

## Effect of Procurement Planning on Public Institutions Performance: A Case of Rwanda Development Board

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### ABSTRACT

*The purpose of this study was to assess the effect of procurement planning on public institutions performance. The Rwandan Development Board (RDB) has included state agencies in the creation of procurement strategies, but their efforts have been fruitless so far. An everyday scenario would be an organization's signed contracts with its contractors seeing a rise in the amounts due to the unexpectedly high pricing on global marketplaces. In conducting this research, three objectives were laid out to assess the effects of procurement needs identification and specifications on performance of Rwanda Development Board, to find out the effect of procurement budgeting on performance of Rwanda Development Board and to examine the effect of procurement risk management on the performance of Rwanda Development Board. To accomplish these goals, we first conducted a literature study that centered on the resource-based perspective, stakeholder theory, and relationship management theory; then, we used a census sample approach to choose 156 RDB workers from whom we gathered data. Methods for gathering information included an interview guide, documentation, and a questionnaire. We used quantitative and qualitative data to examine the data. The results show that, with all procurement planning set to zero, the performance of RDB will be 147.4 percent; there will be a 36.8 percent boost in RDB performance with an increase of one unit in the use of procurement needs identification and specifications; a 63.2% boost in RDB performance with an increase of one percent in the use of procurement budgeting; and a 68.4 percent boost in RDB performance with an increase of one percentage point in the use of procurement risk management planning. From a high level of analysis, it was found that procurement risk management planning, procurement budgeting, and procurement requirements identification and specifications were the three factors that had the most impact on the performance of public institutions at RDB. Procurement requirements identification and specifications, procurement budgeting, and procurement risk management planning all had 0.011, 0.018, and 0.31 levels of significance, respectively, at a 5% level of significance and a 95% level of confidence. With  $p < 0.05$ , all of the factors were considerably different. Also, the Rwanda Development Board's procurement plans and the performance of public institutions are significantly different ( $p = .000$ ), according to the ANOVA test. Public sector organizations' efficiency and effectiveness are both improved by procurement planning, according to the research. Procurement planning allows the government agency to save money by consolidating comparable needs under a single contract and by dividing more complicated needs into smaller, more manageable packages. The researcher concluded that RDB could benefit from identifying possible product issues before purchase through procurement needs identification and specifications; as a result, the researcher advised that RDB and suppliers typically enter into a transactional relationship. It is recommended to collaborate with suppliers when acquiring commodities that have a greater supply risk.*

**Keywords:** Performance, Procurement Planning, Public Institution

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### I. INTRODUCTION

There is a serious problem of poor performance in public institutions due to inappropriate procurement planning in general because of inefficiencies and corruption, weak legal and regulatory frameworks for procurement (Nkongoli, 2016), poor infrastructure, limited use of information and communication technology (ICT) tools, and limited access to financing for procurement activities, especially in the private sector. As a result, many African countries are striving to continuously develop their public procurement systems to function better and effectively contribute to their economic development (Nzimande & Padayachee, 2017).

Procurement planning in Rwanda is currently faced with the following main challenges: limited capacity and expertise among procurement professionals and government officials; corruption and unethical practices in procurement processes; and inefficient procurement processes and procedures, leading to delays and cost overruns. According to Shin and Lee (2016), procurement planning aims to address a range of issues related to an organization's procurement of goods, services and works, including: ensuring that procurement activities are aligned with the organization's overall goals and strategies; by identifying cost-effective procurement opportunities; to optimize the use of financial resources; to mitigate risks associated with procurement such as supply chain disruptions, substandard

goods and services, and unethical practices; to increase transparency and accountability in the procurement process; and finally, to ensure compliance with laws and regulations. Require.

In spite of all that has been said, the Rwanda Development Board and other public institutions in Rwanda have not been able to accomplish what was intended because of the problems with procurement planning. These problems include things like a lack of regulations and laws that are helpful for identifying and specifying needs, a lack of funding for budgeting, the difficulty of planning for procurement risk management, a lack of information, a lack of emphasis on strong buyer-supplier relationships, and well-established communication networks. For instance, according to the Auditor General Annual Report (2021), the audit observed fifty-five (55) cases of delayed contracts worth Rwf 644.16 Bn (2021: Rwf 201.0 Bn). These comprised forty-one (41) contracts worth Rwf 551.25 billion identified during the year under audit and fourteen (14) contracts worth Rwf 92.91 billion from previous audits. Additionally, moment the prices on the international markets have increased unexpectedly, causing an increase in the amounts an organization has signed with the contractors it works with; furthermore, the quality of goods or services changes due to changes that are not caused by expected things, causing RDB's procurement planning to change in an unexpected way (Oluka & Basheka, 2014).

Additionally, inspection evidence shows that the reason for this problem is due to the invalid implementation of the procurement process during the planned phase, which leads to a delay in the procurement implementing process, abandoned contracts, and a lack of coordination between listed companies to get the project started and the activity quickly carried out. These funds are in danger of being confiscated by the government, and the expected goal of the project may not be realized during this period. The purpose of this study was to evaluate the effect of the procurement strategy on RDB's procurement performance, since no prior research had focused on the aforementioned assertion. For this reason, it is imperative that the researcher examine the Rwanda Development Board (RDB) as a case study to determine how procurement planning influences the efficiency and effectiveness of governmental organizations. Hence, the general objective of this study was to assess the effect of procurement planning on public institutions performance.

### 1.1 Research Objectives

- i. To assess the effect of procurement needs identification and specifications on performance of Rwanda Development Board.
- ii. To find out the effect of procurement budgeting on performance of Rwanda Development Board.
- iii. To examine the effect of procurement risk management planning on the performance of Rwanda Development Board.

### 1.2 Research Hypothesis

H0<sub>1</sub>: There is no significant effect of procurement needs identification and specifications on performance of Rwanda Development Board.

H0<sub>2</sub>: There is no significant effect of procurement budgeting on performance of Rwanda Development Board.

H0<sub>3</sub>: There is no significant relationship between procurement planning and risk management on institution performance of Rwanda Development Board.

## II. LITERATURE REVIEW

### 2.1 Theoretical Review

A theoretical framework is a structure that can contain or support a research theory. A theoretical framework proposes and describes a theory that explains why a research question under study exists (Vollstedt & Rezat, 2019). Therefore, this section discusses resource-based views, Stakeholder theory, and finally relationship management theory.

### 2.2 Resource-Based View

The study's second resource-based view (RBV) theory emphasizes that firm resources are fundamental determinants of competitive advantage through supply planning and performance. Two assumptions are made in analyzing the sources of competitive advantage (Peter & Barney, 2003). First, the model assumes that firms within an industry (or within a strategic group) may differ in the resource pools they control. Second, resource heterogeneity is believed to persist over time because the resources used to implement firm strategies are not perfectly mobile across firms (Galbreath, 2005).

Resource heterogeneity (or uniqueness) is seen as a necessary condition for resource pools to contribute to competitive advantage. The argument is: "If all firms in a market have the same inventory of resources, then there is

no single strategy available to one firm that is unavailable to all other firms in the market.” Barney (2003) explained that procurement performance depends on. They have fundamentally different levels of efficiency depending on the resource, in the sense that they allow a company to serve customers more for a given cost (or provide the same benefit at a lower cost).

### **2.2.1 Stakeholder Theory**

The term "stakeholder" as we use it today first appeared in a 1963 internal memo at the Stanford Research Institute (now SRI International, Inc.). The term is meant to challenge the notion that shareholders are the only ones group management has to cater to. In the late 1970s and early 1980s, scholars and practitioners worked to develop management theory to explain management problems associated with high levels of uncertainty and change. Much of the management vocabulary previously developed under the influence of Weber's theory of bureaucracy assumed that organizations existed in relatively stable environments. Furthermore, since Barnard (1938) little attention has been paid to the ethical aspects of business and management, management education has been integrated into the search for theories to achieve greater certainty, prediction, and behavioral control. In this context, Freeman (1984) suggested that managers should use a vocabulary based on the concept of stakeholders.

Stakeholder theory suggests that we have a better chance of addressing these three issues if we examine the relationship between firms and the groups and individuals who can influence them or be affected by them as a unit of analysis. First, from a stakeholder perspective, a firm can be understood as a set of relationships among groups that participate in the activities that constitute the firm (Walsh, 2005). It involves how customers, suppliers, employees, financiers (shareholders, bondholders, banks, etc.), communities and managers interact to create value and act together. Understanding a business requires understanding how these relationships work and change over time. The manager's job is to manage and shape these relationships to maximize value for stakeholders and direct the distribution of value (Freeman, 1984). When stakeholder interests collide, leaders must find a way to rethink the problem in order to meet the needs of the broader stakeholder population. If that happens, more value could be created for everyone (Harrison et. al, 2010). When trade-offs must be made (as they sometimes do), leaders need to figure out how to make those trade-offs and then work to improve the trade-offs for all parties (Freeman et al., 2008).

### **2.2.2 Relationship Management Theory**

In 2003, Ledingham defined relationship management as “the ethical and effective management of organization-stakeholder relationships centered on shared interests and shared goals over an extended period of time, thereby promoting mutual understanding and benefit” (Ledingham, 2003). Relationship management theory states that “organizational stakeholder relations (OSRs) work best when they are based on shared interests and common goals, and when they generate understanding and benefits for the organization and stakeholder groups” (Ledingham, 2001). The theory states that there must be common interests between organizations and stakeholders seeking a long-term relationship, and that the relationship is likely to be short-term when the organization and stakeholders have different interests, goals, or goals.

In theory, relationships take time to solidify. If stakeholders or organizations feel that they are not getting enough out of the partnership, the relationship may not last. It assumes that the essence of public relations is to create mutually beneficial relationships with the public that can enhance or hinder an organization's ability to achieve its goals (Ledingham & Bruning, 2000). In procurement planning, a good relationship between the supplier and the organization can improve business performance as both parties want to benefit from the partnership. If an organization or supplier feels it has been treated unfairly or not benefited equitably, the relationship may be short-lived and may cease to exist. Understanding the parameters of a relationship or partnership is crucial, as any change or modification to the agreed and known parameters can lead to changes in behavior and perceptions of the relationship, even if the external environment remains the same.

Accepting a supplier means that you know them and the quality of the goods and services they provide. If the information here about the supplier is incomplete, then the relationship with him is based only on a certain dose of trust and the desire to take his obligations seriously. Partnerships/relationships that start with low trust can lead to uncertainty in expectations. In this regard, building trust is a long process. Therefore, procurement planning can help target specific individuals/organizations who form such emotional relationships that can affect organizational performance (Tynan, 2016).

## **2.3 Empirical Review**

### **2.3.1 Procurement Needs Identification**

Changalima and Mdee (2023) conducted a study on the effectiveness of procurement needs assessment and procurement performance of public organizations in Tanzania, focusing on Babati District Council as a case study.

The study is based on a descriptive research design, which allows for a detailed description and analysis of the variables studied. Describe and present their properties and explain their relationships without manipulation. The study used a combination of simple random sampling and directed sampling techniques to draw a sample of 78 respondents from 97 employees at the Babati District Council headquarters. The study used questionnaires and interviews as field data collection tools. Use descriptive statistics to estimate frequencies, means, standard deviations, and percentages when examining respondent characteristics and respondent data for independent and dependent variables. Inferential statistics are also used to establish causal relationships between independent and dependent variables. It is also demonstrated by calculating mean, frequency, standard deviation, correlation and regression analysis on the collected data. The study concluded that procurement planning variables including: procurement needs assessment, procurement budget, and procurement methods were significantly and positively correlated with procurement performance at Babati District Council Headquarters. Furthermore, the study concluded that procurement needs assessment and budgeting in accordance with the procurement planning procedure may help in the on-time delivery of quality goods, work or services, reduce unnecessary operating costs, and satisfy customers by meeting expected requirements Customer demand. Finally, the study recommends that the government should train key stakeholders in the procurement process such as tender committee members, procurement management units, and user departments through training on procurement issues, relevant regulations of PPA 2011 and 2013, to formulate annual procurement plans and its implementation details. Implemented as a capacity building measure to improve the efficiency of the procurement process and ensure compliance with laws and regulations.

Bulcha (2018) examines the impact of procurement planning on public agency performance, focusing on specific objectives, cost estimation, needs assessment, and quality specifications. The literature suggests that procurement planning is one of the key functions of procurement with the potential to contribute to operational success and performance improvement. This function initiates the entire procurement/procurement process of a public institution. Despite their importance, little academic research has examined the extent to which procurement planning efforts contribute to the effective performance of public agencies. The study is based on procurement models, the PPOA Handbook, the PPDA Act (2005) and PPDR (2006). The study employed a descriptive survey research design using simple random sampling techniques. Based on a resource-based perspective and other models from the organizational learning and information processing literature, this study identifies the impact of procurement programs on institutional performance improvement in a sample of 60 employees of the Mombasa Courthouse in Mombasa, Kenya. Collect data from selected respondents using questionnaires. Data were analyzed using descriptive statistical techniques, including frequencies, percentages, and means. Data is presented in the form of tables, pie charts and histograms. The study provides guidance on effective actions to be taken in procurement planning to achieve effective procurement and thus improve agency performance. The findings show a significant link between quality and procurement planning. Good procurement planning is allocating a budget for the procurement needs of the organization to ensure the availability of departmental requirements. It was also noted that the concept of professionalism was crucial and continued procurement training was needed to understand procurement and ethics law. It has been found that poor planning of procurement activities can have a significant impact on performance and service delivery. User needs directly affect the efficiency of procurement and service delivery. Procurement planning must be properly integrated into the budget process, consistent with procurement laws and ethics.

### 2.3.2 Procurement Budgeting

Liebman and Mahoney (2017) focus on the impact of procurement budgets on public agency performance, focusing on specific goals, budget and cost estimates, needs assessments, and quality specifications. The literature suggests that procurement planning is one of the key functions of procurement with the potential to contribute to operational success and performance improvement. Despite their importance, little academic research has examined the extent to which procurement planning efforts contribute to the effective performance of public agencies. The study is based on procurement models, the PPOA Handbook, the PPDA Act (2005) and PPDR (2006). The study provides guidance on effective actions to be taken in procurement planning to achieve effective procurement and thus improve agency performance.

Sinclair and Malen (2021) argue that budget management has a significant impact on the achievement of institutional budget goals. Unless a budget is crafted with the utmost devotion and honesty, it is impossible to appreciate the enormous power of finance as an instrument of national progress. Budgeting and budgetary controls have become high priorities for modern institutions and thus provide a broad perspective for this study. The purpose of this study is to determine the impact of budget allocations on the budget use of Kenyan public institutions and to analyze the impact of the procurement process on the budget use of Kenyan public institutions. This study is based on resource-based theory and adopts a descriptive research design. The target group for the study was the Supreme Registrar, Court Registrars, Deputy Registrars, Directors and Deputy Directors of the Judiciary, a total of 40

individuals. The study used a census approach covering the entire population of 40 respondents. In addition, data collection tools include questionnaires and interview guidelines. In addition, content analysis was used for qualitative analysis, and SPSS was used for quantitative analysis of the data. Inferential statistics include Pearson correlation and multiple linear regression models. Present data using frequency tables, percentage tables, charts, and graphs. Correlation results showed that budget allocation was positively correlated with budget use (Pearson correlation coefficient  $r = 0.798$ ,  $p$ -value 0.0001). Results showed that procurement process was positively correlated with budget utilization (Pearson correlation coefficient  $r = 0.608$ ,  $p$ -value 0.0001). Regression results show that there is a significant positive relationship between budget allocation and procurement processes and budget use in the judiciary. The study recommends categorization to allow for better linkages between policy priorities and funding programmes. The study also recommends that the budget should contain clear information on all aspects of justice policy. Monitoring of proper compliance with laws and internal controls should be strengthened.

### 2.3.4 Procurement Planning and Risk Management

As Mwambafula (2020) focuses on the impact of procurement risk management on organizational performance. The specific objectives are to identify the sources of risk that affect the organizational performance of manufacturing companies, determine the impact of the procurement risk identification process on organizational performance, and determine the impact of organizational risk mitigation strategies on organizational performance and to be tested by manufacturing companies. The study adopted a case study design of Coca-Cola Kwanza Ltd. in Dar es Salaam with a sample size of 77 respondents. Data were obtained primarily through questionnaires and interviews, with journal and organizational reports as secondary sources. The quantitative data obtained was analyzed using descriptive statistics and regression models while the qualitative data was analyzed using content-based data. Research has shown that the risk identification process has a significant impact on an organization's performance. The results show that the sources of risk affecting organizational performance include: technical risk, organizational and social risk, market risk, financial risk and regulatory risk. Third, respondents strongly agree that risk tolerance and cost-benefit analysis are the best strategies for minimizing risk. Avoidance strategies also improve organizational performance; with a significant regression score less than 0.05 indicating statistical significance. Therefore, the research suggests that the management of organizations must take cost-effective measures to identify risks in a timely manner and mitigate them effectively. Companies need to adjust their procurement risk management. This ensures that Coca-Cola Kwanza Co. meets international standards and is globally competitive. It is critical for organizations to proactively identify and address risks.

Tondu et al. (2020) risk-based management strategies are the actions an organization takes to reduce the severity of unexpected events in its operating environment. This study analyzes the relationship between procurement risk management strategies and procurement performance of Kenyan sugar manufacturers. The findings of this study provide useful insights that can inform risk management strategies and performance management policies of sugar companies. Data were collected through self-completed questionnaires from 45 middle managers at Kenya Sugar Corporation. This study is a census. Perform quantitative data analysis, including descriptive analysis, reliability analysis, and regression analysis. At the 0.01 level, the correlation analysis results show that there is a significant positive correlation of 0.415 between procurement risk management strategies and procurement performance. The study concluded that the management of Kenyan sugar companies should have procurement risk management strategies that would otherwise improve their overall performance.

## III. METHODOLOGY

### 3.1 Research Design

The researcher conducted both descriptive and correlational studies. Descriptive survey research use surveys to collect information on a variety of issues, quantitative and qualitative approach used for data collected with questionnaire and correlational studies research design examined at the links that exist between variables under the study.

### 3.2 Study Population and Sample Size

The population is defined as the total collection of elements about which wish to make a sum. the study population was 156 employees of the Rwanda Development Board/Headquarter working within these departments: procurement and legal division, administration and estate division, planning division, internal audit division, business facilitation division, finance division, investment marketing department, tourism and conservation department, strategic capacity development department, and finally finance division. The employees of the Rwanda Development

Board (RDB) were 156; therefore, the researcher considered using all of them because the study population of this research was less than 300 (Cherkinsky et al. 2013), i.e., the census inquiry method was applied.

### 3.3 Data Collection Instruments

Data Collection Instruments are tools or techniques used to gather information and data for research purposes. In this study, questionnaires were used to gather primary data. Employees of the Rwanda Development Board (RDB) served as the primary sources. Textbooks, journals, publications, and websites that discuss the subject served as secondary data sources. Questionnaires contained some study-related questions that were the same for everyone in order to collect data.

### 3.4 Data Analysis Method

Data analysis involves reducing the accumulated data to a manageable size, developing summaries, researching patterns and applying statistical techniques, while data preparation includes editing, coding and data entry. Data coding involves assigning numbers or other symbols to responses. Data entry converts information gathered by secondary or primary methods into a medium for visualization and manipulation. Version 22.0 of the Statistical Package for Social Science (SPSS) was used as a tool to analyze the data. The Statistical Package for Social Sciences (SPSS) for quantitative analysis was used in the study.

## IV. FINDINGS & DISCUSSIONS

### 4.1 Response Rates

The chapter comprises the data presentation, analysis, and interpretation of the findings as set out in the research methodology. The findings have been presented through the effect of procurement planning on public institution performance: a case study of Rwanda Development Board. These findings are related to the following objectives of the study: the effect of procurement needs identification and specifications on performance of Rwanda Development Board, the effect of procurement budgeting on performance of Rwanda Development Board; and the effect of procurement risk management planning on the performance of Rwanda Development Board. Additionally, these data were presented in the form of descriptive statistical tables, percentages, the mean, and the standard deviation for the data analysis process. Based on the objectives of the study and research questions, information was gathered from 156 respondents taken from Rwanda Development Board. This chapter was organized in such a way that the information from primary data was analyzed using Statistical Package for the Social Sciences (SPSS) version 20.

**Table 1**

*Perceptions of Respondents on Procurement Needs Identification and Specifications*

Statement	Min	Max	Mean	Std. Dev.
Procurement needs identification and specifications decide what to buy, when to buy and from which sources	4	5	4.81	0.403
Procurement needs identification and specifications ensure that the chosen supplier provides what is specified	5	5	5	0
By identifying procurement needs and specifications, RDB can identify all suppliers that are pre-qualified for the next project	4	5	4.88	0.342
Procurement requirements identification and Specification defines why RDB needs to procure goods, works or services and plans for associated risks	3	5	2.62	0.719
Determination and specification of RDB procurement requirements ensures continuity and smooth operation of deliveries	4	5	4.5	0.516
Procurement needs identification and specifications also helps RDB identify potential issues with products prior to purchase	4	5	4.26	0.488

**N=156**

Table 1 indicates that “By identifying procurement needs and specifications, RDB can identify all suppliers that are pre-qualified for the next project” responded at very highest mean and the responses were homogeneous (mean= 4.88, SD=0.342), and item 2 indicates that “Procurement needs identification and specifications ensure that the chosen supplier provides what is specified” responded at very highest mean and the responses were homogeneous (mean= 5.00, SD=0.000), Despite item 4 indicated that “Procurement requirements identification and specification defines why RDB needs to procure goods, works or services and plans for associated risks” has highest mean and responses were homogeneous (mean= 3.49, SD= .609) while item 6 shows that “Procurement needs identification and



specifications also helps RDB identify potential issues with products prior to purchase” responded at lowest mean and the responses were heterogeneous (mean= 4.26, SD= .488). Thus, the planning function within the RDB involves defining the goals of the organization, determining an overall strategy to achieve those goals, and developing a comprehensive planning hierarchy to integrate and coordinate activities. Furthermore, procurement planning is the main function that lays the groundwork for subsequent procurement activities. It "ignites" the engine of the procurement process.

The results are in alignment with Changalima and Mdee (2023) found that procurement planning variables including: procurement needs assessment, procurement budget, and procurement methods were significantly and positively correlated with procurement performance at Babati District Council Headquarters. Also Bulcha (2018), show a significant link between quality and procurement planning. Good procurement planning is allocating a budget for the procurement needs of the organization to ensure the availability of departmental requirements. It was also noted that the concept of professionalism was crucial and continued procurement training was needed to understand procurement and ethics law. It has been found that poor planning of procurement activities can have a significant impact on performance and service delivery. Furthermore, “procurement planning works Rwanda Development Board as the process of identifying and integrating requirements and developing a procurement schedule with the goal of satisfying needs as needed. RDB’s employees also continuously added that good procurement planning includes the process of identifying and selecting suppliers, contractors. The results were related to the theory of resource-based view; also, Barney (2003) explained that procurement performance depends on the different levels of efficiency depending on the resource, in the sense that they allow a company to serve customers more for a given cost (or provide the same benefit at a lower cost).

Therefore, procurement needs assessments and specifications in RDB always provide a detailed description of the goods or services that the supplier is expected to deliver during the contract period. In addition, it is a measurable and legally binding record of the supplier. Additionally, good specifications contain all the correct information to enable them to accurately price their goods or services so that customers can compare quotes on an equal basis.

**Table 2**  
*Perceptions of Respondents on Procurement Budgeting*

Statement	Min	Max	Mean	Std. Dev.
Procurement needs identification and specifications decide what to buy, when to buy and from which sources	5	5	5	0
Procurement needs identification and specifications ensure that the chosen supplier provides what is specified	3	5	2.81	0.75
By identifying procurement needs and specifications, RDB can identify all suppliers that are pre-qualified for the next project	3	5	4.38	0.619
Procurement requirements identification and Specification defines why RDB needs to procure goods, works or services and plans for associated risks	5	5	5	0
Determination and specification of RDB procurement requirements ensures continuity and smooth operation of deliveries	4	5	4.94	0.25
Procurement needs identification and specifications also helps RDB identify potential issues with products prior to purchase	5	5	5	0

N=156

Table 2 indicates that “Determination and specification of RDB procurement requirements ensures continuity and smooth operation of deliveries” responded at very highest mean and the responses were homogeneous (mean= 4.99, SD=0.250), and item 1 indicates that “Procurement needs identification and specifications decide what to buy, when to buy and from which sources” responded at very highest mean and the responses were homogeneous (mean= 5.00, SD=0.000), moreover item 6 reveals that “Procurement needs identification and specifications also helps RDB identify potential issues with products prior to purchase” responded at very highest mean and the responses were homogeneous (mean= 5.00, SD=0.000). Despite item 2 indicated that “Procurement needs identification and specifications ensure that the chosen supplier provides what is specified” has lowest mean and responses were homogeneous (mean= 2.81, SD= .750). Therefore, RDB’s procurement budgets make the procurement department accountable for its finances. Furthermore, procurement budget tells the RDB as a public body what it can and cannot afford and serves as the basis for its procurement strategy. While a procurement budget can warn a company when its finances are out of control, it can't stop a company from buying something. The results are in alignment with Sinclair and Malen (2021) showed that budget allocation was positively correlated with budget use (Pearson correlation coefficient  $r = 0.798$ , p-value 0.0001). Results showed that procurement process was positively correlated with budget utilization (Pearson correlation coefficient  $r = 0.608$ , p-value 0.0001). Regression results show that there is a

significant positive relationship between budget allocation and procurement processes and budget use in the judiciary. Additionally, purchasing budget tells RDB employees what they can and cannot afford and guides their purchasing strategy. While the purchasing budget can warn them when their finances are out of control, it cannot stop them from buying things. As result, effective budget preparation and use are tools to measure RDB's performance and promote financial health and harmony within the organization. It allows organizations to check whether the company's plans are actually effectively understood by all employee stakeholders and implement recovery measures when discrepancies or even inconsistencies actually arise.

**Table 3***Perceptions of Respondents on Relationship between Procurement Planning and Risk Management*

Statement	Min	Max	Mean	Std. Dev.
Procurement risk management helps RDB as a public body to ensure a smooth and successful procurement and delivery process	4	5	4.38	0.5
Procurement risk management in RDB contributes to overall supply chain resilience and business continuity	3	5	4.75	0.683
Procurement risk management improves control at all levels through improved decision-making.	5	5	5	0
Through procurement risk management, RDB can use resources more efficiently	4	5	4.88	0.342
RDB ensures better service through procurement risk management	3	5	2.62	0.719
Through procurement risk management, RDB ensures more effective change management	5	5	5	0

**N=156**

Table 3 indicates that “Through procurement risk management, RDB can use resources more efficiently” responded at very highest mean and the responses were homogeneous (mean= 4.88, SD=0.342), and item 3 indicates that “Procurement risk management improves control at all levels through improved decision-making” responded at very highest mean and the responses were homogeneous (mean= 5.00, SD=0.000), moreover item 1 reveals that “Procurement risk management helps RDB as a public body to ensure a smooth and successful procurement and delivery process” responded at very highest mean and the responses were homogeneous (mean= 4.38, SD=0.500). Despite item 5 indicated that “RDB ensures better service through procurement risk management” has lowest mean and responses were homogeneous (mean= 2.62, SD= .719). Therefore, procurement risk management helps RDB as a public institution to assess and mitigate potential risks associated with purchasing goods or services from suppliers. Without proper planning and execution, this institution can face limited budget and unexplainable losses, business interruption, reputational damage and regulatory penalties. The results are in alignment with Mwambafula (2020) the risk identification process has a significant impact on an organization's performance. The results show that the sources of risk affecting organizational performance include: technical risk, organizational and social risk, market risk, financial risk and regulatory risk. Third, respondents strongly agree that risk tolerance and cost-benefit analysis are the best strategies for minimizing risk. Avoidance strategies also improve organizational performance; with a significant regression score less than 0.05 indicating statistical significance. Finally procurement risk management helps the Rwanda Development Board as a public body to ensure smooth and successful procurement and delivery operations. It also contributes to overall supply chain resilience and business continuity.” They also emphasized that “RDB is currently exposed to the following risks: poor supplier management, inadequate contract management, inadequate systems and controls, and fraud. As stated in relationship management theory; there must be common interests between organizations and stakeholders seeking a long-term relationship, and that the relationship is likely to be short-term when the organization and stakeholders have different interests, goals, or goals. Furthermore, the core of risk management is to ensure the optimal operation of the RDB procurement process. Additionally, by removing roadblocks always streamlines the material sourcing process, managing suppliers, invoicing, internal processes and maintaining high delivery standards.



**Table 4***Perceptions of Respondents on Performance of Rwanda Development Board*

Statements	Min	Max	Mean	Std. Dev.
Through procurement risk management, RDB ensures more effective change management	5	5	5	0
Always RDB Accelerates Rwanda's Economic Development by Boosting Private Sector Growth	5	5	5	0
RDB works with professional excellence, responsibility, teamwork, client orientation and passion	5	5	4.66	0.409
RDB ensures the introduction and innovation of technology; infrastructure construction	4	5	4.88	0.342
RDB ensures Rwanda's smooth transformation into a dynamic global hub for business, investment and innovation	5	5	5	0

N=156

Table 4 indicates that “RDB ensures the introduction and innovation of technology; infrastructure construction” responded at very highest mean and the responses were homogeneous (mean= 4.88, SD=0.342), and item 2 indicates that “Always RDB Accelerates Rwanda's Economic Development by Boosting Private Sector Growth” responded at very highest mean and the responses were homogeneous (mean= 5.00, SD=0.000), moreover item 1 reveals that “Through procurement risk management, RDB ensures more effective change management” responded at very highest mean and the responses were homogeneous (mean= 5.00, SD=0.000). However item 3 indicated that “RDB works with professional excellence, responsibility, teamwork, client orientation and passion” has highest mean and responses were homogeneous (mean= 4.66, SD= .409). Therefore, RDB always strives to support everyone throughout the investment process and ensure that Rwanda remains one of the most competitive places to do business in Africa and the world. The results are in alignment with what Ugoani (2020) said that public institutions performance assumes that the public recognizes and responds to whether the institution is performing well. Generally, as highlighted by Rwanda development annual report (Rwanda Development Board [RDB], 2022), tourism revenues, including meetings, incentives, meetings and events (MICE), will increase significantly by 171.3%, from \$164 million in 2021 to \$445 million in 2022. Compared to pre-pandemic in 2022, Rwanda received a total of 1,105,460 international tourists. Of these, more than 60% were from African countries, underscoring the country’s growing popularity as a tourist destination on the African continent. In addition, 47.5% of the visitors came for business reasons, reflecting Rwanda’s positioning as a hub for business activities.” As they say, these unparalleled achievements were implemented through a procurement plan prepared and carefully organized by many experts’ results of best practices.

**Table 5***Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.778 <sup>a</sup>	0.605	0.577	0.333

a. Predictors: (Constant), Procurement planning

Table 5 indicates the link between the study variables, and the results in the table below demonstrate that there was a positive association between the study variables, with a correlation coefficient of 0.605 at the 1% significance level. According to the data in the table, the adjusted R squared value was 0.577, which means that there was a variation of 57.7% in the performance of the Rwanda Development Board as a result of changes in the following areas: 95% confidence interval for procurement risk management planning; identification and specifications of procurement needs; procurement budgeting; and procurement. This suggests that the independent factors might explain 57% of the performance differences.

The findings, supported by the emphasis of Shin and Lee (2016), indicate that procurement planning addresses critical organizational issues such as alignment with goals, cost optimization, risk mitigation, and compliance. This aligns well with the findings that 57.7% of the variation in Rwanda Development Board performance is due to procurement needs identification, budgeting, and risk management, highlighting the significant impact of strategic procurement planning on organizational performance.



**Table 6**  
ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.584	13	0.195	3.7	.000 <sup>a</sup>
	Residual	0.316	142	0.053		
	Total	0.9	155			

a. Predictors: (Constant), Procurement risk management planning, Procurement needs identification and specifications, Procurement budgeting  
 b. Dependent Variable: Institutional performance

Table 6 shows the results of the ANOVA analysis for the regression model examining the effect of procurement planning variables on institutional performance. The F value is 3.700, which indicates that the regression model is statistically significant. The significance level (Sig.) is 0.000, which is less than the alpha level of 0.05. This means that there is a statistically significant relationship between the predictors (procurement risk management planning, procurement needs identification and specifications, and procurement budgeting) and the dependent variable (institutional performance).

The findings supported by the emphasis of Tondou et al. (2020) that procurement risk management strategies significantly improve performance align well with the results showing a statistically significant relationship between procurement planning variables and institutional performance. The ANOVA analysis confirms this positive effect, highlighting the importance of strategic procurement planning in enhancing organizational outcomes.

**Table 7**  
Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.474	0.383		3.846	0.008
	Procurement needs identification and specifications	0.368	0.197	0.491	1.871	0.011
	Procurement budgeting	0.632	0.197	0.965	3.207	0.018
	Procurement risk management planning	0.684	0.298	0.684	2.298	0.031

a. Dependent Variable: Institutional performance

In order to assess the effect of procurement planning on public institutions performance, the researcher also preferred to use the multiple regression models that assume a linear relationship  $Y = \alpha + \beta X + \epsilon$  between the dependent variable Y (public institutions performance) and the explanatory variable X (procurement planning), where the error term  $\epsilon$  includes the omitted factor. Check as follows:

$$Y = a + bX_1 + cX_2 + dX_3 + \epsilon$$

Where:

Y : Public institutions performance

X1, X2, and X3: Independent (explanatory) variables: procurement needs identification and specifications (x1), procurement budgeting (x2) and procurement risk management planning (x3).

A : Intercept

b, c, d: Slopes

$\epsilon$  : Residual (error)

Therefore, regression model for the research can be stated as:

$$\text{Public institutions performance} = 1.474 + 0.368 \text{ procurement needs identification and specifications} + 0.632 \text{ procurement budgeting} + 0.684 \text{ procurement risk management planning} + 0.383$$

According to the regression equation, the Rwanda Development Board (RDB) will have a performance of 147.4 percent when all procurement planning is kept constant. The performance of the RDB would increase by 36.8 percent for every unit increase in the use of procurement needs identification and specifications. The performance of the RDB would increase by 63.2 percent for every 1% increase in the use of procurement budgeting. The performance of the RDB would increase by 68.1 percent for every 1% increase in the use of procurement risk management planning. From a high level of analysis, it was found that procurement risk management planning, procurement budgeting, and procurement requirements identification and specifications were the three factors that had the most impact on the performance of public institutions at RDB. Procurement requirements identification and specifications, procurement budgeting, and procurement risk management planning all had 0.011, 0.018, and 0.31 levels of

significance, respectively, at a 5% level of significance and a 95% level of confidence. A p-value less than 0.05 indicated that all variables were statistically significant.

Nzimande and Padayachee (2017) emphasized that public institution performance is hindered by inefficiencies, corruption, and inadequate procurement frameworks; the results confirm this. In line with the results, the most important factors influencing RDB performance were procurement budgeting, procurement needs identification and specifications, and procurement risk management planning. This emphasizes the significance of well-planned procurement in improving the efficiency and effectiveness of public institutions.

## V. CONCLUSIONS & RECOMMENDATIONS

### 5.1 Conclusions

Globally, procurement planning increases transparency and predictability; it also provides a good basis for monitoring; allocating annual procurement activities according to demand and available resources, facilitating efficient and effective financial management. Issues including bad supplier connections, outdated technology, a lack of internal communication, and trouble managing contracts are just some of the problems that the organization is now facing. To sum up, the researcher came to the conclusion that public institutions' performance is improved by procurement planning after carrying out this study. In addition, since the main purpose of any specification is to provide procurement personnel with clear procurement guidelines and provide suppliers with strict standards of minimum acceptance of products or services, the success of procurement activities depends on the authenticity and accuracy of the specification. Outline the needs of the purchaser. The government agency may save the most money by using procurement planning to group comparable needs under a single contract and to divide complicated needs into many smaller contracts. Furthermore, the goal of Rwanda Development Board (RDB) procurement planning has always been to secure the necessary resources in a timely, cost-effective manner, and of a quality that meets client requirements. By implementing a solid procurement plan, companies can avoid costly mistakes and gain a competitive advantage. Finally, RDB's procurement risk management involves finding supply chain hazards, both internal and external. Effective risk management therefore means eliminating situations that expose public organizations to unnecessary and increased risk.

### 5.2 Recommendations

A number of critical steps may be taken to improve the procurement process of the Rwanda Development Board. Potential problems and appropriate suppliers may be identified by upfront requirement specification, market research, and clear need definition of the project. Additional ways to improve efficiency include employing a multi-source strategy, streamlining approvals, and monitoring expenditures. A thorough risk management strategy guarantees the project's flawless delivery, and strong connections with suppliers are built via effective communication. Following these procedures will result in the RDB's procurement process being more efficient and fruitful.

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