

Influence of Tendering Process on the Performance of Public Institutions

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Abstract: *The purpose of the study was to determine the influence of tendering process on the performance of public institutions in Rwanda. A Census using a structured questionnaire was conducted on 43 procurement officers from 10 Rwanda public institutions. Data collected was processed and analysed for descriptive and inferential statistics. The study found out that Supply of goods and services on quality assurance had an influence on the performance of public institutions. On the other hand, the study confirmed that only a minority supported the fact that the ability of a supplier to deliver quickly improves the performance of public institutions. Similar findings were confirmed for whether High quality goods variability is a major reason for an organization inability to achieve procurement goals and hence affect the performance of public institutions. The study further confirmed that Product Quality Assurance is significantly correlated to the tendering process performance ($r=0.522$, $p<0.01$). This implies that the increasing the Product Quality Assurance in this case public institutions would result to increased performance of the public institutions. The study therefore concludes that observance of ethical practices in the tendering process enhances delivery of quality products and hence improves the performance of public institutions. Based on the findings it imperative for all public institutions in Rwanda to adhere to the recommended ethical practices in procurement for improved performance.*

Keywords: Quality, Tendering process, Performance Public Institutions

1. Background

Globally, tendering refers to the process by which public entities contract for acquisition/supply of goods services or wants and disposal of public goods in accordance to the current legal framework. While tendering for public institutions focuses on the process of selecting a suitable contractor to execute a public project by calling for tenders, often achieved by sending out tender drawings and a bill of quantities or a specification to receive prices in the form of estimates. It however, also includes actions to perform bidding by interested contractors in order to win the contract by responding to tenders with their capabilities and skills formation (Wittig 2012).

Australian Industry Commission, (2016) notes that competitive tendering and contracting (CTC) has embraced alternative means of procuring public sector facilities to the traditional reliance upon an in-house team delivery approach. This is believed to provide greater flexibility in both procuring facilities and managing them. CTC is a "process of selecting a preferred supplier from a range of potential contractors by seeking offers (tenders) and evaluating these on the basis of one or more selection criteria".

Public procurement agencies in the industrial world, including United States, the United Kingdom, Canada, Australia, the European Union or even Rwanda, share similar supply experiences whether buying a pen or paper or even military specified equipment. Similar if not same procedures of procurement exist in almost all these economies although the budgets may vary. There are many different types of public entities and institutions. They include federal states, provincial, county and municipal levels each with wide array of subgroups. Given that in various countries the percentage that the

government contributes to the gross domestic product (GDP), range anywhere from 25-50 percent, it's not difficult to envisage the economic and social impact of public supply. Therefore, the wise the spending of the taxpayer's money ensures that the government services benefit from those intended and help build taxpayers confidence and trust in government (Johnson et al 2016)

In Africa especially in Ghana, the quality of procurement and procurement related workforce influences the efficiency of the procurement process and the degree of compliance to procurement laws, regulations and policies. In the end, this influences the quality of procurement outcomes and the achievement of the objects of the procurement law. According to Thai (2011), procurement professionals and personnel have dual responsibilities. They make sure that operational agencies comply with procurement regulations and they are directly involved in procuring goods, services, and capital assets as authorized and funded. As already indicated, procurement professionals through their experience with procurement regulation system are a major source of feedback for procurement adjustment, improvement or reform. In order to do their work effectively, however, procurement professionals have to be well equipped with a set of skills and competencies. In particular, they need to be equipped with procurement techniques and methods and process management skills which are pertinent to their work.

The public procurement system in Rwanda has evolved overtime from a crude system with no regulation to the current orderly and legally regulated system. Initial regulations were contained in the supplies manual of 1978 and supplemented by circulars that were issued from time to time by treasury. The director of government supply agencies was responsible for ensuring proper observance of the provisions of the manual. The manual created

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various tenders and their awards. A review of public procurement system carried out in 1999 unearthed a number of challenges. Among the key flaws noted was no uniform procurement system for the public sector. Besides the system that existed did not have sanctions against persons who breached the regulations in the supplies manual, other than internal disciplinary action. Moreover, the supplies manual did not cover problems of works and the disputes settlement mechanisms relating to the award procedures as set out in the manual were weak and unreliable for ensuring fairness and transparency. Records of procurement transactions in most cases were found to be inaccurate or incomplete or absent which led to suspicions of dishonest dealings at the tender boards. In the view of the shortcomings, it was found necessary to have a law to govern the procurement system in the public sector and to establish the necessary institutions to ensure that all procurement entities observed the provisions of the law for the purpose of attaining the objectives of an open tender system in a sector. Consequentially the Exchequer and Audit (Public Procurement Directorate) RPPA regulations 2001 which created the Public Procurement. Source of information

1.2 Statement of the Problem

In Rwanda, the tendering process has been characterized by several scandals attributed to poor handling of procurement information thus leading to high corruption (Thai, 2009). This results to the need to transparent operations in order to enhance competitiveness and reduced costs (Ogot, 2009). This is significant since 60% of government expenditure is spent through public procurement.

Despite an increase in knowledge in the tendering process according to PPDA2005 very little has been done to analyze the effect played by tendering on the efficiency and effectiveness of public institutions. The Government of Rwanda has implemented several reforms to address inefficiency in the use of public resources and weak institutions of governance. The PPDA 2005 has established procedures for tendering and disposal of unserviceable, obsolete or surplus stores and equipment by public entities to achieve; maximize economy and efficiency, promote competition and ensure competitors are treated fairly, promote the integrity and fairness of those procedures, increase transparency and accountability in those procedures, increase public confidence in the procedure and facilitate the promotion of local industries and economic development show the problem that gives rise to your study despite an increase in knowledge in the tendering process according to PPDA 2005 very little have been done to analyze the influence played by tendering process on the efficiency and effectiveness of public procurement.

Currently, there are weak oversight institutions, lack of transparency, poor linkages between procurements and expenditures, delays and inefficiencies, poor records management, bureaucracy, rampant corruption, Political interests. Bottom-up approach to the development of institutional mechanisms for holding to account the domestic implementation of international regulatory decision-making is also missing hence the need to investigate on the influence

of tendering process. The research therefore sought to establish the influence of product quality the performance of public procurement.

2. Literature Review

2.1 Theoretical framework (The Goal-Setting Theory)

Goal-setting theory had been proposed by Edwin Locke in the year 1968. The theory began with the early work on levels of aspiration developed by Kurt Lewin and has since been primarily developed by Dr. Edwin Locke, who began goal setting research in the 1960's. The research revealed an inductive relationship between goal setting and improved organizational performance. A goal is the aim of an action or task that a person consciously desires to achieve or obtain (Locke & Latham, 2012). Goal setting involves the conscious process of establishing levels of performance in order to obtain desirable outcomes. This goal setting theory simply states that the source of motivation is the desire and intention to reach a goal (PSU, 2014). If individuals or teams find that their current performance is not achieving desired goals, they typically become motivated to increase effort or change their strategy (Locke & Latham, 2016).

This theory suggests that the individual goals established by an organization play an important influence in motivating its superior performance. This is because the stakeholders keep following their goals. If these goals are not achieved, they either improve their performance or modify the goals and make them more realistic. In case the performance improves it will result in achievement of the performance management system aims (Salaman *et al*, 2015).

This theory postulates that in an organization, the supplier selection and evaluation team's efforts to achieve procurement performance in the organization will be required to make realistic goals. According to the theory, the objectives of procurement should be realistic and therefore guide the selection process towards achievement of these objectives/goals. Specific and clear goals lead to greater output and better performance. Unambiguous, measurable and clear goals accompanied by a deadline for completion avoids misunderstanding (Shahin & Mahbod, 2009).

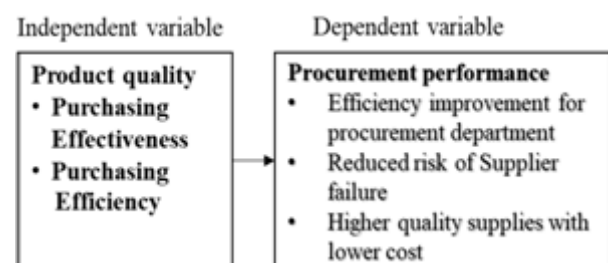


Figure 1: Conceptual framework

2.2 Product Quality on Organization Performance

According to Heizer & Render (2013), quality is the ability of a product or service to meet customer/user needs. Quality can mean excellence, meeting customer requirement, quality as value, customer perception and adoption to expectation. Hansen (2011) lamented that it is unfortunate that until

today the concept of quality appears fragmented and ambiguous in literature as in practice. The term quality management has different meaning within many business sectors. It is considered to have four main components: quality planning, quality control, quality assurance and quality improvement. Quality management is focused not only on product/service quality, but also the means to achieve it. Quality management theory focus on continuous improvement therefore uses quality assurance and control of processes as well as products to achieve more consistent quality.

Shewhart (2011) made a major step in the evolution towards quality management by creating a method for quality control for production, using statistical methods, first proposed in 1924. This became the foundation for his ongoing work on statistical quality control. W. Edwards Deming later applied statistical process control methods in the United States during World War II, thereby successfully improving quality in the manufacture of munitions and other strategically important products.

Quality management has become such an influential element of doing business that companies have adopted the cost of quality (COQ) model to predict the possible financial burdens of selling a product that is flawed. The COQ recognizes prevention costs, appraisal costs, internal failure, and external costs as foreseeable quality management issues that could not fulfil the needs of the customer.

Furthermore, an international body has come forward to create a unifying single quality standard known as the ISO 9000, which published a series of quality assurance standards. For a company to become a member of ISO 9000, they must be observed for 9 to 18 months and must meet rigorous quality standards on their goods and services. However, quality control cannot just focus on individual function in order for a procurement manager to be successful they need to implement total quality management (TQM). TQM embodies the entire organization, from supplier to consumer, to follow a stringent quality management emphasis. TQM incorporates a wide range of methods from the plan, do, check, act circular flow model which provides a company a template to have continuous improvement to the six-sigma process. Six sigma's is a statistical tool that aims to help reduce defects to a 99.9997% capability rate.

Quality in its most basic sense is making the consumer/user content with their good/service and it is the obligation of the procurement manager to ensure that quality awareness is involved with each decision areas. The European Foundation for Quality Management (EFQM) proposes a model of excellence leading to improved business results. The model is based on the concept that an organization will achieve better results by involving all people in the continuous improvement of their processes. Investors in people have drawn attention to the importance of employees' engagement for building effective relationship between an organization and its people. Cascading the vision and direction of the organization is one of the strongest levers for generating improved performance. (Mullins, 2010) When the purchasing department is looking at the procurement of materials from suppliers, they will have been

given some guidance by the manufacturing department, research and development, or the quality department. This should include a variety of information about the item to be sourced, such as physical description, dimensional measurements, chemical composition, performance specifications, and standards to conform to, or even the brand name of the product Stiglitz, (2000). The purchasing department must know the physical attributes of the part they are required to source. For example, if the required material must be made of a certain shade of a blue, then the purchasing department must be able to communicate that requirement to the potential suppliers to ensure that the specification can be met. Sometimes the quality department or development team will inform the purchasing department to only source a particular brand name. This may be due to the specific nature of the part made by one company or the level of quality it has over competitors.

3. Research Methodology

This study adopted descriptive research design. The target population comprised of a total of 10 public institutions in Rwanda where employees from the procurement department were the main respondents. Hence the target population was 430 employees. This study targeted a sample size of 43 respondents that represents 10% of target population. Mugenda and Mugenda (2003), contended that in descriptive studies, a sample of 10% of the population is recommended as a good representation. Ogachi (2011) argued that the use of a reasonable sample is appropriate because it is quick, inexpensive, efficient, and accurate means of assessing information about the population. Thus 10% is representative for data for analysis. The study used both primary and secondary data to collect data to answer the specific objectives regarding the influence of tendering process on performance. Data collected using the questionnaire was analyzed through SPSS (Statistical Packages of Social Sciences) version 21. Data was coded for analysis. Descriptive statistics such as mean and standard deviation was used to describe indicators of product quality and procurement performance.

4. Results and Findings

4.1 Product quality on Performance

The study sought the views of the respondents on the influence of product quality on Procurement Performance. The results are as shown in Table 1.

50% of the respondents strongly agreed, 30% agreed, 10% were undecided, 5% disagreed and 5% strongly disagreed. On whether the ability of a supplier to deliver quickly improve the performance of public institutions, 45% of the respondents strongly agreed, 35% agreed, 10% were undecided, 10% disagreed, and none of the respondents strongly disagreed. On whether High quality goods variability due to tendering is a major reason for an organization inability to achieve inventory goals and hence affect the performance of public institutions negatively, 40% of the respondents strongly agreed, 30% agreed, 20% were undecided, and 5% disagreed while 5% strongly disagreed.

Table 1: Effects of product quality on Performance of Public institutions

| Statements | SA | A | U | D | SD |
|---|-------------|-------------|------------|------------|-----------|
| Supply of goods and services on quality assurance a influence in the performance of public institutions | 20 (50%) | 12 (30%) | 4 (10%) | 2 (5%) | 2 (5%) |
| The ability of a supplier to deliver quickly improve the performance of public institutions | 18 (45%) | 14 (35%) | 4 (10%) | 4 (10%) | 0 (0%) |
| High quality goods variability due to tendering is a major reason for an organization inability to achieve inventory goals and hence affect the performance of public institutions negatively | 16 (40%) | 12 (30%) | 8 (20%) | 2 (5%) | 2 (5%) |

4.2 Correlation between Product quality and performance of public institutions

Correlation analysis was conducted to empirically determine whether Product quality assurance was a significant determinant of procurement performance. Results in appendix 2 indicate that Product Quality Assurance is significantly correlated to the tendering process performance ($r=0.522$, $p<0.01$). This implies that the increasing the Product Quality Assurance in this case public institutions would result to increased performance of the public institutions.

Table 2: Correlation between Product quality and performance of public institutions

| | | Product Quality | Performance |
|-----------------|---------------------|-----------------|-------------|
| Product Quality | Pearson Correlation | 1 | |
| | Sig. (2-tailed) | .000 | |
| Performance | Pearson Correlation | .522** | 1 |
| | Sig. (2-tailed) | .000 | |

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

4.3 Discussion of Results

The findings are in agreement with Ramanathan and Narayanan (2016) who found out that appropriate procurement method selection is fundamental for the buyer and supplier as it helps in the general satisfaction of the buyer and success of the project. This selection depends on factors such as quality and time as well as the cost and they are generally regarded as the most important attaining the end product in the shortest time possible, highest quality and at the lowest cost (Kakwezi & Nyeko, 2010). Project developers today have a wide variety of procurement methods at their disposal and this has led to performance comparison between different methods of procurement. The variety of tendering methods at the disposal of buying entities has made the decision to choose any particular method for a given task quite a difficult one. Several determinants need to be considered for an informed decision to be made on the right method of procurement.

In addition according to Jacob (2010) International Competitive Tendering can be used whenever open/competitive tendering is used and effective competition cannot be obtained unless foreign contractors are invited to tender as well as, when items to be procured are not available locally or cannot be provided on account of technical and other competencies together with financial constraint. Song, Landrum and Chernew (2013) noted that ICB has several advantages in that it results in best "value for money" for buying entity due to the competitiveness of process; brings about transparency and helps in reduction of favouritism and corruption; and all suppliers have an equal chance of winning the tender (Takano, Ishii & Muraki, 2014). Ika, Diallo and Thuillier (2012) cautioned that international bids are expensive to hold and even more expensive to complete so the value of services and products required are usually in the \$ millions and the projects involved are very complex.

5. Conclusions and Recommendations

Based on the findings, the researcher concluded that the level of transparency in the organization was good. The findings further revealed that transparency reduced corruption during tendering process hence resulting to enhance the performance of public institutions. The researcher concluded that transparency resulting from tendering process played an influence in the performance of public institutions to a very large extent. Further the researcher concluded that Public administration on tendering process leads to accountability during the tendering process and hence positive performance of public institutions. The researcher concluded that accountability resulting from tendering process played an influence in the performance of public institutions to a very large extent. The research findings further revealed that high lead time variability due to tendering is a major reason for an organization inability to achieve inventory goals and hence affect the performance of public institutions negatively.

The study concludes that the quality of suppliers obtained was rated to be good, In terms of delivery good, and in terms of reliability good. This shows observance of ethical practices in the tendering process resulted in suppliers who would be relied upon in terms of quality and delivery. The procurement process should therefore as much as possible portray ethical behaviours to portray a good image to the public about the process. Ethical practices improve the performance of the procurement department and the organization at large.

Based on the findings, the researcher recommended that the government employees need to be more transparent in the tendering process. The organization should be able to put in place measures to enhance transparency during the tendering process. The researcher further recommended there was need for the organization employees to be more accountable during tendering process. This will help in enhancing the effectiveness of the process thus better performance. Further, the researcher recommended that there was need for the organization to minimize lead time by initiating review of the procurement law to hasten the tendering process.

The study recommends that there is need to enormously implement procurement policies which encourage tendering in organizations in order to enhance performance. Further the study recommends that tendering procedures should be well practiced in any procurement process to ease the procurement processes and associated costs hence achieve organizational objectives.

The researcher recommended that a replication of the study to be carried out in other areas to enable generalization of the findings. The researcher recommended a further research to be carried out on the influence played of other alternative procurement methods on performance of public institutions. Further studies should be conducted on the critical success factors of tendering in public institutions.

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Appendix 1: List of public institutions sampled

- 1) Rwanda Agriculture Board (RAB)
- 2) Rwanda Development Board (RDB)
- 3) Rwanda Social Security Board (RSSB)
- 4) Rwanda Management Institute (RMI)
- 5) Rwanda Broadcasting Agency (RBA)
- 6) Rwanda Transport Development Agency (RTDA)
- 7) Rwanda Utilities Regulatory Authority (RURA)
- 8) Rwanda Environment Management Authority (REMA)
- 9) RwandAir Limited
- 10) Institute of National Museums of Rwanda (INMR)

Appendix 2: Correlation Between Product Quality and Performance

| | | Product Quality | Performance |
|-----------------|---------------------|-----------------|-------------|
| Product Quality | Pearson Correlation | 1 | |
| | Sig. (2-tailed) | | |
| | N | 40 | |
| Performance | Pearson Correlation | .522** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 40 | 40 |

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