



Procurement Planning & the Rwanda Biomedical Centre (RBC)

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August 6, 2022

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Abstract

This study analysed the effect of procurement planning on the performance of public institutions using the case illustration of the Rwanda Biomedical Centre (RBC). The RBC is one of the public institutions in Rwanda with a mandate to promote health in the country. However, the institution has been marred by poor procurement practices. For example, the auditor general's report (2015) indicated some inconsistencies in the procurement process at the RBC. Likewise, a national daily, the *New Times* reported that RBC was the least performer. In the light these, the study set out to achieve four main objectives – to examine the significance of a proper needs assessment on RBC's performance; establish the effect of procurement cost estimation on RBC's performance; assess the effect of quality specification of goods on RBC's performance; and establish the strategies for addressing the challenges faced in the procurement planning practices at RBC.

Keywords: Procurement planning practices; Rwanda Biomedical Centre (RBC); Inclusive Technopreneurship; Public Health Services; Rwanda

1. Introduction

The Rwanda Biomedical Centre (RBC) is the nation's central health implementation agency. Established in 2011 through a merger of fourteen key health institutions, RBC strives to improve the health of the Rwandan population by providing high quality, affordable and sustainable health care services. It seeks to accomplish this mandate through the implementation of preventative, rehabilitative, and curative health interventions. RBC also conducts scientific research, provides diagnostics services, and implements innovative health interventions to protect the nation against diseases and other health threats. The mission of the entity is to promote high quality, affordable, and sustainable health care services to the population through evidence-based interventions and practices guided by ethics and professionalism. Its broader vision is "to become a Center of Excellence for the prosperity of the country, ensuring quality health service delivery, education and research." The Board of Directors of Rwanda Biomedical Centre was appointed by the Cabinet Decision in the cabinet meeting held in 2016. Interestingly also RBC has a strong gender balance in its Senior and Middle management: with the likes of Noella BIGIRIMANA, Deputy Director General; Dr. Isabelle MUKAGATARE, Head of Department of Biomedical Services; Nathalie MUTEGARABA, Division Manager, Corporate Services; Eng. Francine UMUTESI, Division Manager, Medical Technology and Infrastructure (MTI); Dr. Yvonne KAYITESHONGA, Division Manager, Mental Health; Clarisse MUSANABAGANWA, Medical Research Analyst, Research, Innovation and Data Science working alongside Prof. Claude Mambo MUVUNYI, the Director General.

This study analysed the effect of procurement planning on the performance of public institutions using the case illustration of the RBC. The RBC is one of the public institutions in Rwanda with a mandate to promote health in the country. However, the institution has been marred by poor procurement practices. For example, the auditor general's report (2015) indicated some inconsistencies in the procurement process at the RBC. Likewise, a national daily, the *New Times* reported that RBC was the least performer. In the light these, the study set out to achieve four main objectives – to examine the significance of a proper needs assessment on RBC's performance; establish the effect of procurement cost estimation on RBC's performance; assess the effect of quality specification of goods on RBC's performance; and establish the strategies for addressing the challenges faced in the procurement planning practices at RBC.

Whereas previous studies have always looked at procurement planning and its effect on the performance of public institutions not all factors have been dealt with within the institutions of RBC in Rwanda. The aim of the Public Procurement Regulations of 2012 was to promote fairness, accountability, and procedures in procurement in public institutions with the main aim of ensuring efficient use of public funds. However, studies reveal that even after the enactment of the Regulations there are losses of public funds that can be attributed to public procurement. Further, studies indicate dissatisfaction among stakeholders brought about by loopholes left by the Regulations which may be used by dishonest people to make the process inefficient.

Statement of the problem

Procurement planning is an essential component of public finance that has impact towards many other components and thus affects overall efficiency and effectiveness of organizations performance (Basheka & Mugabira, 2008). Despite the important role played by the Procurement system, some government institutions in Rwanda still practice lengthy bureaucratic procurement processes in acquiring goods and services, corruption and discriminatory awards of tenders hence has made some government projects to fail. The Rwanda Biomedical

Centre is one of the public institutions in Rwanda that is mandated to promote health in the country. However, the institution has poor procurement practices. For example, the New Times (2017) reported that RBC was the last performer. The auditor general's report (2015) indicated some inconsistency in the procurement process of RBC Rwanda Biomedical Center. The researcher believes that poor procurement planning has an effect on the performance of RBC. However, there is limited research that has been conducted on this institution in regard to its procurement planning, practices and how these functions affect its performance. It is in light of this research gap that this study seeks to explore how procurement planning affects performance of RBC.

Significance of the Study

The findings of the study gave an insight into the current problem to improve on public institution's performance. Procurement planning of public institutions is expected to assist all public organizations to come up with policy in their respective entities to overcome the problem. The policy will help improve on the quality of procurement through cost cutting purchase, reduced delivery period, quality attainment, efficient and effective processes. The poor planning concept has given the public institutions a poor public image because of misplaced priorities of funds due lack of serious plans in the public procurement institutions. Therefore, the study will enable the sector to prioritize procurement planning in every financial year leading to quality procurement and improved performance. The study was necessary to assist central and county governments achieve their objectives through planned procurement. If public institutions emphasize and practice procurement planning, they stand a chance of getting more funds from donors or private sector stakeholders who can step in to cater for deficits courtesy of inadequate funding by the central government thus resulting in improved organizational performance.

2. Literature Review

In our review of the literature on the subject matter we draw extensively from about five key sources (Thomson, 2004; Gelderman, *et al.* 2006; De Boer and Telgen, 2008; Basheka and Bisangabasaija, 2010; Kakwezi and Nyeko, 2010) in chronological order.

Thomson, (2004) asserts that the contribution of procurement planning in facilitating an efficient and effective service delivery in public sector organizations is generally undisputed in both developed and developing countries. Its contribution can be at both central and local government levels of public sector management. This Study revealed a significant positive relationship between procurement planning and performance in local government procurement systems. These results are compared to international research findings, and suggestions are offered for management, policy making, and future research. Gelderman, *et al.* (2006) 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 ensure the goods/services received meet the standard set forth in the specification and provides equitable award at the lowest possible cost.

De Boer and Telgen (2008) describe a comprehensive procurement performance as a function of an all-inclusive procurement planning process that analyses all the variables in a specific environment. In relation to the above discussion, the studies and theories have established the value of, cost estimation, quality specification and need assessment. They, however, fail to highlight in clear terms the role of the above procurement planning variables on institutional performance. Basheka and Bisangabasaija, (2010) argue that 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. It is a function that sets in motion the entire acquisition/procurement process of acquiring services in local governments. Kakwezi and Nyeko, (2010) further adds that effective procurement planning is an important route towards securing the right service to be delivered to the public, and also maximizing the level of service provision which can be achieved within the local Supporting People. A procurement plan helps Procuring Entities to achieve maximum value for expenditures on services to be delivered and enables the entities to identify and address all relevant issues pertaining to a particular procurement before they publicize their procurement notices to potential suppliers of goods, works and services.

2.1 Needs Assessment in Procurement Planning

Procurement Planning entails the identification of what needs to be procured (which is the result of a Needs Assessment), how the organizations need can best be met, the scope of the goods, works or services required, what procurement strategies or methods to be deployed, setting the time frames, and the accountability for the full procurement process. It indeed involves determining what needs to be procured, when, how, and by whom (Seminega, 2012). According to Tan, *et al.* (2009) needs assessment is "a systematic process for determining and

addressing the needs, or gaps between current conditions and desired conditions or wants". This is important in procurement; because it is an effective tool to identify appropriate interventions or solutions by clearly identifying the problem to ensure that finite resources (Prior Budget appropriations) are directed towards developing and implementing a feasible and applicable solution for identified projects (Thomson, 2004). He further argues that a good needs assessment will lead to a well thought out project selection through a workshop or challenge session for all the stakeholders involved in a project or service delivery including the beneficiaries of the project or service. This creates an opportunity for stakeholders to conduct a robust Peer review of the project concept and design selection to assure them that what is being proposed is the best solution for the beneficiary's situation. This model can also be applied to public sector projects to achieve the same results if government projects must succeed (Seminega, 2012).

As pointed out by PPA (2007), the beginning of the procurement process needs realization and identification of the requirements. This is informed by the inventory status, projects plan, production schedules, work plans, capital or operational requirements budgets and the procurement plan. Establishment of the requirements is the foundation for conducting market surveys to ascertain aspects such as prices, new products or alternative or substitute products, new sources of supply, nature of competition and environmental aspects that may affect the supply market. In their report in the same year, Karin *et al.* (2007) singled out non-adherence to procurement methods as a major impediment to public procurement development in Kenya. They, however, did not specify the stage of procurement where this happened.

Inasmuch as the above studies highlight the core role of proper need assessment as a foundation for an effective procurement, they fail in bringing to the fore the link between need assessment and institutional performance. Public service agencies strive to maximize overall 'value for money' for citizens. This requires consideration of issues such as client satisfaction, the public interest, fair play, honesty, justice and equity (Trionfetti, 2000). Recent theorists also point to the importance of public administration as a moral and ethical concern and recognize that administrative action is permeated by moral choices and are therefore models of not only technical and professional competencies but also of moral behavior (Van, 2006). According to the Judiciary Strategic Plan (2012-2016), the intention is "to institutionalize results-based budgeting and establish a financial management and accountability capacity so as to meet regulatory standards and customer needs." Specifically, the Judiciary plans to develop and operationalize value-for-money standards, trails and indicators for forensic audit, train procurement committees at the devolved units; and develop an annual procurement unit.

2.2 Cost Estimation and Forecasting in Procurement

According to Wee (2002), purchases must be economical and efficient. This means that they should be based on market prices and should be able to generate saving. It also means that bad practices such as irresponsible procurement leading to wastage, wear and tear of stocks, overinvoicing, unplanned expenditure, shortage of goods when needed, poor quality products and similar factors to be avoided. The PPOA prepares and updates a Market Price Index (MPI) to be used by the Procuring Entity (PE) on a periodic basis. The Procurement Plan must be integrated into the budgetary processes based on the indicative or approved budget, as stipulated in the PPDA (2006). The budget as well as the procurement plan are to be based on realistic cost estimates derived from the market research database which is to be compiled and updated regularly by the procurement unit in line with regulations, PPDA (2009). Costs are one of the factors that are concerned with the customer perspective. The price is not seen as the only parameter for costs. Other issues that are involved are ordering and delivering arrangements, paying for materials, and storing the materials to mention a few. The customer might choose the more expensive supplier knowing that the delivery will be defect free. That is why, taking the customer's perspective is crucial for the organization to succeed (Thomson, 2004).

The Public Procurement Act (PPA henceforth) has been adapted in Rwanda to improve a national public procurement system with respect to international standards. Most developing countries prefer the flexibility that comes with receiving development aid through budget support, they have an incentive to reform their public procurement and financial management systems (Baily *et al.*, 2005). This is the case for the government of Rwanda whose public procurement was recently decentralized to local governments in order to meet the above-mentioned requirements. It is against this background that the Rwanda Procurement process had to undergo radical reforms in order to comply with these principles so as to make a profitable use of donor funds in a more effective and transparent manner (Basheka and Mugabira, 2010).

According to a report made by *Transparency International* Rwanda on assessment of Public Procurement in 2006, public procurement accounted for 52% of the total public funds' expenditure. For example, in Rwanda, public procurement is estimated at 13% of GDP and 40% of public expenditure. When one does not consider salaries, public procurement accounts for over 66% of public expenditure which could even be higher if one further does not consider public debt repayment (MINECOFIN, 2011). Inevitably, this has a certain effect on management of government expenditure and projects as well. The study report May 2010 of the Rwanda Association of Local

Government Authorities (RALGA) on procurement practices in local governments, state that the RPPA and the ombudsman's reports of 2008 indicated failures in the procurement practices of public sector, and local governments in particular (RALGA, 2010).

2.3 Quality specification in procurement

According to Sunil (2004), quality is defined using five different approaches namely, the transcendent approach; the product-based approach; the user-based approach; the manufacturing- based approach; and the value-based approach. The transcendent approach equates quality with Innate excellence: The product-based approach defines quality as a sum or weighted sum of the desired attributes in a product: The user-based approach identifies a high quality item as one that best satisfies consumer needs or wants: The manufacturing-based approach equates quality with conformance to specifications: And the value-based approach defines amounts as a measure of not only the product's conformance to specifications or performance at an intended level but also conformance at an acceptable cost or price.

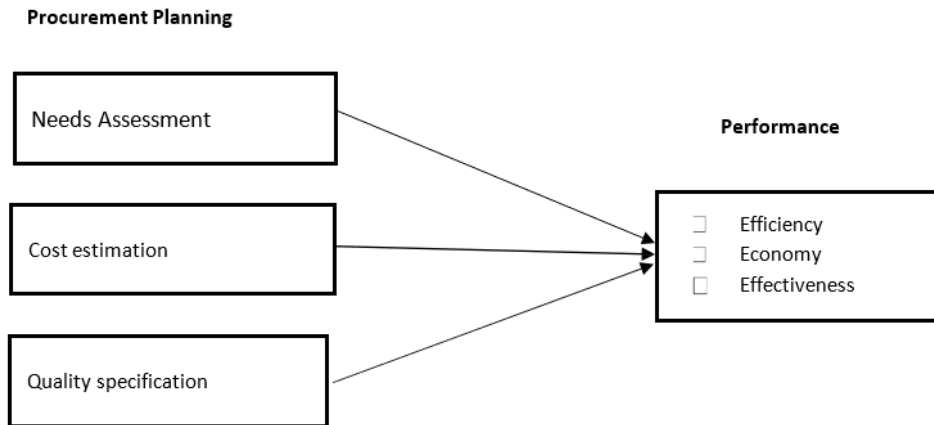
Hui, et al., (2011) defined service quality as a measure of how well the service level delivered meet customer expectations. A common definition of service quality is that service should correspond to the requirements (Edvardsson, 1998). Despite rigorous academic debate and attention to issues related to understanding service quality from an external customer's perspective, research on the procurement needs domain is relatively new (Hui et al., 2011). Osei et al., (2012) that service organizations should not only focus on the external customer, but also monitor the exchange of services within the organization that is, service provided by an employee in a department or section to an employee in another area of the firm. The importance of internal functions has been recognized and most researchers agree that internal organizational support activities and the quality of internal service operations are key links to external customer satisfaction and an overall service quality strategy (Basheka and Mugabira, 2008).

This implies that both user-based approach and transcendent approach are likely used by the procurement departments depicting the user department as their major source of existence; they are the first clients to consider before going out of the organization. Service quality can be described in terms of seven perceived criteria which include professionalism and skills; attitudes and behavior; accessibility and flexibility; reliability and trustworthiness; service recovery; servscape; and reputation credibility (Kagendo, 2012). However, Tookey et al. (2001) brings out five dimensions that can be used as measurement for perceived service quality which include tangibles, reliability, responsiveness, assurance, and empathy. Gelderman, et al. (2006) 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 ensure the goods/services received meet the standard set forth in the specification and provides equitable award at the lowest possible cost.

2.4 Conceptual Framework

The conceptual Framework shows the hypothesized relationship between procurement planning and performance. Procurement planning which is the independent variable is represented by needs assessment, cost estimation and quality specification while performance (dependent variable) is measured in terms of efficiency, economy, and effectiveness. The hypothesised conceptual framework in Figure 1 shows the possible relationship between procurement planning and performance. The arrows show the direction of the effect of procurement planning on performance. Needs assessment, cost estimation and quality specification have been selected as the predictor variables of procurement planning while performance was measured based on three indicators of effectiveness, efficiency, and economy.

Figure 1: Conceptual Framework



3. Methodology

The total target population of the study included 61 staff drawn from key departments such as procurement, finance, accounts, and administration departments at the RBC – who are active participants in the procurement planning process. This qualification was based on the fact that the participants are in one way or the other involved in the application of the public procurement. The sample of 61 employees (44 from the Finance department and 17 from the procurement department) were purposively selected to inform the study. Following the sample selection, the multiple regression model was used to analyse a relationship of key variables with a view to tackling the research objectives.

3.1 Research Design

The researcher used a mixed methods research design by incorporating both quantitative and qualitative approaches. The mixed design was preferred because it provides multiple approaches for studying the research problem, it also allows the researcher to collect data using multiple methods, and all this enhances validity and reliability of findings.

3.2 Study Population and Sampling

For this case the total target population was 61 staff of some key departments of Procurement, Accounts and Finance of the RBC who are active participants of the procurement planning process and belonging to Procurement, Finance, Accounts and Administration departments. This qualification was based on the fact that the participants are in oneway or the other involved in the application of the public procurement.

The sample size was determined using universal or census sampling techniques in which all the elements of the target population are taken as the sample size. The sample within each selected population was selected using purposive sampling. Because the study requires people with technical knowledge about the study, the respondents within each sample was selected using purposive sampling i.e., selecting a sample based on the researcher's judgement on how such a sample will enable him/her/them answer questions that align with the study objectives (Saunders *et al.*, 2000).

3.3 Qualitative Data Collection using Interview guides

In order to address the objectives of the study, primary data was collected by holding in-depth interviews using interview guide with the heads and staff of the key departments of RBC. These in-depth interviews involved discussions between the researcher and the respondents on the procurement planning and performance. This approach is consistent with the work of Kothari (1998) and Saunders *et al.* (1999) who argued that in-depth interviews constitute one of the vital approaches for understanding phenomena that have not been significantly studied. During the interview, a set of questions were designed to guide the researcher in the interview process. This helped the researcher to ensure that the interview is not diverted, and the researcher remain focused to the objectives of the study. During the unstructured interviews, respondents were requested to share their experiences as freely as possible. There was no intervention from the researcher except for occasional guidance to keep the interview on track. In order to promote freedom of the respondents to express themselves interview guides will not be used during these interviews. The data that was obtained from the

unstructured interviews were analyzed to identify common themes emerging from it. The use of semi-structured interviews is intended to deepen the researcher’s understanding of procurement planning and performance of public institutions.

3.4 Quantitative Data Collection using Questionnaires

The quantitative was collected using one set of questionnaires. The questionnaire was designed using a five-point scale, both closed and open-ended questions were used. Open ended questions were seeking the views of respondents on the subject matter. In this study the researcher used both the structured and the unstructured self-administered questionnaires. The questionnaires will be given to the respondents, the researcher explained the objectives and the purpose of the study to the respondents and ensured them anonymity and the study was only going to be used for academic purpose only. The researcher used this type of questionnaire in the study because of the advantages it has over other instruments as shown in the literature (Saunders *et al.* 1999; Kothari, 2000; Kasomo, 2006; Mugenda, 2008), it is relatively cheap to collect data through the use of questionnaires since it involves only spending money in preparing the questionnaire and mailing it to the respondents. In addition, when the study involves both deductive and inductive approaches, questionnaires are usually the preferred approach. Furthermore, when the study involves identifying a relationship between variables, the questionnaires help to get data that describe a relationship between different variables.

4. Findings

4.1 Summary of Findings

In Table 1, the respondents were whether they have been involved in procurement planning before, Responses show that, 95.1% of the respondents said yes while 4.9% of respondents said no. Results in Table 2 respondents were asked whether procurement planning is important to the Rwanda biomedical center, where 47.5% of respondents were strongly agreed and 52.5% were agreed. The results from the survey revealed that, majority of respondent agreed that procurement planning is important to the Rwanda biomedical center. The table 3 shows that the people involved in procurement planning at the RBC, where 19.7% of respondents state that are the only the senior managers in procurement department, 26.2% of respondents state that are the senior managers in all departments, 18% of respondents state that Senior managers and Middle-level managers in procurement, 36.1% of respondents state that all levels in procurement (senior managers, Middle-level managers, and Support staff). The results from the survey revealed that, majority of respondent state that people involved in procurement planning at the Rwanda Biomedical center are all levels in procurement (senior managers, middle-level managers and support staff as represented by 36.1% of the respondents. Table 4 shows how respondents rate the cost of the procurement function reduced through procurement planning and services delivery at RBC, where 29.5% of respondents mentioned that is highly reduced, 52.5% is reduced and 18% is fairly reduced. The results from the survey revealed that, majority of respondent mentioned that the rate the cost of the procurement function reduced through procurement planning and services delivery at RBC is reduced as represented by 82% of the respondents. Table 5 shows that the quality of service in regard to procurement function improved due to procurement planning strategy, where 40% of respondents mentioned that is highly improved, 50.8% is improved and 8.2% is fairly improved. The results from the survey revealed that, majority of respondent mentioned that the quality of service in regard to procurement function improved dueto procurement planning strategy is improved as represented by 91.8% of the respondents. Table 6 shows that the time for getting goods from suppliers reduced because of procurement plan at RBC, where 42.6% of respondents mentioned that is highly reduced, 45.9% is reduced and 11.5% is fairly reduced. The results from the survey revealed that, majority of respondent mentioned that the time for getting goods from suppliers reduced because of procurement plan at the RBC is reduced as represented by 88.5% of the respondents.

Table 1: Respondents view on whether this ware involved in procurement planning before

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	58	95.1	95.1	95.1
No	3	4.9	4.9	100
Total	61	100.0	100.0	

Source: Survey Data 2021

Table 2: Procurement planning is important to RBC

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agreed	32	52.5	52.5	52.5
	Strongly agree	29	47.5	47.5	100.5
Total		61	100.0	100.0	

Source: Survey Data 2021

Table 3: People involved in procurement planning at the RBC

	Frequency	Percentage
Only the senior managers in procurement Department.	12	19.7
Senior managers in all departments	16	26.2
Senior managers and Middle level managers in procurement	11	18.0
All levels in procurement (senior managers, middle-level managers and support staff).	22	36.1
Total		100.0

Table 4: Cost of the procurement function reduced through procurement planning & services delivery

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly reduced	18	29.5	29.5	29.5
	Reduced	32	52.5	52.5	82.0
	Fairy reduced	11	18.0	18.0	100.0
Total		61	100.0	100.0	

Table 5: Quality of service in procurement function improved due to procurement planning strategy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly improved	25	41.0	41.0	41.0
	Improved	31	50.8	50.8	91.8
	Fairy improved	5	8.2	8.2	100.0
Total		61	100.0	100.0	

Table 6: The time for getting goods from suppliers reduced because of procurement plan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly reduced	26	42.6	42.6	42.6
	Reduced	28	45.9	45.9	88.5
	Fairy reduced	7	11.5	11.5	100.0
Total		61	100.0	100.0	

4.2 Discussion of Findings

The first objective of this study aimed at examining the effect of proper need assessment on institution's performance. The overall performance of the procurement function improved because of procurement planning at RBC, where 44.2% of respondents mentioned that is highly improved, 52.5% is improved and 3.3% is fairly improved. The results from the survey revealed that, majority of respondent mentioned that the overall performance of the procurement function improved because of Procurement planning at RBC, as represented by 96.7% of the respondents.

The second objective of the study established the effect of procurement cost estimation on institution's performance. The cost of the procurement function reduced through procurement planning and services delivery at RBC, where 29.5% of respondents mentioned that is highly reduced, 52.5% is reduced and 18% is fairly reduced. The results from the survey revealed that, majority of respondent mentioned that the rate the cost of the procurement function reduced through procurement planning and services delivery at RBC, as represented by 82% of the respondents.

The third objective of the study aimed at assessing the effect of quality specification of goods on institution's performance. The quality of service in regard to procurement function improved due to procurement planning strategy, where 40% of respondents mentioned that is highly improved, 50.8% is improved and 8.2% is fairly improved. The results from the survey revealed that, majority of respondent mentioned that the quality of service in regard to procurement function improved due to procurement planning strategy as represented by 91.8% of the respondents.

Based on these findings, the study concluded that a good needs assessment will lead to a well thought out project selection through a workshop or challenge session for all the stakeholders involved in a project or service delivery including the beneficiaries of the project or service. Costs are one of the factors that are concerned with the customer perspective. The price is not seen as the only parameter for costs. Other issues that are involved are ordering and delivering arrangements, paying for materials, and storing the materials to mention a few. We therefore concluded 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. The study further recommends that RBC conduct market survey to ascertain aspects such as prices, new products or alternative or substitute products, new sources of supply, nature of competition and environmental aspects that may affect the supply mark. Public institutions like the RBC should also purchase economically and efficiently, by avoiding such "bad practices" such irresponsible procurement leading to wastage, wear and tear of stock, over invoicing, unplanned expenditures, stock shortages, poor quality products among others. Public institutions should identify the minimum requirements of the end user, allows for a fair and open procurement process, provides for testing/inspection to ensure the goods/services received meet the standard and provides equitable award at the lowest possible cost.

5. Conclusions and Implications

The findings from the survey revealed that the cost of the procurement function reduced through procurement planning and services delivery at RBC, where 29.5% of respondents mentioned that it had highly reduced, 52.5% is reduced and 18% is fairly reduced. The quality of service in regard to procurement function improved due to procurement planning strategy. The study concluded that quality specification is an integral part of the procurement function, which every purchasing department should have in place – not the least the RBC. Indeed, the conclusions are similar to those reached in a study on the Medical Laboratory Equipment procurement in Kenyan Public Hospitals (Madichie and Sua, 2021). In that study, Madichie and Sua (2021) also observed in the case of Kenya, where "the aim [...] was to establish who makes procurement decisions, what resources are used while researching the business buying decision-making process in the procurement of capital medical laboratory equipment (CMLE) in public hospitals. Participants for the study were selected using purposive sampling with a view to providing insights into the explored issues. The target respondents were medical superintendents, medical laboratory technologists and procurement officers in six county referral hospitals in Kenya between May-June 2018." Factors considered important in the business decision-making included quality [...] supplier capability, equipment costs, and ease of use. Public hospitals in Kenya should adopt participatory purchasing models with key stakeholders such as buyers, lower-level employees in hospital departments, and physicians, are included in the buying decision-making."

5.1 Limitations and Implications

At the risk of highlighting the limitations of this study – notably not particularly pitched against Enterprise Education, it is our strong believe that it has implications for the subject matter. Besides, the study was crafted out of a master’s thesis at the University of Kigali, which goes to show that educators can develop problem-solving skills to impact upon real organisational challenges as has been the case at the RBC.

5.2 Policy Implications

The study posits that public institutions should purchase both effectively and efficiently by avoiding irresponsible procurement practices that often result in wastage, stock wear and tear, over invoicing, unplanned expenditure, shortage of goods, and poor-quality products. The findings of the study gave an insight into the current problem to improve on public institution’s performance. The policy will help improve on the quality of procurement through cost cutting purchase, reduced delivery period, quality attainment, efficient and effective processes. The poor planning concept has given the public institutions a poor public image because of misplaced priorities of funds due to lack of state-of-the-art procurement planning practices in the institution. Therefore, the study will enable the sector to prioritize procurement planning in every financial year leading to quality procurement and improved performance.

In a *Quartz* article reported in the Rwandan Daily, i.e., *The New Times*, it was evident that the components of our conceptual framework were noted. For example, in his summary of Rwanda’s E-Procurement system, Augustus Seminega, Director General of Rwanda Public Procurement Authority, pointed out that “Government procurement officials should take advantage of the time saved in transactions to ensure compliance, transparency, competition, fairness and dedicate more time to achieve value for money, efficiency and effectiveness.” Furthermore, “...in 2013, the Rwandan government approached the World Bank to fund a feasibility study on the implementation of its e-GP system. The feasibility study identified major challenges and recommended solutions. Some of the challenges included: inconvenient business registration; inaccurate management information & analytics; lack of one-stop procurement portal; and inefficient document and records management system.” (Quartz, 2018). Interestingly, the government of Rwanda has been championing a course for the development an eprocurement system since 2017, as the case of the launch of ‘Umucyo’ (meaning transparency) shows (Quartz, 2018):

“AOS Ltd, a Rwandan Information Technology Systems Integrator, has developed an electronic procurement system for the Government of Rwanda. Dubbed ‘Umucyo’ (transparency). The system was developed in collaboration with the Ministry of Finance and Economic planning and the Rwanda Public Procurement Authority (RPPA) to automate the public procurement process and enable the interactions of Government to Business entities (G2B).”

As Madichie and Sua (2021) also point out in their implications, *“three broad implications derived from the conclusion of the study.”* The first, according to them, was that *“public hospitals in Kenya should adopt participatory purchasing models where more stakeholders such as buyers, lower-level employees in hospital departments (users), physicians, and procurement officers included in the buying decision-making. This would ensure that the hospitals do not rely only on top management employees in making such critical decisions. This is expected to increase quality of purchases and thus increasing healthcare delivery.”* The authors also cautioned that, *“second, in doing research on capital laboratory medical equipment during the procurement process, the members responsible for researching are encouraged to utilise electronic sources of information more. This is because these sources are efficient and cost effective. They also provide deeper information and can be used to countercheck the information provided by sales or other supplier representatives.”* Third, it was recommended *“that in the process of procuring capital laboratory medical equipment, the participants in the procurement process should not overlook the performance feedback and evaluation phase [...] because this phase is critical in informing how well the purchased equipment is performing.”*

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