



Effect of Contract Management Practices on Organizational Performance of Rwanda Development Board (2017-2022)

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ABSTRACT

The general objective of this research project was to assess the effect of contract management on organizational performance. The following were specific objectives of the study: to analyze the effect of contract planning on performance of Rwanda Development Board, find out the effect of contract negotiation on performance of Rwanda Development Board, assess the effect of contract implementation on performance of Rwanda Development Board and assess the effect of contract monitoring on performance of Rwanda Development Board. To achieve these objectives, literature was reviewed on the subject matter, and then data was collected from 156 employees of RDB and they were chosen by using census sampling technique. Questionnaire, observation, interview guide and documentation were used as tools of data collection. Data was analyzed by using both quantitative data and qualitative data by presenting the findings of respondents through the mean and standard deviation. Findings indicated that there is positive link between contract management and organizational performance whereas it was found that the effect of all contract management on organizational performance will be 1.462 percent; a unit increase in the use of contract planning would lead to an increase in RDB's performance by 19.2%; a one percent increase in the use of contract implementation would lead to an increase in RDB's performance by 3.8%; a one percent increase in the use of contract monitoring would lead to a 35% increase in RDB's performance. Overall, contract monitoring had the greatest effect on RDB's performance, followed by contract implementation, while contract planning took third place, and lastly, contract negotiation. At a 5% level of significance and a 95% level of confidence, contract planning varies at a 0.010 level of significance; contract negotiation had a 0.048 level of significance; contract implementation had a 0.031 level of significance; and contract monitoring had a 0.029 level of significance. All the variables were significant ($p < 0.05$). The study also concludes that the main objective of contract management is to ensure that the borrower's contractors, suppliers, or consultants meet agreed project specifications and completion dates.

Keywords: Contract Implementation, Contract Management, Contract Monitoring, Contract Negotiation, Organizational Performance

I. INTRODUCTION

The current global business environment is highly competitive and organizations currently face large and highly efficient competitors all over the globe (Adiguzel, 2019). This as a result has made contract management essential for further development and growth of business entities. Contract management entails the whole process of, contract cycle, contract relationship, contract implementation, and contract monitoring and payment calculation. Similarly, procurement performance is achieved when, contract execution and the expected project on outcomes or end results are realized (Khan et al., 2017).

A successive Procurement performance ensures an organization's services delivery is of high quality, timely and efficient. Having efficient procurement performance is possible if organizations have effective contract management systems in place and an effective oversight committee (Odhiambo & Kwasira, 2019). However scandals at the local levels have led to renewed interests in minimizing contractors opportunistic behaviors and ensuring accountability throughout the contracting process (Kim, 2015).

The public procurement directive the suppliers are evaluated in terms of financial criteria, quality and value for the money, the main aim being reducing cases of contract breaching and cases of corruption. An effective contract management process entails, contract cycle, contract relationship, contract implementation and contract monitoring through legal support training and utilization of possibilities in procurement and supply chain systems (Hassan & Omwenga, 2023).

Yegon and Mbeche (2018) studied the determinants of procurement contract management of select state corporations. The study notes contract relationship with contractual terms as the culmination of procurement



performance. Kipkemoi and Gacuri (2018) argue that contract documentation and the entire process of contract management system should be done according to public procurement act guidelines. Furthermore, public procurement officers in charge of contract management have been stage-managing the contracts to suit their desires, large sums of taxpayers' funds has been lost through legal cases, and the remedy is to have a good contract management legal framework.

Thai (2017) posits that procurement contract management negotiations allow both parties to fulfill their obligations to achieve the objectives required by the contract. They involve managing all transactions between clients and contractors, from contract award to work completion and acceptance or contract termination, payment and dispute resolution (Sriboonchitta & Wiboonpoongse, 2018). Contract management also includes building good relationships between customers and suppliers. It continues throughout the life of the contract and involves proactive management to anticipate future needs and respond to situations as they arise (Gordon et al., 2019). Contract management (sometimes called contract execution or contract fulfillment) begins when the contractor is selected and the procurement contract is signed. Contract management includes the organizational aspects of contract management; contract terms, payment and monitoring; dispute resolution; contract modification, termination, breach and record keeping (Jolly, 2022). Additionally, contracts are often complex, may involve many people, take a long or long time, and consume many resources. Therefore, it is important to manage them properly. The general objective of this research project was to assess the effect of contract management on organizational performance.

1.1 Research Objectives

The specific objectives were:

- i. To assess the effect of contract planning on performance of Rwanda Development Board.
- ii. To find out the effect of contract negotiation on performance of Rwanda Development Board.
- iii. To determine the effect of contract implementation on performance of Rwanda Development Board.
- iv. To examine the effect of contract monitoring on performance of Rwanda Development Board.

II. LITERATURE REVIEW

2.1 Theoretical Review

This study was grounded institutional theory, negotiation theory, and the principal agency theory.

2.1.1 Institutional Theory

Institutional theory is an old and popular tool for analyzing various aspects of organizations (Cai & Mehari, 2015). Other scholars argue that organizations and their environments are well articulated through institutional theory (Aksom & Tymchenko, 2020). The theory is popular because it explains the role of different stakeholders in a given setting (Dwivedi & Dwivedi, 2021). The theory has been used to study elements of public procurement due to the participation of different stakeholders (Obanda, 2010; Matto, 2017). The theory has been used in studies of procurement and supply chain performance (Kauppi, 2013; Tumuramy et al. 2018). The authors agree with Scott (2004) who advocated the three pillars of any institution, namely regulation, norms and cultural perception. For them, the regulatory pillar emphasizes the use of laws, rules and sanctions as enforcement tools. In explaining the normative pillars, they refer to the norms and values that should be considered in the implementation of institutional functions (Obanda, 2010).

2.1.2 Negotiation Theory

Negotiation theory points out that negotiation is a specialized and formalized form of agreement, which is mainly used to reach a common agreement on important issues (Druckman, 1986). Negotiation is important when one party needs the other to come to an agreement on how to achieve its goals. The main reason for negotiating is to create a common environment that leads to long-term trust between the two parties. This ensures that those involved are more focused on the terms to be agreed. It is the most effective form of conflict resolution and contract management; therefore, effective skills and experience are required. The theory further holds that negotiation is a process in which two parties with different positions reach a common position under agreed rules. Negotiations go through stages that include setting the agenda, seeking guiding principles, identifying issues, negotiating a favorable concession exchange, and seeking implementation details. Transitions between stages are called turning points. There are many methods that can be used as a basis for negotiation: structural analysis, strategic analysis, process analysis and comprehensive analysis. Individual negotiation methods are described in the following subsections (Shah & Shah, 2023).



2.1.3 The Principal-Agent Theory

Principal-agent theory shows the relationship between a contractor or supplier and a buyer (principal) as an agent. It also shows the relationship between contractors or suppliers as prime contractors and subcontractors. An extensive literature review illustrates how principal-agent theory is applied (Braun and Guston, 2003). It considers three different aspects that pose risks to the relationship between the buyer and the contractor or supplier. In any formal situation, the owner of a project hires a contractor or supplier to perform all the activities to complete the project, whether it is construction or delivery of goods. With regard to principal-agent theory, the relationship between a contractor or supplier and a customer must also contain the interests of both parties (Guston, 1996; Garen, 1994).

2.2 Empirical Review

Gamariel and Faustin (2021) investigated the correlation between Rwandan local government contract planning and procurement and disposal unit performance. Employing a descriptive and relational research design, they distributed questionnaires to 103 respondents in Musanze district. However, five respondents failed to return the questionnaires, necessitating further interviews with management. Utilizing SPSS, they employed the Spearman test to elucidate the nature and extent of the relationship between the variables under scrutiny. The findings revealed intriguing insights. Notably, 88.8% of the respondents strongly concurred that all key materials provided by the customer had been identified. Conversely, 24.5% of the respondents expressed disagreement regarding the timely procurement of planned resources. Furthermore, a substantial 82.7% fully endorsed the existence of a budget for officer training, while 34.7% disagreed with the assertion that procurement officers adhere to established procurement guidelines. The study also uncovered perceptions regarding resource allocation for control and risk management processes. A staggering 96.9% of respondents fully agreed that adequate resources were allocated to these processes. However, a significant 38.8% disagreed with the adequacy of internal control processes.

Kiamba (2016) examined the effectiveness of contract management negotiations in public institutions in Tanzania using the city of Kinondoni as an example. The sample size of the study was 23 respondents. Recruit the sample size using targeted sampling techniques. It turns out that most stakeholders have neither soft nor hard skills in the negotiation process in the research field. The consequences were delivery delays, major variances in contract handling, and a lack of professionalism. Therefore, the study recommends that contractors and clients should effectively evaluate the time to deliver a project or work and come to an agreement on whether the supplier will be able to complete the work within the stipulated deadline. Additionally, the study recommends considering hiring contractors to perform the actual work requested by clients. Finally, procurement professionals should receive at least 72 hours of specialized training per year.

Tallam and Yusuf (2018) focused on the impact of monitoring intensity on the procurement performance of public organizations in El Goyo Marakwet County. The study was based on relational contract theory and principal-agent theory. A descriptive research design was chosen, using a questionnaire as the primary data collection tool. The unit of analysis for this study is the employees of the finance and procurement departments of the district government. The study found that the organization was able to increase oversight to improve procurement performance. The results show that monitoring intensity is a factor affecting organizational procurement performance.

III. METHODOLOGY

The study utilized both descriptive and correlational research designs to investigate the relationship between contract management practices and organizational performance within the Rwanda Development Board (RDB). The study population consisted of 156 employees from various departments within the RDB, and the universal sampling technique was employed due to the manageable size of the target population. Data collection instruments included self-administered questionnaires, document analysis, and interviews, both primary and secondary. Prior to data collection, a pilot study was conducted to validate the questionnaire, ensuring its reliability and validity. Data processing and analysis involved standard error checking, editing, coding, and tabulation, followed by descriptive statistics such as means and standard deviations. Inferential statistics, including correlation and regression analysis, were then employed to examine the relationship between contract management practices and organizational performance. Ethical considerations were paramount, with confidentiality and anonymity of respondents guaranteed throughout the study.



IV. FINDINGS & DISCUSSIONS

4.1 Age of Respondents

Table 1 reveals that the majority of respondents, comprising 66 individuals (42.3%), fell within the age group of 31–40 years. Following closely, 46 respondents (29.5%) were in the age group of 41–50 years. Furthermore, 23 respondents (14.7%) belonged to the age group of 21–30 years, and finally, 21 respondents (13.5%) were aged 51 years and above. This distribution implies that individuals from all age categories participated in this study.

Table 1

Age of Respondents

Age	Frequency	Percent
21-30 years	23	14.7
31-40 years	66	42.3
41-50 years	46	29.5
51 years and above	21	13.5
Total	156	100.0

4.2 Gender of Respondents

Table 2 indicates that the majority of respondents, totaling 81 individuals (51.9%), were male, while the remaining 75 respondents (48.1%) were female. Thus, it can be concluded that both male and female employees currently working at the Rwanda Development Board participated in this study. However, there was a slight gender imbalance among the respondents, with the female category slightly outnumbering the male category.

Table 2

Gender of Respondents

Gender	Frequency	Percent
Male	75	48.1
Female	81	51.9
Total	156	100.0

4.3 Level of education

Table 3 indicates that the majority of 81 respondents, representing 51.9%, hold a bachelor's degree, followed by 59 respondents, representing 37.8%, who hold a master's degree, and finally 16 respondents, representing 10.3%, who hold a secondary level certificate. Therefore, the many employees of working at Rwanda Development Board have well accomplished their studies.

Table 3

Level of Education

Education Level	Frequency	Percent
Master's degree	59	37.8
Bachelor's degree	81	51.9
Secondary level	16	10.3
Total	156	100.0

4.4 Years of Experience

Table 4 reveals that 49 respondents, constituting 31.4%, fall into the category of 1 to 5 years of service, while the second largest group comprises 66 respondents, accounting for 42.3%, with service years ranging from 5 to 10 years. Additionally, 41 respondents, making up 26.3%, have been employed for 10 years or more. Therefore, it can be inferred that the human development policies implemented by the Rwanda Development Board have led to higher levels of engagement among employees. This enhanced engagement contributes to a positive organizational culture, thereby increasing productivity and ultimately enhancing the efficiency and effectiveness of the organization.

**Table 4***Years of Experience*

Years of experience	Frequency	Percent
1 to 5 years	49	31.4
5 to 10 years	66	42.3
10 years and above	41	26.3
Total	156	100.0

4.4.1 Effect of Contract Planning on Performance of Rwanda Development Board

The objective assessed the effect of contract planning on performance of Rwanda Development Board. The results are presented in Table 5.

Table 5*Perceptions of Respondents on "Effect of Contract Planning on Performance of Rwanda Development Board"*

	Mean	Std. Dev.
The contract planning process in RDB is thorough and comprehensive.	4.38	.500
The objectives and deliverables of contracts in RDB are clearly defined.	4.88	.342
The scope of work in contracts at RDB is well-defined and aligned with organizational goals.	4.69	.479
The terms and conditions of contracts in RDB are fair and balanced.	3.06	.574
The risk assessment conducted during contract planning in RDB is effective.	5.00	.000
Stakeholders in RDB are adequately involved and aligned during the contract planning phase.	4.81	.403

N-156

Table 5 presents the perceptions of respondents regarding the effect of contract planning on the performance of the Rwanda Development Board (RDB). Respondents generally agreed that the objectives and deliverables of contracts are clearly defined, with this item receiving the highest mean score of 4.88 (SD=0.342). Similarly, respondents perceived the scope of work in contracts at RDB to be well-defined and aligned with organizational goals, as evidenced by a mean score of 4.69 (SD=0.479). Additionally, stakeholders were perceived to be adequately involved and aligned during the contract planning phase, with a mean score of 4.81 (SD=0.403). However, the findings also reveal areas for improvement. The item related to the fairness and balance of contract terms and conditions received a lower mean score of 3.06 (SD=0.574), indicating some dissatisfaction among respondents in this aspect. Fair and balanced contract terms are essential for fostering trust and collaboration between parties, highlighting a potential area of concern that warrants attention. On the other hand, the risk assessment conducted during contract planning received the highest mean score of 5.00, indicating unanimous agreement among respondents. The findings show potential areas for improvement in contract planning processes at RDB. These findings align with the findings by Umulisa et al. (2015) who found that efficient contract planning is essential for procurement and disposal processes.

4.4.2 Effect of Contract Negotiation on Performance of Rwanda Development Board

The objective examined the effect contract negotiation on performance of Rwanda Development Board. The results are shown in Table 6.

Table 6*Perceptions of Respondents on "Effect of Contract Negotiation on Performance of Rwanda Development Board"*

Statements	Mean	Std. Dev.
Contract negotiations in RDB lead to mutually beneficial agreements.	4.88	.342
The negotiation process effectively addresses concerns and conflicts between parties in RDB.	4.75	.447
The terms and conditions agreed upon during contract negotiations in RDB are fair and reasonable.	4.12	.342
The negotiation team in RDB is competent and skilled in achieving favorable outcomes.	5.00	.000
The negotiation process in RDB ensures that the contracts align with organizational policies and regulations.	3.41	.592
Communication and documentation during contract negotiations in Rwanda Development Board are clear and well-documented.	4.00	.000

N=156

Table 6 indicates that the respondents generally agreed that contract negotiations lead to mutually beneficial



agreements, with this item receiving the highest mean score of 4.88 (SD=0.342). Similarly, respondents perceived the negotiation team at RDB to be competent and skilled in achieving favorable outcomes, as evidenced by a mean score of 5.00 (SD=0.000). Additionally, respondents indicated that the negotiation process effectively addresses concerns and conflicts between parties, with a mean score of 4.75 (SD=0.447). However, there were areas for improvement identified by respondents. The item related to the alignment of contracts with organizational policies and regulations received a lower mean score of 3.41 (SD=0.592), indicating some dissatisfaction in this aspect. Furthermore, while communication and documentation during contract negotiations were perceived to be clear and well-documented (mean=4.00, SD=0.000), there may still be room for enhancement to ensure transparency and accountability in the negotiation process. The findings show that while respondents generally perceive contract negotiation practices at RDB positively, there are areas for improvement, particularly regarding alignment with organizational policies and regulations. These findings are in agreement with the findings by Druckman (1986) who found that the success of the negotiation process is aiming to create a win-win situation for both parties. Negotiation is important when one party needs the other to come to an agreement on how to achieve its goals. The main reason for negotiating is to create a common environment that leads to long-term trust between the two parties. This ensures that those involved are more focused on the terms to be agreed.

4.4.3 Effect of Contract Implementation On Performance of Rwanda Development Board

The objective explored the effect of contract implementation on performance of Rwanda Development Board. Results are shown Table 7.

Table 7

Perceptions of Respondents On "Effect Of Contract Implementation On Performance of Rwanda Development Board"

Statements	Mean	Std. Dev.
Contracts in RDB are implemented according to the agreed-upon terms and conditions.	4.24	.432
The implementation of contracts in RDB is efficient and timely.	4.50	.466
The resources allocated for contract implementation in RDB are adequate.	4.81	.403
The communication and coordination between parties during contract implementation in RDB are effective.	5.00	.000
The performance of contractors during contract implementation in RDB is satisfactory.	2.69	.704
Issues or disputes arising during contract implementation in RDB are promptly addressed and resolved	3.44	.727

N=156

Table 7 show that the majority of respondents agreed that contracts in RDB are implemented according to the agreed-upon terms and conditions, as indicated by a mean score of 4.24 (SD=0.432). Furthermore, respondents indicated that the implementation of contracts in RDB is efficient and timely, with a mean score of 4.50 (SD=0.466). Moreover, respondents perceived the resources allocated for contract implementation in RDB to be adequate, as evidenced by a mean score of 4.81 (SD=0.403). The communication and coordination between parties during contract implementation were perceived to be effective, with the item receiving the highest mean score of 5.00 (SD=0.000). However, there are areas for improvement identified by respondents. The performance of contractors during contract implementation was perceived to be less satisfactory, as indicated by a lower mean score of 2.69 (SD=0.704). Similarly, issues or disputes arising during contract implementation were perceived to be less promptly addressed and resolved, as indicated by a lower mean score of 3.44 (SD=0.727). The findings show the role of the contract management team in the RDB is to facilitate healthy communication and effectively oversee the contract lifecycle management process. In addition, the public agency's contract management team analyzes contract processes for workflow improvement, advanced risk management, and more. As noted by Marwanga (2015) in literature; organizational culture has a significant impact on performance agreement implementation through aspects such as performance contracts committee composition, employee awareness, and engagement. Top management commitment, especially compliance with performance contracts (PC) procedures, has a significant impact on the implementation of performance agreements. The regression equation shows that employee turnover and top management commitment have a significant impact on the implementation of departmental performance contracts. According to Scott (2004) in institutional theory; who advocated the three pillars of any institution, namely regulation, norms and cultural perception. For them, the regulatory pillar emphasizes the use of laws, rules and sanctions as enforcement tools. In explaining the normative pillars, they refer to the norms and values that should be considered in the implementation of institutional functions (Obanda, 2010).



4.4.4 Effect of Contract Monitoring on Performance of Rwanda Development Board

The objective examined effect of contract monitoring on performance of Rwanda Development Board. The results are shown in Table 8.

Table 8

Perceptions of Respondents on "Effect of Contract Monitoring on Performance of Rwanda Development Board"

Statements	Mean	Std. Dev.
The contract monitoring process in RDB is systematic and structured.	3.86	.512
The performance of contractors is regularly monitored and evaluated in RDB.	4.94	.250
The communication and reporting related to contract monitoring in RDB are timely and accurate.	4.25	.447
Issues or deviations from the contract terms identified during monitoring in RDB are appropriately addressed.	4.81	.403
The monitoring process in RDB ensures compliance with contractual obligations and regulations.	5.00	.000
The feedback received from stakeholders during contract monitoring in RDB is utilized to improve contract performance.	4.56	.512

N=156

Table 8 indicates that the majority of respondents agreed that the performance of contractors is regularly monitored and evaluated, as indicated by a high mean score of 4.94 (SD=0.250). Furthermore, respondents perceived the communication and reporting related to contract monitoring in RDB to be timely and accurate, with a mean score of 4.25 (SD=0.447). Additionally, respondents indicated that issues or deviations from the contract terms identified during monitoring in RDB are appropriately addressed, as evidenced by a high mean score of 4.81 (SD=0.403). Moreover, the monitoring process in RDB was perceived to ensure compliance with contractual obligations and regulations, with the item receiving the highest mean score of 5.00 (SD=0.000). However, respondents indicated some areas for improvement in contract monitoring practices at RDB. The contract monitoring process was perceived to be less systematic and structured, as indicated by a lower mean score of 3.86 (SD=0.512). The findings show that effective contract management at RDB includes on-site visits to ensure suppliers execute projects according to the terms of the contract (Braun & Guston, 2003).

4.4.5 Performance of Rwanda Development Board

The study sought to assess the performance of RDB (the dependent variable). The results are shown in Table 9.

Table 9

Perceptions of Respondents on "Performance of Rwanda Development Board"

Statements	Mean	Std. Dev.
The overall performance of RDB meets or exceeds expectations.	5.00	.000
RDB consistently delivers high-quality services and achieves desired outcomes.	4.33	.492
Stakeholders perceive RDB as being effective in fulfilling its responsibilities.	4.66	.480
RDB demonstrates a strong commitment to accountability and transparency.	5.00	.000
RDB effectively manages resources and budgets to optimize performance.	2.82	.638

N=156

Table 9 indicates that the majority of respondents agreed that the overall performance of RDB meets or exceeds expectations, as indicated by a high mean score of 5.00 (SD=0.000). Furthermore, respondents perceived RDB as consistently delivering high-quality services and achieving desired outcomes, with a mean score of 4.33 (SD=0.492). Stakeholders also perceive RDB as being effective in fulfilling its responsibilities, as evidenced by a high mean score of 4.66 (SD=0.480). Moreover, respondents indicated that RDB demonstrates a strong commitment to accountability and transparency, with a mean score of 5.00 (SD=0.000). However, respondents identified areas for improvement in RDB's performance. Specifically, RDB was perceived to be less effective in managing resources and budgets to optimize performance, as indicated by a lower mean score of 2.82 (SD=0.638). The findings show that RDB performance good. These findings align with the findings by Tallam and Yusuf (2018) who found that there was a total increase of 1,105,460 for international tourists.

4.5 Inferential Statistics

The researcher conducted a regression analysis to help explain this relationship. The study adopted the following linear regression model to depict the expected relationship between the variables:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon.$$



Where: Y = organizational performance, which was measured using the responses on the effect of contract management variables; a = the β_0 intercept, which is the value of Y when X is zero; X_1 , X_2 , X_3 , and X_4 are regression coefficients of the following variables, respectively: x_1 = contract planning; x_2 = contract negotiation; x_3 = contract implementation; and finally, X_4 = contract monitoring.

All five independent variables were also measured using the responses to each of the variables obtained from the respondents. The results are illustrated and explained next.

Table 9

Tests of Normality^b

	Contract management practices	Kolmogorov-Smirnova			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
RDB's performance	2	0.385	154	0.000	0.75	154	0.000

a. Lilliefors Significance Correction

b. RDB's performance is constant when Contract management practices = 1. It omitted.

Table 10

Correlation

		Organizational performance
Contract management practices	Pearson Correlation	.903
	Sig. (2-tailed)	.000
	N	156

According to Pearson's theory on coefficient of correlation, table 4.10 indicates that contract management and an organizational performance equal to .903, thus named that there is a fairly strong positive relationship between these two variables.

Table 11

Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.787 ^a	.619	.481	.246

a. Predictors: (Constant), Contract monitoring, Contract planning, Contract implementation, Contract negotiation

From the table 11 above, R is the correlation coefficient which shows the relationship between the study variables, from the findings shown in the table below there was a positive relationship between the study variables as shown by 0.619 at the 1% significance level. Furthermore, the Adjusted R squared is the coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variables, from the findings in the table above the value of adjusted R squared was 0.481 which is an indication that there was variation of 61.9% on RDB's performance due to changes in contract planning, contract negotiation, contract implementation finally contract monitoring at 95% confidence interval. This is an indication that 61.9% of the changes in performance could be account for by the independent variables.

Table 12

Analysis of Variance

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.083	4	.271	4.469	.022 ^a
	Residual	.667	151	.061		
	Total	1.750	155			

Predictors: (Constant), Contract monitoring, Contract planning, Contract implementation, Contract negotiation

Dependent Variable: Performance of Rwanda Development Board

For a 5% level of significance, the numerator $df = 4$ and the denominator $df = 151$; therefore, table 12 shows that there is a significant variation at critical value equal to .022 as a link between contract management and RDB's performance.

**Table 13***Regression Coefficients*

Model		Coefficients				
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
I	(Constant)	1.462	.394		3.708	.003
	Contract planning	.192	.283	-.270	-.679	.010
	Contract negotiation	.038	.349	.045	.110	.048
	Contract implementation	.115	.292	-.115	-.395	.031
	Contract monitoring	.350	.331	.350	1.057	.029

a. Dependent Variable: Organizational performance

From the regression equation below, it was found that the effect of all contract management on organizational performance will be 1.462 percent; a unit increase in the use of contract planning would lead to an increase in RDB's performance by 19.2%; a one percent increase in the use of contract implementation would lead to an increase in RDB's performance by 3.8%; a one percent increase in the use of contract monitoring would lead to an increase in RDB's performance by 11.5%; and lastly, a one percent increase in the use of contract monitoring would lead to a 35% increase in RDB's performance. Overall, contract monitoring had the greatest effect on RDB's performance, followed by contract implementation, while contract planning took third place, and lastly, contract negotiation. At a 5% level of significance and a 95% level of confidence, contract planning varies at a 0.010 level of significance; contract negotiation had a 0.048 level of significance; contract implementation had a 0.031 level of significance; and contract monitoring had a 0.029 level of significance. All the variables were significant ($p < 0.05$).

Substituting the estimated results in the empirical model specified in chapter three gives:

$$Y = 1.462 + 0.192X_1 + 0.038X_2 + 0.115X_3 + 0.350X_4 + 0.394$$

The above equation is our final estimated equation, which shows how much each independent variable may impact or influence the dependent variable, as already explained in the interpretation and analysis above.

4.6 Test of Hypotheses

The study assessed the effect of contract management on organizational performance were used. Findings are in the table below:

Table 14*Independent Samples Test*

Levene's Test for Equality of Variances						t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Contract planning	Equal variances assumed	4.247	.038	-1.188	154	.255	-.256	.216	-.719	.207
	Equal variances not assumed			-.750	2.218	.525	-.256	.342	-1.598	1.085
Contract negotiation	Equal variances assumed	1.306	.022	-1.950	154	.071	-.513	.263	-1.077	.051
	Equal variances not assumed			-1.468	2.406	.259	-.513	.349	-1.797	.771
Contract implementation	Equal variances assumed	4.247	.058	-1.188	154	.255	-.256	.216	-.719	.207
	Equal variances not assumed			-.750	2.218	.525	-.256	.342	-1.598	1.085
Contract monitoring	Equal variances assumed	1.595	.019	-1.110	154	.287	-.346	.312	-1.020	.328
	Equal variances not assumed			-.678	1.088	.613	-.346	.511	-5.712	5.020



H_{01} : There is no significant effect of contract planning on performance of Rwanda Development Board; the results revealed that P-Value = .038 for this F-Test are less than our alpha value or 0.05, which is the case of our variance; are assumed to be equal if this value is bigger than 0.05, therefore assume them to be equal. So we can reject the null hypothesis.

H_{02} : There is no significant effect of contract negotiation on performance of Rwanda Development Board; as a result, F-Test is 1.306 and P-Value = .022; we can reject hypothesis.

H_{03} : There is no significant effect of contract negotiation on performance of Rwanda Development Board, therefore F-Test is 4.247 and P-Value = .058 therefore it means that all contract implementation variables jointly have not effectively positive and significant effect on RDB's performance in all level of significance. So we cannot reject the null hypothesis.

H_{04} : There is no significant effect of contract monitoring on performance of Rwanda Development Board, therefore F-Test is 3.019 and P-Value = .019; we reject null hypothesis and this means that all contract implementation variables are significant effects on RDB's performance in all level of significance.

V. CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusions

From the findings, the study concludes that the main objective of contract management is to ensure that the borrower's contractors, suppliers, or consultants meet agreed project specifications and completion dates. The purpose is also to manage the necessary changes, deal with claims or disputes, and get the contracts right through contract changes. Additionally, contract management also is an important part of any business as it helps reduce risk and ensures that all parties involved in the contract fulfill their obligations. With the right processes and systems in place, contracts can become more efficient and effective for everyone involved. Therefore, the researcher found that there is positive link between contract management and organizational performance whereas it was found that the effect of all contract management on organizational performance will be 1.462 percent; a unit increase in the use of contract planning would lead to an increase in RDB's performance by 19.2%; a one percent increase in the use of contract implementation would lead to an increase in RDB's performance by 3.8%; a one percent increase in the use of contract monitoring would lead to an increase in RDB's performance by 11.5%; and lastly, a one percent increase in the use of contract monitoring would lead to a 35% increase in RDB's performance. Overall, contract monitoring had the greatest effect on RDB's performance, followed by contract implementation, while contract planning took third place, and lastly, contract negotiation. At a 5% level of significance and a 95% level of confidence, contract planning varies at a 0.010 level of significance; contract negotiation had a 0.048 level of significance; contract implementation had a 0.031 level of significance; and contract monitoring had a 0.029 level of significance. All the variables were significant ($p < 0.05$).

5.2 Recommendations

The Rwanda Development Board is advised to prioritize the meticulous handling of contract negotiation procedures, adhering to best practices such as appointing skilled negotiators, setting clear agendas, and ensuring comprehensive discussions. Additionally, it is crucial for the organization to maintain rigorous contract management protocols, which encompass thorough reviews, precise terms and conditions, adherence to regulations, and effective dispute resolution mechanisms.

By adopting a structured approach to contract management, the Rwanda Development Board can consistently identify opportunities for cost savings, negotiate favorable terms, and cultivate strong supplier relationships. Such practices not only enhance operational efficiency but also contribute to the organization's overall performance and serve as a cornerstone of transparency and accountability in the public sector.

Furthermore, effective resource and budget management are essential for optimizing performance and facilitating the monitoring of policy implementation. Through strategic allocation and monitoring of resources, RDBs can ensure the efficient utilization of funds while upholding their commitment to fulfilling policy objectives.

REFERENCES

- Adıgüzel, Z. (2019). Competitiveness of international business: Management, economics, technology, environment, and social study of cultural perspective. In *Handbook of Research on Decision-Making Techniques in Financial Marketing* (pp. 412-428). IGI Global. <https://doi.org/10.4018/978-1-7998-2559-3.ch004>
- Aksom, H., & Tymchenko, I. (2020). How institutional theories explain and fail to explain organizations. *Journal of*



Organizational Change Management, 33(7), 1223-1252.

- Ali, S., Uppal, M. A., & Gulliver, S. R. (2018). A conceptual framework highlighting e-learning implementation barriers. *Information Technology & People*, 31(1), 156-180.
- Braun, D., & Guston, D. H. (2003). Principal-agent theory and research policy: an introduction. *Science and public policy*, 30(5), 302-308.
- Cai, Y., & Mehari, Y. (2015). The use of institutional theory in higher education research. In *Theory and method in higher education research* (pp. 1-25). Emerald Group Publishing Limited.
- Druckman, D. (1986). Stages, turning points, and crises: Negotiating military base rights, Spain and the United States. *Journal of Conflict Resolution*, 30(2), 327-360.
- Dwivedi, R., & Dwivedi, P. (2021). Role of Stakeholders in Project Success: Theoretical Background and Approach. *International Journal of Finance, Insurance and Risk Management*, 1, 38-49. <https://doi.org/10.35808/ijfirm/248>.
- Gamariel, M., & Faustin, B. (2021). Effect of Contract Management on Purchasing Performance in Procuring Entities: A Case of Rwanda Energy Group (Reg), Kigali. *Social Science Learning Education Journal*, 6(11), 751-757.
- Garen, J. E. (1994). Executive compensation and principal-agent theory. *Journal of political economy*, 102(6), 1175-1199.
- Gordon, M. D., Morris, J. C., & Steinfeld, J. (2019). Deepwater or troubled water? Principal– Agent theory and performance-based contracting in the coast guard’s deepwater modernization program. *International Journal of Public Administration*, 42(4), 298-309.
- Hassan, A., & Omwenga, J. Q. (2023). Contract Management and Procurement Performance of State Corporation in Kenya. *International Journal of Social Science and Humanities Research (IJSSHR)*, 1(1), 47-73. <https://doi.org/10.61108/ijsshr.v1i1.9>.
- Jolly, K. (2022). Effect of Contract Management Practices on Procurement Performance a Case of Nyarugenge District. *International Journal of Scientific Research and Management (IJSRM)*, 10(12), 4293-4302.
- Kauppi, K. (2013). Extending the use of institutional theory in operations and supply chain management research: Review and research suggestions. *International Journal of Operations & Production Management*, 33(10), 1318-1345.
- Khan, A. W., Khan, S. U., & Khan, F. (2017). A Case Study Protocol for Outsourcing Contract Management Model (OCMM). *J. Softw.*, 12(5), 348-354.
- Kiamba, C. (2016). An innovative model of funding higher education in Kenya: The universities fund. *Towards innovative models for funding higher education in Africa*, 25-38.
- Kim, S. (2015). Toward financially effective contract management: comparing perceptions of contract managers in the public and private sectors (Doctoral dissertation, Rutgers University-Graduate School-Newark).
- Kipkemoi, E., & Gacuiru, J. (2018). The Influence of Budgetary Allocations on Effective Procurement Contract Administration in Public Secondary Schools in Mogotio Sub County, Kenya. *International Journal of Business Management and Processes*, 2(3), 9-9.
- Marwanga, J. M. (2015). Challenges of the Implementation of Performance Contracting Strategy at The National Aids Control Council, Kenya (Doctoral dissertation, University of Nairobi).
- Matto, M. C., Ame, A. M., & Nsimbila, P. M. (2021). Tender process and value for money in Tanzania public procurement. *International Journal of Logistics Economics and Globalisation*, 9(1), 1-23.
- Obanda, W. P. (2010). Fighting corruption in tactical procurement (Doctoral dissertation, PHD dissertation).
- Odhiambo, B. N., & Kwasira, J. (2019). Determinants of successful procurement contract awards in the county government of Migori, Kenya. *International Journal of Social Sciences and Information Technology*, 4(11), 13-32.
- Sriboonchitta, S., & Wiboonpoongse, A. (2008). *Overview of Contract Farming in Thailand: Lessons learned*. ADBI Discussion Paper 112. Tokyo: Asian Development Bank Institute. <https://www.adb.org/sites/default/files/publication/156751/adbi-dp112.pdf>
- Tallam, L. K., & Kibet, Y., (2018). Monitoring Intensity and Procurement Performance. Empirical Evidence from Elgeyo Marakwet County, Kenya. *International Journal of Scientific and Technological Research (IJSTER)*, 1(1) 97-108.
- Thai, K. V. (2017). International public procurement: Concepts and practices. In *International handbook of public procurement* (pp. 1-24). Routledge.
- Tumuramy, B., Ntayi, J. M., & Muhwezi, M. (2018). Whistle-blowing intentions and behaviour in Ugandan public procurement. *Journal of Public Procurement*, 18(2), 111-130.
- Umulisa, A., Mbabazize, M., & Shukla, J. (2015). Effects of project resource planning practices on project



performance of Agaseke project in Kigali, Rwanda. *International Journal of Business and Management Review*, 3(5), 29-51.

Yegon, B., & Mbeche, W. (2018). Determinants of Procurement Contract Management of selected State Corporations in Nakuru County, Kenya. *International Journal of Economics, Commerce and Management United Kingdom*, 6(5), 628-644.