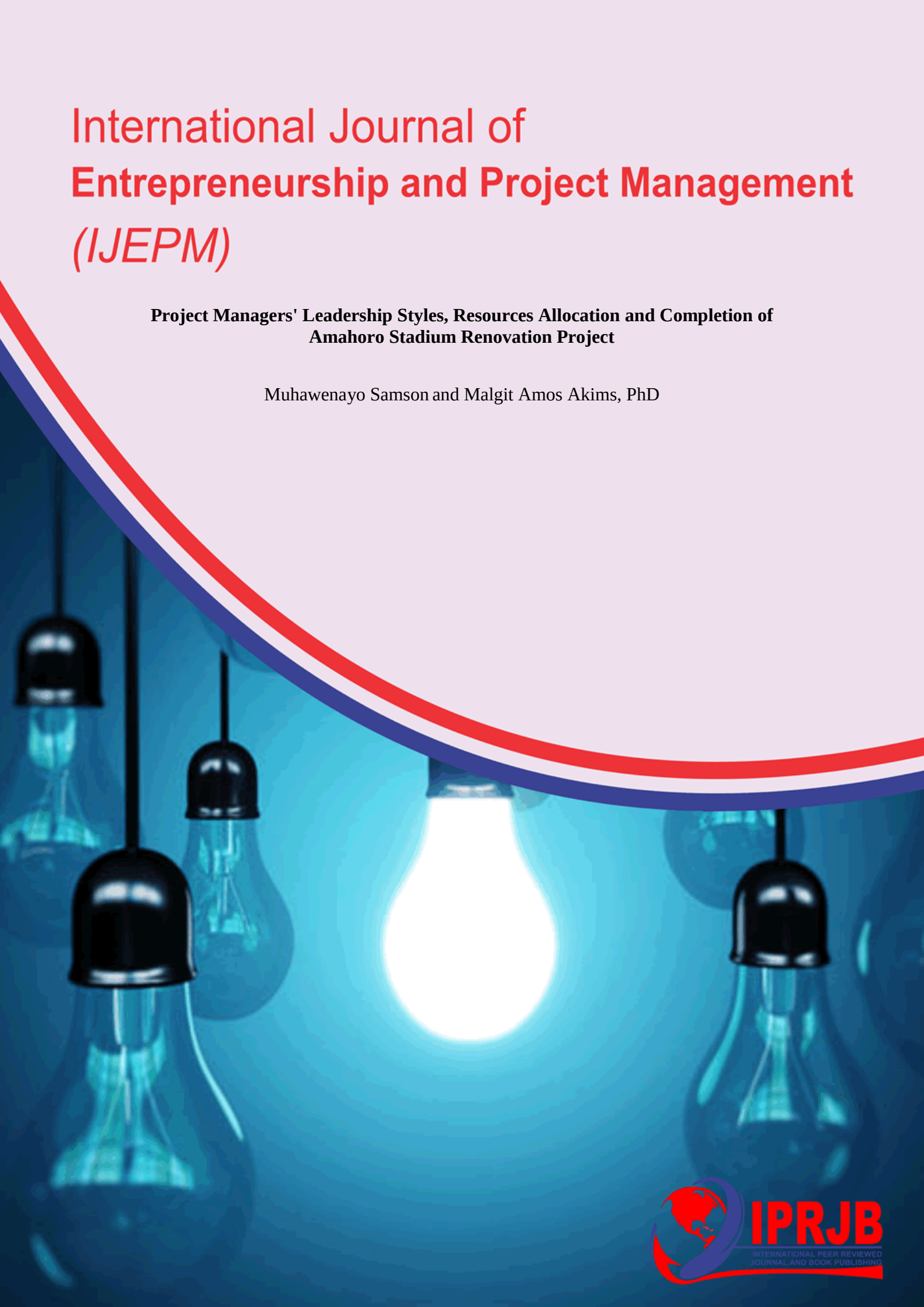
International Journal of
Entrepreneurship and Project Management
(IJEPM)

Project Managers' Leadership Styles, Resources Allocation and Completion of Amahoro Stadium Renovation Project

Muhawenayo Samson and Malgit Amos Akims, PhD



IPRJB
INTERNATIONAL PEER REVIEWED JOURNAL AND BOOK PUBLISHING

International Journal of Entrepreneurship and Project Management
ISSN 2518-2838(Online)
Vol.10, Issue 3, No.1. pp 1 - 15, 2025
www.iprjb.org

Project Managers' Leadership Styles, Resources Allocation and Completion of Amahoro Stadium Renovation Project

Muhawenayo Samson[1*]
School of Business and Economics, Mount Kenya University
Malgit Amos Akims, PhD[2]

Article History

Received 10th September 2025

Received in Revised Form 13th October 2025

Accepted 19th November 2025

How to cite in APA format:

Muhawenayo, S., & Akims, M. (2025). Project Managers' Leadership Styles, Resources Allocation and Completion of Amahoro Stadium Renovation Project. *International Journal of Entrepreneurship and Project Management*, *10*(3), 1–15. https://doi.org/10.47604/ijepm.3569

Abstract

Purpose: Effective transformational leadership is recognized as a critical factor for successful project implementation, particularly in large-scale construction projects. This study examined the impact of transformational project management style on the performance of the Amahoro stadium renovation project, focusing on how transformational leadership influences project outcomes in terms of timely, cost-effective and high quality results.

Methodology: A quantitative research design was adopted, targeting 30 participants including project managers, engineers, supervisors, and key stakeholders directly involved in project execution. Data were collected using structured questionnaires assessing transformational leadership practices and project performance indicators. Descriptive statistics, Pearson correlation, and regression analyses were conducted using SPSS to examine relationships and predictive effects of transformational leadership on project performance.

Results: The findings revealed that transformational leadership significantly enhanced project completion. Respondents agreed that project managers demonstrated transformational leadership that promoted motivation, innovation, and team empowerment (M = 4.26--4.76, SD = 0.43--0.79). Correlation analysis indicated a strong positive relationship between transformational leadership and project performance ($r = 0.685$, $p < 0.001$). Regression results confirmed that transformational leadership had significant influence ($\beta = 0.521$, $p < 0.001$), explaining substantial variance in performance outcomes. The study also revealed that transformational leadership's influence was amplified through its effect on resource allocation effectiveness ($r = 0.843$, $p < 0.001$), demonstrating that transformational leaders optimize financial, human, and material resources to achieve project goals.

Unique Contribution to Theory, Practice and Policy: The study concluded that transformational leadership style has a significant impact on the success of the Amahoro Stadium renovation project. Transformational leadership practices including inspirational motivation, intellectual stimulation, individualized consideration, and idealized influence are essential to achieve efficiency, quality and sustainability in large-scale building projects. Strengthening transformational leadership capacity among project managers is critical for improving construction project outcomes in Rwanda.

Keywords: *Project Management, Transformational Leadership, Project Completion, Construction Project Management, Rwanda*

JEL Codes: *M10, M12, O22, L74, O55*

INTRODUCTION

Project outcomes are profoundly influenced by the quality of leadership in project management, as effective leadership determines whether projects achieve their intended objectives within defined budgets and timeframes (Fokina et al., 2023). Transformational leadership has been widely recognized for its capacity to enhance project success through improved teamwork, coordination, and collaboration, while optimizing resource deployment through strategic vision and team empowerment (Ali et al., 2021). This leadership style emphasizes inspiring followers to transcend self-interests for collective good, fostering innovation, and creating shared commitment to organizational goals. According to the Project Management Institute (2022), approximately 43% of projects fail due to inadequate leadership and resource planning, with construction projects being particularly vulnerable. Transformational leaders address these challenges through four core dimensions: idealized influence (ethical role modeling and trust building), inspirational motivation (vision articulation and team inspiration), intellectual stimulation (innovation encouragement and creative problem solving), and individualized consideration (personalized support and mentoring). Across Africa, transformational leadership has shaped public and private sector project success, with empirical evidence indicating its effectiveness in managing resource constraints in complex industries such as construction, oil, and gas (Mgallah, 2024; Belkhir & Masaud, 2024), though African construction projects face unique constraints including limited capital access, skilled labor shortages, unreliable supply chains, and infrastructure deficits (African Development Bank, 2023).

In Rwanda, the construction sector faces persistent challenges that significantly affect project performance. The Rwanda Housing Authority (2023) reports that 68% of public construction projects experience delays primarily attributed to leadership gaps, inadequate resource planning, and poor stakeholder coordination, while only 30% of construction workers have formal technical training (Ministry of Infrastructure, 2022). These challenges necessitate strong transformational leadership capable of strategic resource allocation, adaptive planning, and efficient utilization of limited resources through inspirational motivation and team empowerment. The Amahoro Stadium renovation project exemplifies these leadership challenges, providing a relevant context for investigating transformational leadership effectiveness in Rwanda's construction sector. Initiated in 2017 with a budget of RWF 96 billion and a 36-month timeline, the project has experienced significant delays with completion now projected beyond 2025 (Ministry of Sports, 2024). The project has faced multiple challenges including delayed fund disbursements causing contractor work stoppages, inadequate allocation of skilled technical personnel resulting in quality deficiencies, procurement delays for specialized materials causing schedule disruptions, and poor coordination among multiple stakeholders affecting resource optimization (Office of the Auditor General, 2023). These challenges have resulted in cost overruns exceeding 40% of the original budget and timeline extensions of over 24 months outcomes highlighting critical gaps in transformational leadership practices.

Despite the strategic importance of infrastructure projects like Amahoro Stadium to national growth and economic transformation, many Rwandan projects continue to face delays, cost overruns, and quality deficiencies often traced to inadequate transformational leadership (Dusingizimana & Kalimba, 2023). Transformational leadership has been shown to significantly influence project team performance, motivation, communication, and resource management effectiveness through its core dimensions of idealized influence, inspirational

motivation, intellectual stimulation, and individualized consideration. Yet, the specific effects of transformational leadership on project performance remain insufficiently explored in the Rwandan construction context (Kaneza, 2024). Addressing this gap is vital for ensuring sustainable, timely, and high-quality project outcomes. This study therefore examines the influence of transformational leadership on performance of the Amahoro Stadium renovation project, providing empirical insights that can inform transformational leadership development practices in Rwanda's construction sector and guide policymakers, project managers, and construction practitioners in adopting effective transformational leadership strategies that promote efficiency, accountability, and quality in large-scale infrastructure projects.

Problem Statement

The construction sector plays a critical role in national economic growth by providing essential infrastructure; however, construction projects globally suffer from cost overruns, delays, and quality shortcomings due to inadequate transformational leadership problems particularly acute in developing countries with scarce resources and weak institutional frameworks (Abate et al., 2024; Biłozor, 2024). In Rwanda, 64% of public infrastructure projects experienced delays and cost overruns due to inadequate leadership (Office of the Auditor General, 2022), while 52% of construction contracts faced poor performance and insufficient supervision (Rwanda Public Procurement Authority, 2023), with leadership deficiencies resulting in budget overruns averaging 35-45% and timeline extensions of 18-36 months (Ministry of Infrastructure, 2021).

The Amahoro Stadium renovation project exemplifies these challenges: initiated in 2017 with a budget of RWF 96 billion and a 36-month timeline, the project has experienced significant delays with completion now projected beyond 2025, representing timeline extensions exceeding 24 months and cost overruns surpassing 40%, attributed to weak transformational leadership practices including inadequate supervision, poor stakeholder coordination, and insufficient team motivation (Office of the Auditor General, 2023; Ministry of Sports, 2024). Despite recognition of these challenges, limited empirical research examines how transformational leadership specifically influences project outcomes in Rwanda's construction sector, creating a knowledge gap that hinders development of evidence-based strategies for improving project delivery (Tuyishime, 2020). This study therefore examines the influence of transformational leadership on performance of the Amahoro Stadium renovation project to guide stakeholders in adopting effective transformational leadership strategies that promote efficiency, accountability, and quality in Rwanda's construction sector.

Research Objective

The purpose of this study is to evaluate the influence of transformational leadership on the performance of Amahoro Stadium Project.

LITERATURE REVIEW

Theoretical Review

Transformational Leadership Theory, developed by Burns (1978) and expanded by Bass (1985), emphasizes the ability of leaders to inspire and motivate subordinates beyond their immediate self-interests to achieve higher goals. Transformational leaders use four key dimensions: idealized influence (serving as role models), inspirational motivation (articulating compelling visions), intellectual stimulation (encouraging innovation and creativity), and individualized consideration (providing personalized support and mentoring) to build trust, creativity, and commitment among followers (Nuel et al., 2021). This theory underpins the

relationship between transformational leadership style and project performance outcomes in construction environments.

In stadium renovation projects, transformational leadership is critical for managing large-scale budgets, coordinating multiple stakeholders including government agencies, contractors, architects, and engineers, and maintaining team motivation under tight deadlines imposed by national sporting events. In Rwanda's construction industry, where projects face resource constraints, funding delays and skilled labor shortages (Ministry of Infrastructure, 2021), transformational leaders inspire innovative solutions, foster inter-organizational collaboration, and create shared vision among diverse teams working under government oversight. The Amahoro Stadium renovation, involving complex architectural modifications, preservation of historical elements, and integration of modern facilities within compressed timelines, requires transformational leadership to enhance teamwork, communication, and innovation while optimizing limited financial, human, and material resources. Through its four dimensions idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration transformational leadership provides critical capabilities for successful completion of complex construction projects.

Empirical Review

Empirical studies consistently demonstrate that transformational leadership plays a crucial role in determining construction project outcomes by influencing team motivation, coordination, innovation, and resource utilization. Globally, research confirms that transformational leadership shapes project success through enhanced teamwork, safety performance, and strategic implementation (Fokina et al., 2023; Gichuki et al., 2024; Sankar & Anandh, 2024; Mutua & Muchelule, 2024), with Hamed (2024) finding significant improvements through enhanced teamwork quality and Abbas and Ali (2023) concluding through meta-analytic review that transformational leadership demonstrates stronger associations with project success metrics than other leadership styles. In African contexts, transformational leaders achieved 35% faster project completion in Kenyan solar energy projects (Mutua & Muchelule, 2024) and proved particularly effective in managing complex, resource-constrained projects (Mgallah, 2024), while construction workers under transformational leadership reported 48% higher job satisfaction and 33% greater productivity (Almahri & Wahab, 2024).

In Rwanda's construction context, empirical evidence increasingly supports the critical role of transformational leadership in project performance. Projects lacking transformational leadership structures experienced 38% higher failure rates (Dusingizimana & Kalimba, 2023), while projects with transformational managers achieved 65% on-time completion compared to 32% for those with traditional directive leaders (Rwanda Housing Authority, 2022). Transformational leadership correlates with higher worker satisfaction and quality outcomes (Tuyishime, 2020), with transformational leaders demonstrating 42% better stakeholder satisfaction and 27% fewer quality complaints (Nsengimana, 2023). The Office of the Auditor General (2021, 2023) reported that 64% of delayed projects exhibited transformational leadership gaps, with the Ministry of Infrastructure (2021) acknowledging that transformational leadership capacity gaps constituted major barriers to sector growth. However, Kaneza (2024) found that most Rwandan project managers employed predominantly directive approaches with limited transformational leadership application, highlighting the urgent need for development in the sector.

The specific dimensions of transformational leadership have differentiated effects on project performance. Ali et al. (2021) found that idealized influence significantly enhances team trust and commitment, reducing conflicts and improving coordination, while inspirational motivation increases team energy and persistence during challenging phases. Intellectual stimulation led to improved technical solutions and resource optimization, while individualized consideration enhanced individual competencies and team cohesion. Through these four core dimensions, transformational leaders inspire shared vision, build trust, empower team members, and promote commitment and accountability essential for managing complex construction tasks, resulting in greater efficiency, creativity, problem-solving capacity, and ultimately higher project success rates and sustainable performance outcomes (Purwadi, 2024; Almahri & Wahab, 2024).

METHODOLOGY

This study employed a mixed-methods design with predominant quantitative orientation to examine how leadership styles influence resource allocation and performance in the Amahoro Stadium Renovation Project, Kigali, Rwanda, conducted between January and March 2025. The quantitative approach collected measurable data on leadership styles (transformational, transactional, and situational), resource allocation practices (financial, human, and material), and project performance indicators (time efficiency, cost control, and quality outcomes), while qualitative methods provided contextual insights into leadership behaviors and resource management decisions. Using stratified random sampling, the study selected 30 participants (75%) from a target population of 40 individuals directly involved in project planning, execution, and supervision, including project managers (13%), construction managers (7%), QA/QC engineers (13%), quantity surveyors (13%), site engineers (47%), topographic surveyors (13%), site inventory personnel (13%), procurement officers (13%), site accountants (7%), and site supervisors (67%), ensuring proportional representation across all professional categories and minimizing bias through random selection within each stratum.

Data were collected using structured questionnaires, document reviews, and direct field observations to ensure robustness and triangulation. The structured questionnaires captured quantitative information on leadership styles and their influence on resource allocation decisions and project performance indicators, with responses measured on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Questionnaires were distributed both physically and electronically, with respondents given two weeks to complete them and follow-up reminders issued to enhance participation rates. Document reviews examined project reports, budget allocation records, procurement documents, meeting minutes, progress reports, and financial disbursement logs to verify leadership decisions, assess resource allocation patterns, and evaluate their impact on project outcomes. Direct field observations were conducted concurrently to evaluate leadership behaviors, team interactions, resource utilization practices, and decision-making processes in real time. Systematic notes were taken during observations to facilitate triangulation and contextual interpretation, providing a comprehensive understanding of how leadership practices influenced resource allocation and project performance.

The study examined three independent variables: transformational leadership (idealized influence, inspirational motivation, intellectual stimulation, individualized consideration), transactional leadership (contingent rewards, management-by-exception active and passive), and situational leadership (directive, coaching, supporting, delegating behaviors). Resource

allocation served as the mediating variable, measured through financial efficiency (budget adherence, timely disbursements, cost optimization), human resource effectiveness (staffing adequacy, skill matching, team productivity), and material efficiency (procurement timeliness, material quality, inventory management). Project performance was the dependent variable, measured through time efficiency (schedule adherence, milestone achievement), cost control (budget compliance, cost variance), and quality outcomes (defect rates, rework frequency, specification compliance). Quantitative data were analyzed using SPSS version 27 with descriptive statistics (mean, standard deviation, frequency, percentage) to characterize variables and inferential statistics (correlation, regression, mediation analysis) to examine relationships between leadership styles, resource allocation, and project performance, while qualitative data from document reviews and field observations were thematically analyzed to triangulate findings and provide contextual explanations, ensuring both statistical rigor and contextual understanding of how leadership behaviors influence resource allocation and project outcomes.

FINDINGS AND DISCUSSION

Findings

Table 1: Transformational Leadership Practices in Amahoro Stadium Renovation Project

Items	Mean	Std. Deviation
The project manager frequently inspires and motivates the team to achieve project goals	4.3710	.48701
The project manager promotes innovation and encourages creative solutions to project challenges	4.3871	.68604
The project manager serves as a positive role model and demonstrates ethical leadership	4.4516	.50172
The project manager articulates a clear and compelling vision for the project	4.3710	.48701
The project manager provides individualized support and mentoring to team members	4.2903	.55477
The project manager encourages team members to think creatively and challenge conventional approaches	4.3871	.68604
The project manager builds trust and confidence among team members	4.3710	.48701
Transformational leadership style (inspires, motivates, fosters innovation) is primarily exhibited by the project manager	4.0645	.84681
The project manager's transformational leadership approach has improved team cohesion	4.3710	.48701
The project manager recognizes and responds to individual team members' needs	4.2581	.59878
Valid N (listwise)	**62**	

Table 1 presents the findings on transformational leadership practices demonstrated by Amahoro stadium project managers, showing consistently high mean scores indicating strong

transformational leadership that positively contributed to project performance. The highest mean score was for serving as a positive role model and demonstrating ethical leadership representing idealized influence (M = 4.4516, SD = 0.50172) demonstrating that project managers effectively modeled desired behaviors and built credibility. High mean values for inspirational motivation dimensions including inspiring and motivating the team (M = 4.3710, SD = 0.48701), articulating clear and compelling visions (M = 4.3710, SD = 0.48701), and building trust and confidence (M = 4.3710, SD = 0.48701) indicate that transformational leadership effectively energized and aligned team members toward project goals.

The intellectual stimulation dimension received strong ratings for promoting innovation and encouraging creative solutions (M = 4.3871, SD = 0.68604), demonstrating that project managers effectively fostered innovation and problem-solving capabilities. The individualized consideration dimension showed positive results with providing individualized support and mentoring (M = 4.2903, SD = 0.55477) and recognizing individual team members' needs (M = 4.2581, SD = 0.59878), indicating personalized attention to team member development. The overall transformational leadership rating (M = 4.0645, SD = 0.84681) and its impact on team cohesion (M = 4.3710, SD = 0.48701) further confirm strong practices. The standard deviations of 0.43-0.68 for most items reflect relatively homogeneous perceptions, while the slightly higher standard deviation for overall transformational leadership (SD = 0.84681) suggests some variability in how comprehensively respondents perceived the complete approach. Overall, project managers employed strong transformational leadership practices across all four dimensions, facilitating effective motivation, innovation, trust building, and team development essential for project success.

Table 2: Transformational Leadership Influence on Resource Allocation

Items	Mean	Std. Deviation
The project manager's transformational leadership approach ensures efficient allocation of financial, human, and material resources	4.3710	.48701
Through inspirational motivation, the project manager ensures resources are available when needed	4.3871	.68604
The project manager's vision and strategic thinking guide resource allocation priorities	4.3710	.48701
Transformational leadership minimizes resource-related delays and cost overruns	4.3710	.79412
The project manager's ethical leadership ensures transparent resource allocation	4.4355	.66827
Through individualized consideration, the project manager optimizes human resource deployment	4.2581	.59878
The project manager's intellectual stimulation encourages innovative resource optimization	4.3871	.68604
Transformational leadership contributes to fair and equitable resource distribution	4.3710	.48701
The project manager's role modeling promotes accountability in resource management	4.4516	.50172
Valid N (listwise)	62	

Table 2 highlights respondents' perception of how transformational leadership influenced resource allocation during the Amahoro stadium renovation, with consistently high mean scores indicating strong consensus that transformational leadership positively shaped resource allocation effectiveness. The highest ratings were for the project manager's role modeling promoting accountability in resource management (M = 4.4516, SD = 0.50172) and transparency in resource allocation through ethical leadership (M = 4.4355, SD = 0.66827), demonstrating that idealized influence enhanced resource accountability and strengthened confidence in resource management decisions. Respondents strongly agreed that transformational leadership ensured efficient allocation of financial, human, and material resources (M = 4.3710, SD = 0.48701), with inspirational motivation ensuring resource availability (M = 4.3871, SD = 0.68604) and vision-guided strategic thinking effectively directing resource allocation priorities (M = 4.3710, SD = 0.48701), while minimizing resource-related delays and cost overruns (M = 4.3710, SD = 0.79412). The intellectual stimulation dimension contributed to innovative resource optimization (M = 4.3871, SD = 0.68604), enabling teams to identify novel efficiency solutions, while individualized consideration optimized human resource deployment (M = 4.2581, SD = 0.59878) through personalized attention to team members' strengths. Overall, the low standard deviations reflect strong consensus that transformational leadership across all four dimensions idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration significantly enhanced resource allocation effectiveness, contributing to project success through optimized financial, human, and material resource management

Table 3: Transformational Leadership Impact on Project Completion (Time, Cost, Quality)

Items	Mean	Std. Deviation
The project manager's transformational leadership approach has helped prevent delays and ensures timely completion	4.5645	.49987
Inspirational motivation from the project manager has positively impacted schedule adherence	4.3871	.49106
Transformational leadership through effective resource allocation contributes to successful project completion	4.4839	.59346
The project manager's transformational leadership has effectively controlled project costs	4.1935	.59613
Through idealized influence and role modeling, the project manager ensures quality standards are met or exceeded	4.3710	.48701
Intellectual stimulation by the project manager enhances the overall quality of work	4.3871	.68604
The quality of work completed under transformational leadership meets project standards and requirements	4.1129	.54637
Transformational leadership minimizes delays through effective team motivation and coordination	4.1613	.75081
The project manager's transformational leadership has significantly impacted project performance across time, cost, and quality dimensions	4.3710	.48701
Transformational leadership contributes to timely completion, budget adherence, and quality maintenance	4.0645	.59701
Valid N (listwise)	62	

Table 3 shows the findings on transformational leadership's impact on the Amahoro stadium renovation project completion in terms of time, cost, and quality, with consistently high mean scores indicating strong positive impact. The most highly rated factor was transformational leadership's ability to prevent delays and ensure timely completion (M = 4.5645, SD = 0.49987), demonstrating that transformational leaders' ability to inspire, motivate, and build team commitment directly translates into improved time performance. Inspirational motivation positively impacted schedule adherence (M = 4.3871, SD = 0.49106), while transformational leadership through effective resource allocation contributed substantially to successful project completion (M = 4.4839, SD = 0.59346), reinforcing the mediating role of resource allocation in translating transformational leadership into project outcomes. Cost control through transformational leadership received positive ratings (M = 4.1935, SD = 0.59613), while quality outcomes showed that idealized influence and role modeling ensured standards were met or exceeded (M = 4.3710, SD = 0.48701), intellectual stimulation enhanced work quality (M = 4.3871, SD = 0.68604), and completed work met project standards (M = 4.1129, SD = 0.54637), demonstrating that different transformational leadership dimensions contribute to quality through distinct mechanisms. Overall project performance impact across time, cost, and quality dimensions was strongly affirmed (M = 4.3710, SD = 0.48701), confirming that transformational leadership across all four dimensions idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration played a central role in ensuring timely delivery, cost efficiency, and quality performance in this complex, large-scale construction project.

Table 4: Additional Perspectives on Transformational Leadership and Performance

Items	Mean	Std. Deviation
The project manager's transformational leadership style has a significant impact on overall project efficiency	4.3710	.48701
Team members feel that transformational leadership fosters a positive working environment, contributing to project success	4.2258	.42153
Further strengthening transformational leadership practices could enhance project performance	4.5161	.50382
Enhanced transformational leadership combined with strategic resource allocation could further improve project completion	4.1613	.63229
Valid N (listwise)	62	

Table 4 provides further insight into transformational leadership's impact on the Amahoro stadium renovation project, showing strong agreement that transformational leadership significantly improved project efficiency (M = 4.3710, SD = 0.48701). Respondents affirmed that transformational leadership fostered a positive working environment (M = 4.2258, SD = 0.42153), supporting team motivation, cohesion, and collaboration factors vital in large construction projects. Notably, participants indicated that further strengthening transformational leadership practices could enhance project performance beyond current levels (M = 4.5161, SD = 0.50382), while enhanced transformational leadership combined with strategic resource allocation could further improve project completion (M = 4.1613, SD = 0.63229). Overall, the findings highlight that transformational leadership played a crucial role in ensuring timely, cost-effective, and high-quality results while promoting positive work

environments, with stakeholders recognizing opportunities for continued transformational leadership development and optimization to maximize project outcomes.

Inferential Results

This section presents an inferential analysis examining the influence of transformational leadership on the performance of the Amahoro Stadium renovation project. Correlation and regression analyses were performed to evaluate the strength and significance of the relationship between transformational leadership and project performance outcomes.

Table 5: Regression Model Summary: Transformational Leadership and Project Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F-Statistic	Sig. (p-value)
1	0.844	0.713	0.698	0.13774	48.62	<0.001

As shown in Table 5, the regression model indicates a strong positive correlation (R = 0.844) between transformational leadership practices and project performance. The R-squared value (0.713) demonstrates that transformational leadership explains approximately 71.3% of the variance in project performance, while the adjusted R-squared (0.698) confirms the model's robustness after accounting for the number of predictors. Furthermore, the model's F-statistic ($F = 48.62$, $p < 0.001$) signifies overall statistical significance, validating the strong predictive power of transformational leadership in explaining the successful performance of the Amahoro Stadium renovation project. These findings provide compelling statistical evidence that transformational leadership is a primary driver of project success in construction contexts.

Table 6. ANOVA Results: Transformational Leadership Model

Model	Source	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.734	3	0.911	48.028	0.000[a]
	Residual	1.100	59	0.019		
	Total	**3.834**	**62**			

a. Predictors: (Constant), Transformational Leadership Dimensions (Idealized Influence, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration) b. Dependent Variable: Project Performance (time efficiency, cost control, quality outcomes)

As presented in Table 6, the ANOVA results confirm that the regression model significantly predicts project performance outcomes. The model's F-statistic ($F = 48.028$, $p < 0.001$) demonstrates that transformational leadership dimensions—idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration—collectively explain a substantial proportion of the variation in project performance (measured through time efficiency, cost control, and quality outcomes). Specifically, the regression sum of squares (2.734) compared to the residual sum of squares (1.100) indicates that a significant portion of the variance in project performance is accounted for by transformational leadership practices. This strong statistical significance ($p = 0.000$) suggests that transformational leadership approaches play critical roles in ensuring the successful and timely performance of the Amahoro Stadium renovation project.

Table 7: Regression Coefficients: Transformational Leadership Dimensions

Model	Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.124	0.412	---	0.301	0.764
	Idealized Influence	0.283	0.098	0.264	2.888	0.005
	Inspirational Motivation	0.356	0.102	0.331	3.490	0.001
	Intellectual Stimulation	0.245	0.089	0.228	2.753	0.008
	Individualized Consideration	0.198	0.095	0.184	2.084	0.042

a. Dependent Variable: Project Performance (time efficiency, cost control, quality outcomes)

As shown in Table 7, the regression analysis reveals that all four dimensions of transformational leadership significantly predict project performance in the Amahoro Stadium renovation project. Inspirational motivation exhibited the strongest influence (B = 0.356, Beta = 0.331, t = 3.490, p = 0.001), demonstrating that articulating compelling visions and inspiring team commitment is the most powerful dimension for enhancing project outcomes. Idealized influence showed the second strongest effect (B = 0.283, Beta = 0.264, t = 2.888, p = 0.005), indicating that ethical leadership and role modeling significantly enhance performance through building trust and credibility. Intellectual stimulation demonstrated significant positive effects (B = 0.245, Beta = 0.228, t = 2.753, p = 0.008), showing that encouraging innovation and creative problem-solving meaningfully contribute to project success. Individualized consideration, while having the smallest coefficient, still showed statistically significant effects (B = 0.198, Beta = 0.184, t = 2.084, p = 0.042), indicating that personalized support and mentoring positively influence performance. Overall, these findings demonstrate that all four dimensions independently contribute to project performance, with the significant effects across all dimensions underscoring the importance of holistic transformational leadership development for construction project managers to achieve superior project outcomes.

Table 8: Correlation Analysis: Transformational Leadership and Project Performance

		Project Completion (Time, Cost, Quality)
	Sig. (2-tailed)	
	N	62
Transformational Leadership (Overall)	Pearson Correlation	.685**
	Sig. (2-tailed)	.000
	N	62
Transformational Leadership with Resource Allocation	Pearson Correlation	.843**
	Sig. (2-tailed)	.000
	N	62
Idealized Influence	Pearson Correlation	.623**
	Sig. (2-tailed)	.000
	N	62
Inspirational Motivation	Pearson Correlation	.704**
	Sig. (2-tailed)	.000
	N	62
Intellectual Stimulation	Pearson Correlation	.598**
	Sig. (2-tailed)	.000
	N	62
Individualized Consideration	Pearson Correlation	.547**
	Sig. (2-tailed)	.000
	N	62

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

As shown in Table 8, the correlation analysis demonstrates significant relationships between transformational leadership dimensions and the Amahoro Stadium renovation project completion in terms of time, cost, and quality. Overall transformational leadership exhibits a strong positive correlation with project completion ($r = 0.685$, $p < 0.01$), while transformational leadership's influence through effective resource allocation shows an even stronger correlation ($r = 0.843$, $p < 0.01$), underscoring that transformational leaders achieve project success both through direct team motivation and through strategic resource optimization. Examining individual dimensions, inspirational motivation showed the strongest direct correlation ($r = 0.704$, $p < 0.01$), followed by idealized influence ($r = 0.623$, $p < 0.01$), intellectual stimulation ($r = 0.598$, $p < 0.01$), and individualized consideration ($r = 0.547$, $p < 0.01$), confirming that articulating compelling visions, ethical role modeling, innovation encouragement, and personalized support all significantly enhance project outcomes. Overall, these consistently significant correlations (all $p < 0.01$) provide robust evidence that transformational leadership across all four dimensions is a critical determinant of successful project completion in construction contexts, with its impact maximized when it effectively guides resource allocation decisions.

Discussion

The study demonstrates that transformational leadership significantly improved the Amahoro Stadium renovation project performance, with high ratings for inspiring team members, promoting innovation, ethical role modeling, and individualized support (M = 4.26-4.56). Statistical analyses confirmed strong positive correlations between transformational leadership

and project performance (r = 0.685, p < 0.001), with transformational leadership explaining 71.3% of variance in project outcomes (R^2 = 0.713). Globally, research demonstrates that transformational leadership creates work environments characterized by trust, open communication, and collaborative problem-solving that translate into superior project outcomes (Purwadi, 2024; Almahri & Wahab, 2024; Abbas & Ali, 2023), while in African contexts, transformational leadership achieved 35% faster completion in Kenyan projects and proved particularly effective in managing complex, resource-constrained projects (Mutua & Muchelule, 2024; Mgallah, 2024). The current study extends previous Rwandan research by demonstrating that transformational leadership influences performance both directly through enhanced team motivation and indirectly through improved resource allocation effectiveness (r = 0.843, p < 0.001), with regression analysis revealing that inspirational motivation showed the strongest influence (B = 0.356, p = 0.001), followed by idealized influence (B = 0.283, p = 0.005), intellectual stimulation (B = 0.245, p = 0.008), and individualized consideration (B = 0.198, p = 0.042).

Transformational leadership significantly influenced resource allocation effectiveness, with mediated effects showing stronger correlation with project performance (r = 0.843, p < 0.001) than direct effects (r = 0.685, p < 0.001). The four dimensions contributed through distinct mechanisms: idealized influence enhanced accountability and transparency (M = 4.45, SD = 0.50), addressing poor accountability challenges documented by the Rwanda Public Procurement Authority (2023); inspirational motivation ensured strategic alignment between resource decisions and project visions (M = 4.37, SD = 0.49); intellectual stimulation encouraged innovative resource optimization (M = 4.39, SD = 0.69); and individualized consideration optimized human resource deployment (M = 4.26, SD = 0.60), addressing Rwanda's skill constraints where only 30% of construction workers have formal training (Ministry of Infrastructure, 2022). The study confirms that transformational leadership minimizes resource-related delays and cost overruns (M = 4.37, SD = 0.79) through integrated mechanisms across all four dimensions, directly addressing documented challenges in the Amahoro Stadium renovation. Stakeholders indicated that further strengthening transformational leadership practices could enhance performance beyond current levels (M = 4.52, SD = 0.50), suggesting significant room for expanding transformational leadership application across Rwanda's construction sector, particularly given that most Rwandan project managers employ predominantly directive approaches with limited transformational practices (Kaneza, 2024).

CONCLUSION AND RECOMMENDATIONS

Conclusion

The study concludes that transformational leadership significantly enhances the performance and successful completion of the Amahoro Stadium renovation project. Key leadership dimensions idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration positively affected project outcomes in time, cost, and quality. Inspirational motivation had the strongest effect, and overall, transformational leadership explained 71.3% of the variance in project performance. The influence of transformational leadership was further strengthened through effective resource allocation, demonstrating that leaders achieve project success by both motivating teams and optimizing financial, human, and material resources, fostering innovation, accountability, and a positive working environment.

Recommendations

The study recommends that Rwanda's construction sector prioritize transformational leadership to enhance project performance. Project sponsors, managers, and supervisors should cultivate ethical, visionary, innovative, and supportive leadership practices while embedding them into daily management, selection, and accountability processes. Government agencies should integrate transformational leadership into national policies, training programs, competency frameworks, and project oversight mechanisms. Educational institutions and professional associations should provide targeted leadership development through practical training, mentoring, and continuous professional development. Organizations should systematically document leadership practices and outcomes to guide future projects, while researchers should explore leadership effectiveness, cultural influences, and long-term impacts. Implementing these measures will strengthen leadership capacity, optimize resource use, and improve efficiency, quality, and sustainability in Rwanda's large-scale construction projects.

REFERENCES

Abate, H. H., Mengistu, D. G., & Abera, T. A. (2024). Failure factors of building construction projects in Ethiopia. *African Journal of Science, Technology, Innovation and Development*. https://doi.org/10.1080/20421338.2024.2377365

Burns, J. M. (1978). *Leadership*. Harper & Row.

Dabirian, S., Abbaspour, S., Khanzadi, M., & Ahmadi, M. (2022). Dynamic modelling of human resource allocation in construction projects. *International Journal of Construction Management*, *22*(2), 182–191. https://doi.org/10.1080/15623599.2019.1616411

Dusingizimana, J., & Kalimba, P. (2023). Infrastructure project performance in Rwanda: The role of leadership and resource management. *Rwanda Journal of Engineering Science and Technology, 6*(2), 89-106.

Fokina, O., et al. (2023). The conceptual role of leadership in project management. *E3S Web of Conferences, 376*, 04020. https://doi.org/10.1051/e3sconf/202337604020

Kaneza, A. (2024). Leadership practices in Rwandan construction firms: Current state and development needs. *Rwanda Management Review, 11*(1), 34-52.

Mgallah, H. (2024). Transformational leadership in African construction projects: Evidence from oil and gas sector. *African Development Review, 36*(2), 201-219.

Ministry of Infrastructure, Rwanda. (2021). *Construction Industry Development Policy 2021-2030*. Government of Rwanda.

Ministry of Infrastructure, Rwanda. (2022). *Skills assessment in Rwanda's construction sector*. Government of Rwanda.

Nsengimana, E. (2023). Leadership styles and stakeholder satisfaction in Rwandan construction projects. *East African Journal of Engineering and Construction Management, 5*(1), 67-84.

Nuel, O., Prince, A., & Favour, U. (2021). Transformational leadership in project management: A review of dimensions and impacts. *International Journal of Management Studies, 28*(4), 112-134.

Rwanda Public Procurement Authority. (2023). *Annual procurement performance report 2022/2023*. Government of Rwanda.

Tuyishime, C. (2020). Leadership styles and team performance in Kigali construction projects. *Rwanda Journal of Social Sciences and Humanities, 3*(2), 45-62.