for Social Sciences (SPSS) and Microsoft excel. This permitted for means, charts, tables, frequencies and correlations to be produced for subsequent inference to be made to the data.

4. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The effects of procurement planning to procurement performance in Rwanda:

The assessment has been made to determine the effects of procurement planning to procurement performance in Rwanda. The results have proven that all respondents in the selected institutions have been strongly agreed with the effects of procurement planning to their procurement performance. The results showed an overall very strong mean of 4.309 meaning that the respondents, strongly agree that the procurement planning has strong effect on the procurement performance of public procuring entities with positive and very high correlational standard deviation of 0.96777383. With a very small standard error of 0.099818249, it shows that the sample mean is a more accurate reflection of the actual population mean.

The effects of procurement sourcing and contract management to procurement performance:

The results showed an overall very strong mean of 4.353191489 meaning that the respondents, strongly agree that the procurement process has strong effect on the procurement performance of public procuring entities with positive and very high correlational standard deviation of 0.865481468. With a very small standard error of 0.089267597, it shows that the sample mean is a more accurate reflection of the actual population mean.

The effects of procurement transparency on procurement performance

The results showed an overall strong mean of 4.209219858 meaning that the respondents, strongly agree that the procurement process has strong effect on the procurement performance of public procuring entities with positive and very high correlational standard deviation of 0.95387069. With a very small standard error of 0.09838425, it shows that the sample mean is a more accurate reflection of the actual population mean.

Regression Results for the effects of procurement process compliance and ethics on procurement performance of Government Procurement entities in Rwanda

The model summary depicted that the multiple R (correlation) value of 0.995 (99.5%) indicated a highly positive relationship between the dependent and independent variables and, the overall contribution of the independent variables: procurement planning (P1), Procurement process (P2), procurement transparency (P3) to the procurement performance (P4) which accounted for 99.04% (R^2 = 0.9904) of the variation in the procurement performance, the rest 0.96% are other variables not included in this study. The result indicated a highly positive relationship between the dependent and independent variables, the value of R^2 is 0.9904, revealing 99.04% variability in the effective procurement performance in public procurement, as a result of the independent variables. The value of adjusted R^2 =0.9901 means that 99.01% of the changes in Y is explained by the independent variables.

Results from ANOVA Analysis of the effects of procurement process compliance and ethics on procurement performance of Government Procurement entities in Rwanda

The ANOVA reported the general significance of the model. As p was less than 0.05, the model has been significant by the values of F-statistics (p = 0.000) and (F=3127.693). Thus, the combination of the independent variables: procurement planning(P1), procurement process(P2) and procurement transparency(P3) significantly predicted and were at best fit to model to predict the dependent variable (procurement performance).

Results from analysis of beta Coefficients about the effects of procurement process compliance and ethics on procurement performance of Government Procurement entities in Rwanda

The analysis of **beta Coefficient showed a positive** relationship of each variable to the model. The t and p values showed the influence of the independent variables on the dependent variable. Beta sign of all the independent variables showed the positive effect of the predicting dependent variable. That means, any increase in the independent variables led to increase in the dependent variable effective regulatory compliance in public procurement. From this, it was understandable that procurement planning (P1), procurement process (P2) and procurement transparency (P3) in public procurement had the highest factor affecting procurement performance in public procurement for procuring entities.

According to coefficient results, all predictors were positively related to the dependent variable and also based on the statistical significances of the independent variable over the dependent variable at 5% level of significance, all of the independent variables were positively and significantly affecting the procurement performance in public procurement at (P<0.05) level of confidence.

Conclusion

The final portion of this research aimed to conclude the finding of the study focusing on the core determinants that have significant impacts to the effective procurement performance of government Procurement entities in Rwanda. These conclusions and recommendations were drawn from the findings obtained from ANOVA Analysis to determine the general significance of the model. The results obtained have proven that the model is strongly significant since the value of p is less than 0.05 and values of (F-statistics (p = 0.000) and (F=3127.693).

Finally, the test of hypothesis has concluded that procurement planning in public procurement is

strongly correlated with procurement performance since the regression result indicated significant relationship at (P<0.05) and (β = 0.217891302, t = 13.13249). The same for procurement process in public procurement where it is strongly correlated with procurement performance at a significance relationship of (β = 0.61666738, t= 51.38419) and its statistical result (P<0.05). The study also concluded that there is a strong relationship between transparency in public procurement and procurement performance of government Procurement entities in Rwanda based on statistical facts where (β = 0.135143797, t = 10.15027, P<0.05).

Recommendations

I.   Procuring entities should follow the guidance provided by the RPPA's published procurement control manual to help them to always make self-assessment for their compliance with the existing procurement law and regulations in order to achieve the value for money through competitive, transparent, efficient and fair procurement;

II.   Rwanda Public Procurement Authority should continue elaborating and developing training and teaching materials in public procurement and making them accessible to all government Procurement entities and other procuring entities to ensure their regulatory compliance in public procurement;

III. E-learning and online training platforms in public procurement procedures based on Rwanda law and regulations should be enhanced and developed, to involve more Staff of government Procurement entities and other procuring entities to attend more courses in public procurement.

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