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PROCUREMENT LEAD TIME MANAGEMENT AND ENTITY PERFORMANCE IN RWANDA.

A CASE OF RWANDA MEDICAL SUPPLY LTD

BY

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ABSTRACT

The main purpose of this study was to investigate the effect of procurement lead time management on entities performance in Rwanda, a case of Rwanda medical supply ltd (RMS). from the general objective, the following specific objectives were formulated: to establish the effect of needs identification on performance of RMS, to examine the effect of selection of goods and services on performance of RMS and to investigate the effect of sourcing vendors on performance of rms. to achieve those objectives, the data was collected from a sample of 81 employees of Rwanda medical supply ltd whom will be selected randomly will be concerted. the techniques that researcher will use in data collection include documentary, questionnaire and interview. The research findings highlight the role of the management on the procurement process of an entity. this implies that senior management must consider their internal procurement processes, and their own role in championing efficient procurement in their organizations there is need to increase the funding process of the organization towards the lead time management. the government has a role to play in ensuring successful enforcement of all procurement laws since the problem is not a lack of the laws but the circumventing of the laws by the parties for their own selfish gains in light of these limitations, future research is recommended to use mixed methods research in order to validate the results of this research, and

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apply a longitudinal study to better capture the relationships between procurement lead time and procurement performance. Conducting a replication study with random sample selection can enhance the methodological rigor of the study and increase the possibility of having a better and a supported external validity. Also, another possible source of data could be the customers whose opinions, along with those of executives, can give a better insight of the relationship, furthermore, taking into consideration certain factors that may have a moderating role in these relationships, such as the country culture, could enrich the research results.

Key terms: Procurement Lead Time Management, Entity Performance

I. INTRODUCTION

Procurement lead time management in East African region is usually a time consuming process that evaluates contractors on several criteria such as cost of production, raw material cost, quality assessment, organizational goal, quality staff, delivery system, and personal facilities where in Uganda and Tanzania, the selection of contractors is complicated process by the fact that numerous

criteria must be considered in the decision making process. Therefore, different criteria are usually considered during the procurement lead time management. Wang (2017) surveyed a number of industries and suggested that quality and on-time delivery are the most important attributes of purchasing performance evaluation.

Procurement lead time management is applied in such organizations in order to prevent the mismanagement of resources in business cycle. Poor management and communication in procurement are some of the problems impact on project performance. The primary problem of procurement lead time management is to achieve all goals within the given constraints. These information issues are usually described in institutions documentation, created at the beginning of the development process; the primary constraints are scope, time, quality and prepared budget.

Contractors are no longer solely interested in construction project activities and outputs, but than ever interested in actual institutions results (outcomes and impacts). The insufficient reliable and relevant procurement lead time

management reports have caused construction projects to collapse; they fall into insolvency because of their liabilities far outweigh their assets they even fail to achieve their effective performance.

In Rwanda, the public procurement is managed on daily basis by an autonomous organ, the Rwanda Public Procurement Authority (RPPA), which operates under the Ministry of Finance and Economic Planning (MINECOFIN). Public procurement is regulated by the Law N°12/2007 of 27/03/2007 on public procurement which was modified and complemented by the Law N°05/20013 of 13/02/2013. The law is implemented by a Ministerial Order N°001/14/10/TC of 19/02/2014 establishing Regulations on Public Procurement, Standard Bidding Documents and Standard Contracts (RPPA, 2017).

The Rwanda Public Procurement Authority implemented the production facilities and ability of the contractor to increase its capacity should also be taken into account to Judge the best one. The potential production capability of each contractor should be analyzed to meet a specified production plan and also to

develop a new product according to the market demand. Rwanda has a decentralized public procurement system whereby procuring entities (central government organs, local government entities, government projects, commissions, public institutions, parastatals, agencies or any other government entity charged by the Chief Budget Manager to manage public funds) have the power to conduct directly their public procurement (RPPA, 2017).

STATEMENT OF THE PROBLEM

The Rwanda medical supplies ltd is given the responsibility of Procuring and distributing drugs to various public hospitals in Rwanda. There are cases where health facilities run short of drugs and it takes long durations before replenishment is done. Part of this delay may be caused by poor logistics that leads to high lead time. According to the literature review and information from different sources, RMS is experiencing stock out on one side and overstock of health commodities resulting to the expiries or losses on the other side. When the logistics network is inefficient, healthcare facilities will experience longer

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lead times as well as stock out (Muga et al, 2020).

Stock-outs are caused by the following reasons: Under-estimating the demand for a product, under ordering and late delivery by a supplier. RMS ordered enough, but supplier did not deliver when expected or only delivered part of your order.

Over stock is a surplus of stock **or** an excessively large inventory of goods. RMS has experienced a situation where a store has more goods in stock than are required to meet demand which conduct to expiries of medicines and other related health commodities. However, drugs that are already past their expiry dates have regularly been dumped in low-income and atmosphere pollution the shortage of health commodities and medical supplies at national central medical store is a challenge facing many health systems in low and middle income countries. This contributes to the provision of poor quality health services and consequently to increase of number of deaths with the population.

The inadequate financing to the firm's procurement process, staff capacity to effect procurement and

stringent public procurement procedures were found to be an impediment to successful management of the procurement lead time management. In addition, a lack of adequate enforcement of ethical code of contact by staff and other actors in the supply chain was found to delay the processing of tenders and the eventual delivery of the products or services. Ordering and receiving of goods by an organization has been a great issue especially in healthcare system. In Rwanda medical supplies face a number of challenges that makes it difficult for its supply chain to operate efficiently and effectively. Logistics plays a very important role in ensuring that drugs and medical equipment are sourced and delivered within reasonable time in order to serve their purpose (Stanley, 2019).

Currently lead time causes many challenges to both procurement and supplying entities and it has led to the following effects. Poor use of buyer-supplier relationships is a procuring process where they do not acquire the goods in the prescribed time to create a dad relationship. This will lead to loss of consumers hence reduced profits. Produced stoppage due to not receiving the goods in time, this will increase idle

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man hour and machines in the organization. This will also cause poor productivity leading to poor quality, Loss of customers this is due to not delivering materials in good time thus lack of trust to the customers. So they have to look for alternative supplier to supply in time (Stanley, 2019).

For at least ten years now, the Rwandan Medical Supply Ltd is struggling to implement new competitive tendering processes.

The stock out of essential medicine **may result in poor clinical outcomes, including drug-resistant mutation and increased population mortality rate and will also conduct to financial poor performance of RMS ltd caused by non-availability of medicine and other related commodities.**

Objectives of the study

General objective

The general objective of the study is to investigate the effect of procurement lead time management on entity performance in Rwanda, a case of Rwanda Medical Supply Ltd (RMS).

Specific objectives

i. To establish the effect of needs identification lead time on performance of RMS.
ii. To examine the effect of selection of goods and services lead time on performance of RMS.
iii. To investigate the effect of sourcing vendors and supplier delivery lead time on performance of RMS.

Research questions

i. What is the effect of needs identification lead time on performance of RMS?
ii. What is the effect of selection of goods and services lead time on performance of RMS?
iii. What is the effect of sourcing vendors and supplier delivery lead time on performance of RMS?

Research hypotheses

H_0: There is no relationship between procurement lead time management and performance of Rwanda Medical Supply Ltd.

H₁: There is significant relationship between procurement lead time management and performance of Rwanda Medical Supply Ltd.

Scope of the study

The study will focus on the domain of procurement. This study will be carried out at Rwanda Medical Supply Ltd Headquarters located in Kigali City. This study will be based on the period of four months from the period of January 2021 up to April 2021.

LITERATURE REVIEW

Concepts of procurement lead time management

Procurement lead time is the amount of time between the placement of an order and the receipts of the goods ordered. It depends on the nature of the product e.g. whether it is made to order or if it is a from the shelf product. Procurement lead time management also depends on control, planning and supply chain management, logistics services and of course distance to customers and suppliers. Long procurement lead time management does not need to be a problem if delivery is predictable and demand is stable. However, if there is uncertainty about future demand, long procurement lead time management is costly even when the customer knows exactly when the merchandise will arrive. If future demand has been underestimated, running out of stock has costs in terms of foregone sales and the possibility of losing customers. If future demand has been overestimated, excess supply must be sold at a discount. Furthermore, the longer the procurement lead time management and the more varieties of the product in question are on the market, the larger stocks are needed

Concepts of performance of entities

Performance is assessed by giving a summary of how the activities and services of organization achieve their objectives achievement through both operating and non-operating activities (Vitasek, 2017).

The personnel involved in performance of entities through administration that required to negotiate, support and manage effective contracts are often expensive to train and retain. Contract management includes negotiating the terms and conditions in contracts and ensuring compliance with the terms and

conditions, as well as documenting and agreeing on any changes or amendments that may arise during its implementation or execution.

THEORETICAL REVIEW

Agency Theory of Procurement

The main disciplinary underpinning of this procurement theory is in organizational sociology, with a focus on political models of decision-making. The basic assumptions underpinning such models are that actors have bounded rationality and differing motivations and preferences, and that intra-organizational conflict is inevitable in situations of joint decision-making. By viewing organizational buying behavior as a multi-actor, multi-agenda process, this literature conceptualizes buying decisions as being a potential locus of intraorganisational politics. This, in turn, highlights the possibility for power to be used to resolve conflicts of interest.

Logistic theory

Jonson, (2018) is the father of theory in that a logistics assumption which argues that most activities are modern societies. It is constructed on subsystems which in turn contain a collection of interrelated components. The relationship between the subsystems and components takes the form of co-ordination and exchange of materials and information. The aim of the system is to supply customers efficiently with their required products. It was used to indicate how each subsystem controls the size of the flow of materials through the system via storage, transportation and various stages of handling and value adding. The logistics systems do not only consist of flows of materials, components and products which are processed and distributed to customers, but also include supply chain flows of spare parts and return flows of defective and used products and packaging.

Buyer-supplier Relationship theory

The buyer-supplier relationship theory is the underpinning theory used to establish the framework for this study. The buyer-supplier relationship theory in procurement is a model developed by economists that

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deals with situations in which the buyer is in position to induce the supplier, to perform some task in the buyer's interest, but not necessarily the supplier's (Health & Norman, 2016).

III. METHODOLOGY

The overall approach to the research process, from the rational foundation of the study to the collection and analysis of the data collected about the procurement lead time management and performance of Medical Supply Companies Ltd i n Rwanda, especially with the case of Rwanda Medical Supply Ltd. this explains how the researcher was collected the data, the nature of data that were collected, where data was collected and how they was it analyzed. It presents the methods and methodological techniques and approaches that was applied in data collection, sampling techniques as well as problems that can be encountered by researcher in the study

Population of the study

The entire population of the study who are supposed to provide the information data related to the objectives of the research study was employ the target population of 102 respondents as employees of Rwanda Medical Supply Ltd.

Sample size

Before identifying the respondents to this research, it is necessary to indicate how the sample size is determined. The sample size of the study is calculated using Taro Yamen (1967). This formula is used to calculate the sample sizes and it is shown below:

$$n = \frac{N}{1 + N(e)^2} \; ;$$

Where n is the sample size, N is the population size, and e is the marginal of error (0.05).

When this formula is applied to the above sample, researcher gets

$$n = \frac{102}{1 + 102(0.05)^2} = \frac{102}{1.255} = 81.2749$$

Then the sample size is 81 respondents. Therefore, the study sample size will be 81 employees of Rwanda Medical Supply Ltd, who will be chosen through simple random sampling technique.

Validity, and reliability

Validity

A pilot study will be concerned for small study conducted in advance of a planned project, specifically to test aspects of the research design (such as stimulus material) and to allow necessary adjustment (Robson, 2022).

Reliability

Pilot studies will allow the researcher to identify potential problems in the proposed study. The testing of data will be conducted in order to respondents during one week before to test the reliability and validity of the questionnaire. The aims are to test whether the designed questions are logical and contextual, if questions are clear and easy to understand, whether the stated responses are exhaustive and how long it takes to complete the questions. Therefore, the pre-test also will allow the researcher to check on whether the collected data can easily be processed and analyzed. Any question which is found ambiguous or interpreted differently during the pre-testing is rephrased so that it can have the same meaning to all respondents.

IV.   DATA ANALYSIS, INTERPRETATION AND PRESENTATION

The purpose of this study was to find out the procurement lead time management and entities performance in Rwanda. In order to reach this objective, it was necessary to collect views from different individuals. Thus, this fourth chapter deals with the presentation, analysis and interpretation of data which was collected from members of the Rwanda medical supply ltd .The present chapter is composed of six main components which include the identification of respondents, services provided by Rwanda medical supply ltd, Rwanda medical supply ltd and performance in Rwanda, performance in Rwanda, suggestions of respondents and verification of hypothesis.

Summary of Finding

This section of the general conclusion comprises of the synthesis of results from the study untitled "The Procurement leads time management and entities performance in Rwanda; case study of Rwanda medical supply ltd". The main objective of this study was to find out the procurement leads time management to the performance of Rwanda.

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The study population consisted of entities in Rwanda especially in Rwanda medical supply ltd. 81 respondents have been chosen from the population, including 28 women equal to 34.6% and 53 men equal to 65.4% ranged in four categories of age with majority comprised of 45.7% whose age is between 31 and 40 years old. Regarding to educational level, 75.3% of the respondents studied Diploma level, while 22.2% completed Diploma level.

After discussing with respondents about the Procurement leads time management and entities performance in Rwanda and presenting the collected data in the form of description, percentages, figures, statistical tables and frequency distribution, we discovered that the big number of the respondents confirmed that procurement leads time management and entities performance in Rwanda.

In line with the second specific objective that consisted of evaluating time management and entities performance in Rwanda, the respondents made us to know that the indicators of entities performance include: excellent negotiation skills, embrace technology, increase of vendors, and fiscally responsible and service minded and great communicators.

Thus, the respondents led us to know that the main entities activity. Rwanda medical supply ltd that can lead to the performance of Rwanda. Within this context, the Pearson correlation analysis indicated that there is a positive relationship between Rwanda medical supply ltd and performance of Rwanda entities of 0.580, meaning that procurement leads time management and entities performance in Rwanda.

However, there are some resistance to change, limited resources and problems in sharing information and collaboration. Among those conditions, the managers are afraid of changes that e-procurement will bring and they don't have resources needed (money, time, skilled personnel) for the adoption and implementation process. From the organization barriers we choose to focus our attention on cultural differences, internal and external compatibility and breaking up post supplier relationships.

Finally, the respondents gave their suggestions on what can be done for adequately use the procurement on behalf of time management and entities performance in Rwanda. The respondents' suggestions were compiled with researcher's ideas to formulate recommendations as indicated in the following section

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V. Conclusion

An organizations aim of reducing lead time isn't about capacity. The amount of work that can get done is usually still the amount of work that can get done and consequently, what lead time does is to deliver the request sooner to whomever needs something done. For example if work is done in parallel instead of in series, there isn't less work, but it is completed sooner. From the findings it can be concluded that management of the lead time and operational Performance requires leadership, drive and strategy and a management system to manage and monitor organizational improvement. The need to have appropriate support infrastructure as reported by the researchers is also a key factor. Fair competition is not always ensured due to the high level of discretionary power of procuring entities for the set-up of firms that have been shortlisted. Rules on how to choose successful firms during the tendering process is a crucial area that requires attention since it is prone to various forms of malpractice. This applies also to small purchase amounts as corrupt activities often start at a lower level, building up close relationships with responsible officers and reaching eventually an established position marked by corrupt exchanges.

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