Effects of Procurement Plan on Financial Performance of Public Institutions in Rwanda: A Case of Rwanda Transport Development Agency

Musoni Jacques & Dr. Martin Kimemia Gathiru, PhD

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Musoni Jacques[1] & Dr. Martin Kimemia Gathiru, PhD[2]
[1] Master of Science Degree in Procurement and Supply Chain Management, Mount Kenya University, Kigali, Rwanda
[2] Lecturer, Mount Kenya University, Kigali, Rwanda

Abstract

The purpose of this study was to examine effects of procurement plan to the financial performance of public institutions from 2017 to 2023 using a case of RTDA. The specific objectives were to study the effects of needs assessments to the effective use of budget in RTDA, to analyse the effects of quality specification on the effective use of budget in RTDA, to study the effects of proper cost estimation to the revenues/expenditure's relationship of RTDA, and to study the impacts of terms of payment to the value of invoices pending of RTDA. The study guided by the principal-agent theory, institutional theory, and collective action theory. The study used descriptive and correlational research design, in the context of the present research it was pertinent to employ a descriptive and correlational research designs. The population for this research was 72 Rwanda Transport Development Agency staff members which use public procurement and public funds to fulfill their responsibilities. From 72 Rwanda Transport Development Agency staff members, the researcher conducted a survey to collect data from RTDA staffs amounted to 62. In this study, researcher used cluster sampling. Respondents were selected from the clusters using a basic random sampling method for the study. During this research, the data that used were primary data to collect by use of structured interview guide and secondary data that collected from existing information that has been compiled, audited, approved and published with competent organs. These reports included any written documents and published financial statements that contain information about the issue worked on. The researcher collected data from text books, journals, financial statements and reports or any other relevant publication of the institution under study within a given scope of time. The researcher analysed quantitative data using both descriptive frequencies, mean and standard deviation) and inferential statistics (correlation and regression analysis), qualitative data analysed using content analysis. The results showed $p=0.000<0.05$ and a 0.731 Pearson correlation value. This suggests that there is a strong connection between the effectiveness of RTDA and the assessment of need identification. The findings of the correlation show a probability value of 0.000, which is less than the level of significance (0.05), and a Pearson coefficient of 0.754, which shows that the

performance of RTDA is highly correlated with the assessment of quality specifications. The outcomes showed p=0.000<0.05 and a 0.772 Pearson correlation value. This suggests that there is a strong correlation between the effectiveness of RTDA and proper cost estimation. Correlation results indicate a probability value of 0.000 that is less than significant level (0.05) and a Pearson coefficient of 0.794 indicating that Terms of payment is highly correlated with the performance of RTDA. RTDA should strengthen needs assessment by engaging stakeholders and forecasting future requirements.

1. Introduction

Over the past five years, RTDA did not realize its expected financial performance targets. These were achieved at 29% in 2017, 33% in 2018, 41% in 2019, 36% in 2020, 43% in 2021, and 49% in 2022. The low levels of achievement are attributed to projects in the early stages of construction, some delays in the procurement process, and climatic changes that have resulted in more precipitation than expected, forcing work to be suspended in some cases (African Development Bank [AfDB], 2023). There is an issue of poor performance in public institutions in Rwanda. In search of ways to overcome such challenges, previous scholars such as Zhang (2019), Deniz, Rungcharoenkitkul and Takahashi (2022), Zhao, *et al*., (2022) contended that effective public procurement plan may contribute to improve financial performance of public institutions. Governments are currently endeavoring to devise unambiguous procurement strategies that are founded on regulatory bodies for public procurement, including procurement approvals and resource allocation. Nevertheless, it remains uncertain which plan ultimately enhanced performance.

Therefore, information on how needs assessments in procurement plan, quality specification in procurement plan, proper cost estimation in procurement plan, and terms of payment in procurement plan affect financial performance of Rwanda Transport Development Agency is not enough and this is the knowledgeable gaps that the present study bridged (Alzeban, 2020). In light with the above considerations, the present study seeks to examine the effect of the procurement plan on financial performance of public institutions in Rwanda with reference to Rwanda Transport Development Authority.

1.2 Objectives of the Study
The general objective of this study was to examine the effects of a procurement plan on financial performance of public institutions in Rwanda.
Specific objectives of the Study
 i. To study the effects of needs assessments in procurement plan on financial performance of Rwanda Transport Development Agency.
 ii. To analyse the effect of quality specification in procurement plan on financial performance of Rwanda Transport Development Agency.
 iii. To study the effects of effective cost estimation in procurement plan on financial performance of Rwanda Transport Development Agency.
 iv. To study the effects of terms of payment in procurement plan on financial performance of Rwanda Transport Development Agency.

1.3 Research Hypotheses
Ho$_1$ There is no relationship between effective needs assessment in procurement plan and the financial performance of Rwanda Transport Development Agency
Ho$_2$ There is no relationship between quality specification in procurement plan and the financial performance of Rwanda Transport Development Agency

Ho₃ There is no relationship between effective cost estimation in procurement plan and the financial performance of Rwanda Transport Development Agency

Ho₄ There is no relationship between terms of payment in procurement plan and financial performance of Rwanda Transport Development Agency.

2. Literature review

2.1 Theoretical Review

This reviews the theories where you can get at special input to the topic under the research by comparing two or more theories and make a unique synthesis about them.

Principal-Agent Theory

The principal-agent problem was conceptualized in 1976 by American economists, Michael Jensen and William Meckling. The principal-agent theory of organizations encapsulates the idea that public sector performance can be improved if incentive-based contracts between different actors are implemented. Since its inception in the 1970s, agency theory has had a significant impact on both the theory and practise of public administration and policy. Through the 1980s and 1990s, it was especially important in many high-income industrialised countries, leading to frequently drastic public sector reforms. With numerous public sectors, its legacy has persisted.

In order to reduce the likelihood of conflict, there are certain measures and principles that can be followed by both the principal and agent. This theory was relevant to the present study because this theory has predominantly been used in the literature to study the two most critical and demanding phases of the procurement process. The initial focus of the theory was on the explaining the relationship between the buyer (principle) and the supplier (agent). The agent (supplier) will be well-positioned in such circumstances to not deliver the service or to deliver it in a way that increases its profit, with the principle (buyer) finding it difficult to detect it, according to scholars who argue that in certain purchase categories (providing the professional services), the principle's requirements were complex and difficult to specify in detail in the contract (Sanderson, 2015).

Institutional Theory

In order to study how organizations fit into, are connected to, and are altered by their social, state, national, and international surroundings, John Meyer and Brian Rowan created institutional theory in the late 1970s. Innovative organizational structures that boost technical effectiveness in early adopter organizations are given environmental legitimacy. At this point, even if the structural shape doesn't increase efficiency, both new and existing organizations will embrace it.

Using theoretical contributions about the distinctions between formal and informal institutions, regulative, normative, and cultural-cognitive types of institutions, as well as the different levels of institutions, Institutional Theory provides the framework for the systematic analysis of innovation (Geels, 2010). This theory will be relevant to the present study since it is often used to explain the adoption and spread of formal organizational structures, including written policies, standard practices, and new forms of organization. Institutional theory seeks to explain similarity, which is isomorphism, in organizational practices and forms, and the causes of such similarity.

Collective Action Theory

Mancur Olson introduced the collective action theory in 1965. Olson contends that any group of people aiming to offer a public benefit would struggle to do so effectively. Many branches of the social sciences, including psychology, sociology, anthropology, political science, and economics, have ideas and formulations for this concept. A different hypothesis that has recently been developed to explain why systemic corruption endures in spite of legislation

making it illegal as well as why corruption in some nations defies other anti-corruption initiatives is collective action theory. The collective action theory emphasizes the significance of elements like trust and how people perceive other people's behaviour, going beyond the standard principal-agent relationship.

According to Persson, Rothstein, and Teorell (2013), systemic corruption is an issue that affects everyone because it causes people to justify their own actions based on assumptions about what other people in the same scenario will do (Marquette and Peiffer, 2015). To combat corruption in these circumstances, there is a need for collective and coordinated approaches, such as reform coalitions or proactive alliances of like-minded organizations. This theory will be relevant and pertinent to the present study because it will allow the staff members to work together to bring about change that would not be possible to be done individually. Additionally, it allowed the researcher to predict how these groups will act.

2.2 Conceptual Framework

In this section of conceptual framework stands for the researcher's synthesis of literature by showing how the phenomenon is explained.
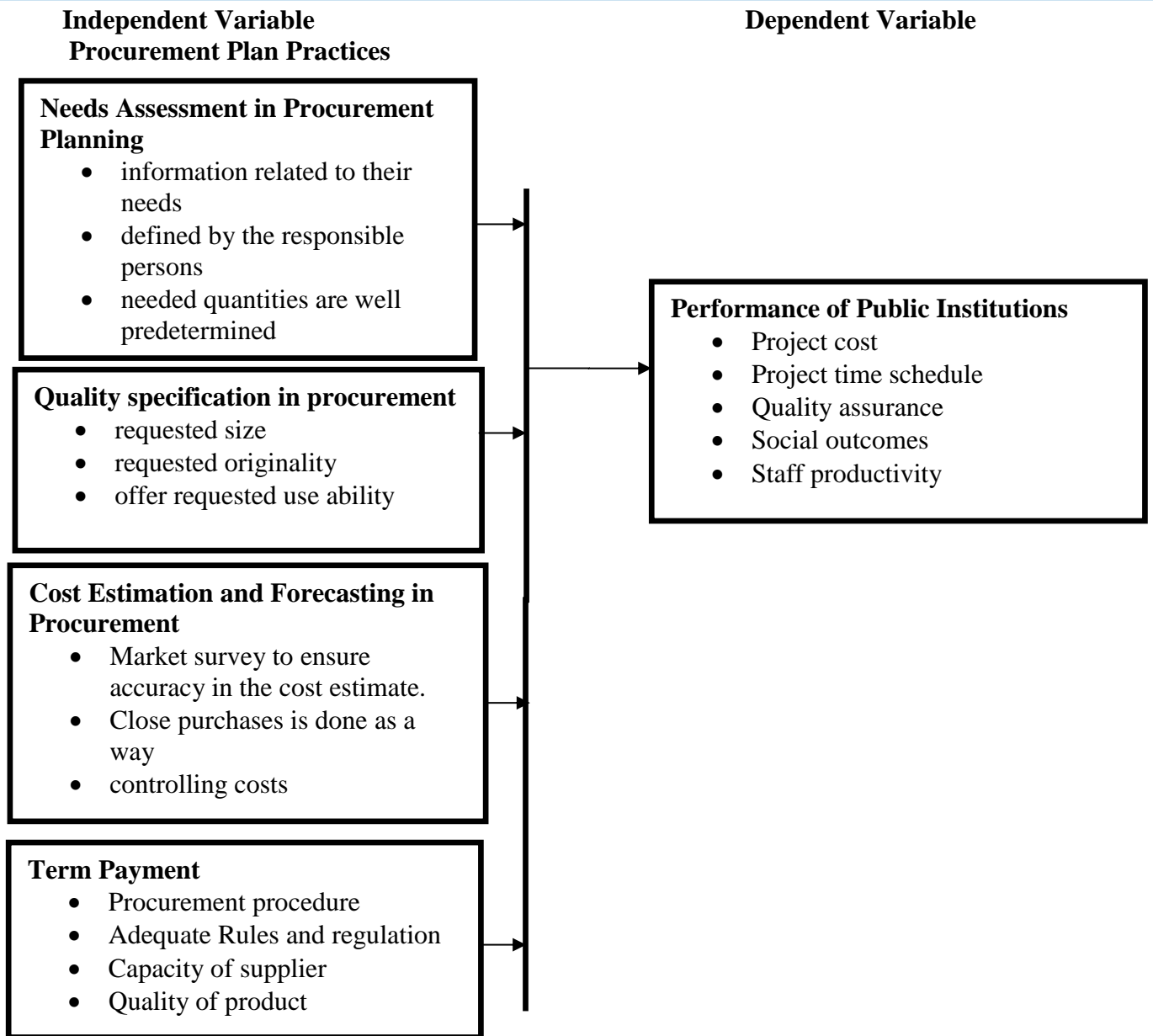
Independent Variable   **Dependent Variable**
Procurement Plan Practices

Needs Assessment in Procurement Planning
- information related to their needs
- defined by the responsible persons
- needed quantities are well predetermined

Quality specification in procurement
- requested size
- requested originality
- offer requested use ability

Cost Estimation and Forecasting in Procurement
- Market survey to ensure accuracy in the cost estimate.
- Close purchases is done as a way
- controlling costs

Term Payment
- Procurement procedure
- Adequate Rules and regulation
- Capacity of supplier
- Quality of product

Performance of Public Institutions
- Project cost
- Project time schedule
- Quality assurance
- Social outcomes
- Staff productivity

Figure 1 Conceptual Framework
Source: Researcher (2023)

A needs assessment is a methodical procedure for identifying needs between the present and desired conditions, and addressing them. To properly define the demand, the difference between the desired condition and the existing condition must be quantified. Quality specifications are detailed requirements that define the quality of a product, service or process. Quality includes tangible elements such as measurements and intangible elements such as smell and taste. The following are illustrative examples of quality specification.

The transcendence approach, the product-based approach, the user-based approach, the manufacturing-based approach, and the value-based approach are the five techniques used to define quality. The process of estimating the costs and other resources required to accomplish a project within a certain scope is known as cost estimation in project management. Cost estimation calculates a total number that establishes a project's budget by taking into consideration all necessary project components.

3. Research methodology

This chapter presents various ways in which the study designed and conducted. In conducting this research study, the researcher used techniques and methods which was necessary and useful to collect data for the success of this research study.

Research Design

This study used quantitative data collection through a close-ended questionnaire with Likert scale. To determine the relationship between the independent and dependent variables under the study, questionnaires were given to a sample of employees who participated in procurement activities within the RTDA.

Target Population

The population for this research was 72 Rwanda Transport Development Agency staff members which use public procurement and public funds to fulfil their responsibilities.

Sample Size and sampling

The selection of a representation merit concerning on withdrawing from the whole population and give empirically justified information. The researcher calculates sample size using formula (Yamane, 1976). The formula comprises 72 persons and only 61were participants.

In this study, researcher used cluster sampling. To do this, Researcher divided the population into groups based on each person's area of expertise. The researcher then make a sample by picking individuals at random from this pool. Respondents were selected from the clusters using a basic random sampling method for the study.

Data Collection Instruments

This section gives explains tools that used to collect information, data collection procedures, and reliability and validity of research instruments. For gathering primary information, an author administered a questionnaire with open and closed questions to the chosen representative group (sample). While secondary data gathered from similar studies, books, journals and other relevant internet sources.

Data Analysis Procedures

The raw data cleared in SPSS and results analyzed using both inferential and descriptive statistics. A descriptive research design used in terms of frequency. Standard deviations mean and frequencies were to analyse statistical data. For inferential statistics to establish the link between variables the multiple linear regression models used.

The regression model adopted to establish the influence between variables. In this study, indicators of dependent variable (Performance) were quality delivery, timely delivery, and cost control while independent variable were assessment of need identification, assessment of quality specification, proper cost estimation in procurement plan and terms of payment in procurement plan for variables in this study, a mean determined using computer software. The correlation coefficient measured effect size r using the following regression equation:

$$Y = b_0 + b_1x1 + b_2x_2 + b_3x_3 + b_4x_4 + e:$$

Where: Y= Performance of RTDA,

b_0= Constant;

X_1= assessment of need identification,

X_2= assessment of quality specification,

X_3= proper cost estimation in procurement plan

X_4= terms of payment in procurement plan.

4. Research findings

This chapter concentrated on research findings and data analysis. The findings, analysis, and discussions on the research objectives were presented using descriptive (percentage, mean, and standard deviation) and inferential (regression and correlation) analysis with the assistance of the Statistical Package for Social Sciences (SPSS).

Table 1: Effects Of Needs Assessments in Procurement Plan On Financial Performance Of Rwanda Transport Development Agency

	SD	D	N	A	SA	Mean	Std. Dev.
RTDA request its beneficiaries provide information related to their needs	1 1.7%	1 1.7%	6 10.3%	27 46.6%	23 39.7%	4.21	0.83
The needed quantities are well predetermined in the Procurement plan of RTDA	2 3.4%	5 8.6%	5 8.6%	26 44.8%	20 34.5%	3.98	1.05
The needed qualities are well defined in the Procurement plan of RTDA	2 3.4%	3 5.2%	5 8.6%	37 63.8%	11 19.0%	3.90	0.89
The RTDA ensures that there is enough competition among suppliers for all items procured	3 5.2%	6 10.3%	10 17.2%	20 34.5%	19 32.8%	3.79	1.17
The items planned for are bought and delivered on schedule time	4 6.9%	6 10.3%	3 5.2%	27 46.6%	18 31.0%	3.84	1.18
Timely preparation of plan enables timely delivery of goods	1 1.7%	3 5.2%	9 15.5%	22 37.9%	23 39.7%	4.09	0.96
Overall						**3.97**	**1.01**

Source: Research findings (2023)

Table 1 offers insights into the effects of needs assessments within the procurement plan on the financial performance of the Rwanda Transport Development Agency (RTDA).

The overall high mean score of 3.97 indicates that respondents held a favorable perception of the impact of needs assessments in the procurement plan on RTDA's financial performance. Although the standard deviation of 1.01 suggests some diversity in responses across the statements, the consistency in agreement signifies a generally positive consensus among participants. This indicates that the majority of respondents shared a similar favorable view on the influence of needs assessments on RTDA's financial performance.

Table 2: Effect of quality specification in procurement plan on financial performance of Rwanda Transport Development Agency

	SD	D	N	A	SA	Mean	Std. Dev.
The needed qualities are well defined in the Procurement plan of RTDA	6 10.3%	6 10.3%	3 5.2%	26 44.8%	17 29.3%	3.72	1.28
RTDA request its beneficiaries to specify the quality during request	8 13.8%	2 3.4%	9 15.5%	27 46.6%	12 20.7%	3.57	1.26
RTDA deliver the quality as per request of beneficiaries	6 10.3%	4 6.9%	4 6.9%	25 43.1%	19 32.8%	3.81	1.26
RTDA offer requested colour of as per request of beneficiaries	0 0.0%	6 10.3%	4 6.9%	33 56.9%	15 25.9%	3.98	0.87
RTDA offer requested size of goods as per request of beneficiaries	3 5.2%	8 13.8%	3 5.2%	24 41.4%	20 34.5%	3.86	1.19
RTDA offer requested originality of as per request of beneficiaries	2 3.4%	5 8.6%	8 13.8%	26 44.8%	17 29.3%	3.88	1.04
Overall						**3.80**	**1.15**

Source: Research findings (2023)

According to the findings presented in Table 2, the study focused on examining the influence of quality specification in the procurement plan on the financial performance of the Rwanda Transport Development Agency (RTDA). The overall high mean score of 3.80 indicate that, on average, respondents held a moderately positive view of the impact of quality specification in the procurement plan on RTDA's financial performance. The standard deviation of 1.15 indicates a moderate level of heterogeneity in responses across the statements. This indicates that while there is a general positive agreement, there are diverse opinions among participants regarding the influence of quality specification on RTDA's financial performance.

Table 3: Impact of Effective Cost Estimation in Procurement Plan on Financial Performance of Rwanda Transport Development Agency

	SD	D	N	A	SA	Mean	Std. Dev.
Market survey is conducted perpetually to ensure accuracy in the cost estimate.	2 3.4%	4 6.9%	2 3.4%	35 60.3%	15 25.9%	3.98	0.95
Close supervision of purchases is done as a way of controlling costs	1 1.7%	2 3.4%	6 10.3%	36 62.1%	13 22.4%	4.00	0.80
The costs are clearly determined by the responsible personnel in the unit /department	2 3.4%	1 1.7%	5 8.6%	34 58.6%	16 27.6%	4.05	0.87
Budget approval is obtained for the required items before purchase is made at all times	0 0.0%	0 0.0%	0 0.0%	31 53.4%	27 46.6%	4.47	0.50
Decisions on when to procure the goods and services are always taken by the procurement committee	2 3.4%	2 3.4%	2 3.4%	31 53.4%	21 36.2%	4.16	0.91
Only personnel (Procurement Officers) with legal powers are allowed to undertake procurement transactions in the organization	2 3.4%	3 5.2%	4 6.9%	14 24.1%	35 60.3%	4.33	1.05
Overall						**4.16**	**0.85**

Source: Research findings (2023)

Table 3 represents findings on the influence of effective cost estimation in the procurement plan on the financial performance of the Rwanda Transport Development Agency. The overall high mean score of 4.16 indicate that, on average, respondents held a positive view of the effect of effective cost estimation in the procurement plan on RTDA's financial performance. The standard deviation of 0.85 indicates a moderate level of heterogeneity in responses across the statements. This indicates a generally favourable agreement with some variation in perceptions among participants.

Table 4: Effect of terms of payment in procurement plan on financial performance of Rwanda Transport Development Agency

	SD	D	N	A	SA	Mean	Std. Dev.
The terms of payment in the procurement plan are clearly stated and easy to understand.	1 1.7%	0 0.0%	0 0.0%	40 69.0%	17 29.3%	4.24	0.63
The terms of payment in RTDA provide adequate flexibility for adjustments based on project progress.	3 5.2%	2 3.4%	3 5.2%	36 62.1%	14 24.1%	3.97	0.95
The payment terms in the procurement plan include provisions to address potential risks and contingencies.	3 5.2%	4 6.9%	3 5.2%	28 48.3%	20 34.5%	4.00	1.08
The terms of payment promote a balanced distribution of financial responsibility between the RTDA and the contractor.	3 5.2%	5 8.6%	1 1.7%	31 53.4%	18 31.0%	3.97	1.08
The terms of payment in the procurement plan ensure fair and timely compensation for completed work.	3 5.2%	1 1.7%	1 1.7%	36 62.1%	17 29.3%	4.09	0.92
The payment terms in the procurement plan are overall satisfactory and meet the needs of both the RTDA and the contractor.	0 0.0%	3 5.2%	2 3.4%	41 70.7%	12 20.7%	4.07	0.67
Overall						**4.06**	**0.89**

Source: Research findings (2023)

The findings presented in Table 4 shows the impact of terms of payment in the procurement plan on the financial performance of the Rwanda Transport Development Agency. The overall high mean score of 4.06 indicates that, on average, respondents viewed the effect of terms of payment in the procurement plan on RTDA's financial performance positively. The standard deviation of 0.89 indicates a moderate level of heterogeneity in responses across the statements. This implies an overall favourable agreement with some variability in perceptions among participants.

Table 5: Financial performance of Rwanda Transport Development Agency

	SD	D	N	A	SA	Mean	Std. Dev.
RTDA effectively manages and executes transportation projects.	0 0.0%	4 6.9%	2 3.4%	37 63.8%	15 25.9%	4.09	0.76
RTDA demonstrates a high level of efficiency in delivering transportation infrastructure projects.	2 3.4%	2 3.4%	1 1.7%	32 55.2%	21 36.2%	4.17	0.90
RTDA consistently meets project deadlines and milestones.	0 0.0%	3 5.2%		30 51.7%	25 43.1%	4.33	0.73
RTDA ensures that transportation projects are completed within the allocated budget.	0 0.0%	3 5.2%	3 5.2%	37 63.8%	15 25.9%	4.10	0.72
RTDA maintains a high standard of quality in transportation infrastructure projects.	1 1.7%	2 3.4%	1 1.7%	32 55.2%	22 37.9%	4.24	0.80
RTDA's overall performance in transportation development contributes to the socio-economic growth of Rwanda.	0 0.0%	0 0.0%	5 8.6%	43 74.1%	10 17.2%	4.09	0.51
Overall						**4.17**	**0.74**

Source: Research findings (2023)

The data presented in Table 5 indicates the financial performance of the Rwanda Transport Development Agency. A significant majority agreed (63.8%) or strongly agreed (25.9%) that RTDA effectively manages and executes transportation projects. The high mean score of 4.09 indicates a high level of agreement, and the standard deviation of 0.76 indicates relatively heterogeneous response. A majority group of respondents agreed (55.2%) or strongly agreed (36.2%) that RTDA demonstrates a high level of efficiency in delivering transportation infrastructure projects. The high mean score of 4.17 indicates strong agreement, and the standard deviation of 0.90 implies some heterogeneity in responses. The participants agreed (51.7%) or strongly agreed (43.1%) that RTDA consistently meets project deadlines and milestones. The very high mean score of 4.33 indicates strong agreement, and the standard deviation of 0.73 indicates relatively heterogeneous response. RTDA ensures transportation projects are completed within the allocated budget.

A significant majority agreed (63.8%) or strongly agreed (25.9%). The high mean score of 4.10 indicates a high level of agreement, and the standard deviation of 0.72 implies relatively heterogeneous response. RTDA maintains a high standard of quality in transportation infrastructure projects. A significant majority agreed (55.2%) or strongly agreed (37.9). The very high mean score of 4.24 indicates very strong agreement, and the standard deviation of 0.80 indicates relatively heterogeneous responses. A lot respondents agreed (74.1%) or strongly agreed (17.2%) that RTDA's overall performance in transportation development contributes to the socio-economic growth of Rwanda. The high mean score of 4.09 indicates strong agreement, and the standard deviation of 0.51 implies heterogeneous response.

The overall high mean score of 4.17 indicates that, on average, respondents show a positive view of the financial performance of the Rwanda Transport Development Agency. The standard deviation of 0.74 indicates a moderate level of heterogeneity in responses across the statements. This implies a generally favourable agreement with some variation in perceptions among participants.

Table 6 Correlations

		Assessment of need identification	Assessment of quality specification	Proper cost estimation	Terms of payment	Performance of RTDA
Assessment of need identification	Pearson Correlation	1	.666**	.712**	.699**	.731**
	Sig. (2-tailed)		.000	.000	.000	.000
	N		58	58	58	58
Assessment of quality specification	Pearson Correlation		1	.962**	.827**	.754**
	Sig. (2-tailed)			.000	.000	.000
	N			58	58	58
Proper cost estimation	Pearson Correlation			1	.803**	.772**
	Sig. (2-tailed)				.000	.000
	N				58	58
Terms of payment	Pearson Correlation				1	.794**
	Sig. (2-tailed)					.000
	N					58
Performance of RTDA	Pearson Correlation					1
	Sig. (2-tailed)					
	N					58

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

Source: Research findings (2023)

Table 6 shows the correlation between the variables under study. The results indicate a significant relationship between Assessment of Need Identification and the Performance of RTDA, with a Pearson correlation coefficient of 0.731 (p=0.000<0.05). Assessment of Quality Specification is highly correlated with the Performance of RTDA, with a Pearson coefficient of 0.754 (p=0.000<0.05). Proper Cost Estimation also shows a significant relationship with the Performance of RTDA, with a Pearson coefficient of 0.772 (p=0.000<0.05). Terms of Payment exhibit a high correlation with the Performance of RTDA, with a Pearson coefficient of 0.794 (p=0.000<0.05).

In accordance with these findings, Müller (2020) conducted an assessment of public institutions' performance in Europe and identified pivotal determinants of their success. Drawing upon Müller's research, it is evident that assessment of need identification, assessment of quality specification, proper cost estimation, and terms of payment within the Rwanda Transport Development Agency (RTDA) play a crucial role in enhancing its financial performance through an optimized procurement plan.

The correlations revealed in this study mirror the principles highlighted by Müller, reinforcing the understanding that meticulous attention to needs assessment, quality specification, cost estimation, and terms of payment can significantly contribute to RTDA's financial performance. By aligning these facets with strategic procurement practices, RTDA can pave the way for improved financial outcomes and operational efficacy, ultimately achieving a higher level of success similar to the institutions evaluated by Müller.

Table 7: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	4.976	4.523		1.100	.276
	Assessment of need identification	.994	.431	.260	2.308	.025
1	Assessment of quality specification	.826	.912	.272	.906	.006
	Proper cost estimation	.991	.868	.329	1.141	.029
	Terms of payment	1.375	.473	.408	2.908	.005
a. Dependent Variable: Performance of RTDA						

Source: Research findings (2023)

The correlation coefficient measured effect size r using the following regression equation:
$Y = b_0 + b_1 x1 + b_2 x_2 + b_3 x_3 + b_4 x_4 + e$:

Where: Y= Performance of RTDA,

bo= Constant;

X_1= assessment of need identification,

X_2= assessment of quality specification,

X_3= proper cost estimation in procurement plan

X_4= terms of payment in procurement plan.

Table 7 on regression equation shows that performance of RTDA, will always depend on a constant factor of 4.976 regardless of the existence of other determinants. The other variables explain that; every unit increase in Assessment of need identification will increase performance RTDA by a factor of 0.994. Every unit increase in Assessment of quality specification will increase performance of RTDA by a factor of 0.826. Every unit increase in Proper cost estimation will increase performance of RTDA by a factor of 0.991. Every unit increase in Terms of payment will increase performance of RTDA by a factor of 1.375. It showed that Assessment of need identification ($p=0.025<0.05$), Assessment of quality specification ($p=0.006<0.05$), Proper cost estimation ($p=0.029<0.05$) and Terms of payment $p=0.005<0.05$) are statistically significant to increase performance of RTDA.

5. Conclusion

The central objective of this study was to scrutinize the impact of procurement plans on the financial performance of public institutions within Rwanda. Through rigorous examination and analysis, the researcher was able to draw insightful conclusions that shed light on the intricate relationship between procurement strategies and financial outcomes. In essence, the researcher's meticulous exploration and subsequent conclusions serve as a cornerstone for the informed decision-making that underpins the operational dynamics of public institutions in Rwanda. These insights are poised to spark actionable interventions that can potentially reshape and elevate the financial performance landscape across the sector.

6. Recommendations

RTDA is advised to prioritize the development of a skilled workforce. This can be accomplished by investing in comprehensive staff training, particularly in the areas of accurate cost estimation and vigilant market observations.

RTDA should consider offering adaptable payment options that align with supplier preferences. This approach not only facilitates timely deliveries but also streamlines overall operational processes. It reinforces a cooperative atmosphere that benefits both parties.

RTDA is encouraged to strategically explore negotiations for early payment discounts. Such a proactive approach not only yields immediate cost savings but also fosters strengthened supplier relationships. These relationships, built on mutual trust and respect, inevitably contribute to bolstering RTDA's financial performance.

Acknowledgement

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