



Effect of Project Management Practices on the Success of a Sports Infrastructure Project: A Case of Zaria Court Project in Kigali City, Rwanda

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Abstract: This study examined the effect of project management practices on the success of sports infrastructure projects, using the Zaria Court Project in Kigali City, Rwanda as a case study. A descriptive and correlational research design was used to describe project management practices and test their relationship with project success. Data was collected using questionnaires, interview guides, and documentation review. Quantitative data were analyzed using SPSS Version 29, where frequencies, percentages, means, and standard deviations were used for descriptive analysis, while Pearson correlation and multiple regression analysis was used for inferential analysis at a 0.05 significance level. Qualitative data from interviews were analyzed using thematic analysis to support and explain the quantitative findings. The multiple regression analysis revealed that project planning practices ($B = 0.410$, $t = 5.775$, $p = 0.000$), resource management practices ($B = 0.197$, $t = 3.127$, $p = 0.002$), risk management practices ($B = 0.136$, $t = 2.194$, $p = 0.031$), and monitoring and evaluation practices ($B = 0.280$, $t = 4.118$, $p = 0.000$) all have a positive and statistically significant effect on the success of the Zaria Court Project. Consequently, the study concluded that the triumphant completion of this sports infrastructure is the direct consequence of seamlessly integrating these four disciplined management frameworks to avoid common industry failures. Based on these outcomes, it is recommended that the Ministry of Sports strictly mandate the utilization of advanced digital scheduling software to handle complex multi-contractor workflows efficiently and prevent initial mobilization delays at the project site.

Keywords: Project management practices; project success; sports infrastructure; Zaria Court Project.

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1. Introduction

Global project success in the construction industry is increasingly defined by the identification and management of critical success factors that determine sustainable outcomes. Recent findings reveal that success is mainly evaluated through completion on time, cost-effectiveness, quality standards, and participant satisfaction within complex multi-dimensional environments. Project managers must direct their efforts toward primary factors including specialized expertise and adherence to safety and environmental performance targets. Failure to manage these areas

often results in project collapse or significant underperformance across various international organizational settings. Effective management practices serve as the foundational requirement for ensuring that infrastructure projects meet their intended long-term strategic and commercial value (Khan et al., 2024).

Qatar successfully delivered high-quality infrastructure for the 2022 World Cup through a decade-long investment program estimated at over two hundred billion dollars. The construction of state-of-the-art stadiums cost approximately six and a half billion dollars, representing a specialized portion of the national diversification strategy. Management of these projects involved complex logistics

including underground transportation and hospitality hubs that transformed the urban landscape of the region. The high visibility and regional economic spillovers generated by these projects demonstrate the success of aligning infrastructure spending with a long-term national vision. These facilities now serve as a global benchmark for large-scale sports development (Meghji, 2024).

Sports development in Nigeria faces persistent challenges related to inadequate funding and a shortage of qualified personnel in facility management. Research in Kwara State highlights that the presence and adequacy of sport facilities bolster success, while their absence leads to a downturn in regional programs. Management practices in this region encompass a range of activities including human resource allocation and collaboration with federations to achieve growth. Effective funding mechanisms and the availability of modern equipment are critical indices for fostering unity and driving social progress through sports. Suboptimal management practices in terms of personnel and facilities remain a significant barrier to administrative success (Ajadi et al., 2023).

Government-funded building construction projects in Kenya, including schools and public facilities, frequently face challenges regarding cost, timelines, and quality performance. Research in Kakamega County reveals that project planning and leadership have a positive significant effect on the performance of these construction works. Effective management requires clear timelines, precise resource allocation, and task coordination to avoid the common pitfalls of poorly managed stakeholders. Policy makers are encouraged to invest in risk identification and assessment to protect project outcomes from underperformance and resource waste. Successful infrastructure delivery in this context depends on the ability of project managers to navigate complex administrative hurdles (Mwanza, 2026).

Research on Rwanda's construction industry indicates that project performance is significantly driven by worker competencies and total quality management systems. In the context of the Kigali Arena and Kigali Golf Club projects, worker skills were found to have the strongest positive effect on overall success. Effective project management practices, including monitoring, evaluation, and risk management, are crucial for delivering high-quality infrastructure under the supervision of national authorities. The performance of these prominent venues is used to evaluate the effectiveness of contractors and the technical capacity of the local workforce. Consistent focus on professional training remains a key factor for success in Rwanda (Gatsinzi & Kamande, 2023).

The renovation of the Amahoro Stadium in Kigali highlights the critical role of leadership styles and resource allocation in meeting project deadlines. Transformational leadership among project managers promotes team cohesiveness and anticipatory problem-solving, which are essential for the delivery of complex structural upgrades.

Effective management of financial and human capital ensures that large-scale sports facilities can host international events and accommodate vast spectator volumes. Success in these renovations is measured by the project's ability to align with international standards while staying within the established budget. Strategic resource management remains the most significant predictor of whether these projects achieve their functional and economic objectives (Mbanzabugabo & Mulyungi, 2025).

1.1 Statement of the Problem

Rwanda has recorded visible progress in sports infrastructure and sports event hosting, which shows the country's commitment to positioning sport as a driver of social and economic development (Ministry of Sports, 2025). Despite the progress, Rwanda's infrastructure sector still experiences delayed project delivery, which affects timely achievement of planned benefits. The Auditor General reported that in 2024, delayed contracts were still equivalent to about 23.7% of the delayed contract value reported in 2023 and about 20.3% of the value reported in 2022. Some contracts had already consumed between 88.9% and 98.7% of their original duration, while actual physical progress remained only between 22% and 57%. This shows a performance gap ranging from 31.9 to 76.7 percentage points between time used and work completed (Office of the Auditor General, 2024).

In 2024, the Auditor General reported 23 stalled construction projects, of which 78.3% were new stalled cases and 21.7% were cases carried forward from previous audits. In value terms, new stalled construction cases represented about 86.1% of the total stalled-construction value, while previous cases represented about 13.9% (Office of the Auditor General, 2024). The Auditor General reported that 89.0% of idle assets were new cases, while 11.0% were cases carried forward from earlier audits. In value terms, new idle assets represented about 61.3% of the total idle-asset value, while previous idle assets represented about 38.7%. These percentages show that a large share of assets acquired or completed under public investment did not immediately serve their intended purpose (Office of the Auditor General, 2024).

Amanya and Njenga reported that 65.7% of public construction projects in one Rwandan district were delayed, while analysis of 15 commercial building projects showed that 75% required more time and 15% were cancelled. The same source reported that delays in Kigali projects were associated with 45% time overruns, 33.4% cost overruns, and 21.6% disputes. For Zaria Court Project specifically, Umurangamirwa and Bazimya found that delay-related factors explained 63.5% of the variance in project performance, leaving 36.5% unexplained. Therefore, this study bridged the remaining knowledge gap by examining the effect of project planning practices, resource management practices, risk management practices, and monitoring and evaluation practices on the success of Zaria Court Project in Gasabo

District, Kigali City, Rwanda (Amanya & Njenga, 2022; Umurangamirwa & Bazimya, 2025).

Despite the growing research on infrastructure in Rwanda, a comprehensive investigation into the project management practices of the Zaria Court Project remains limited. While existing studies have examined the effect of project delays on the performance of this landmark development, they do not explore the holistic impact of management knowledge areas. There is a clear gap in empirical evidence regarding how project management practices influence success of sports infrastructure projects in Rwanda. This study bridged that gap by providing a detailed analysis of management practices on the Zaria Court Project.

1.2 Specific Objectives

To achieve the general objective, the following specific objectives were addressed:

- i. To assess the effect of project planning practices on the success of the Zaria Court Project in Gasabo District.
- ii. To evaluate the effect of resource management practices on the success of the Zaria Court Project in Gasabo District.
- iii. To determine the effect of risk management practices on the success of the Zaria Court Project in Gasabo District.
- iv. To analyze the effect of monitoring and evaluation practices on the success of the Zaria Court Project in Gasabo District.

2. Literature review

2.1 Theoretical Review

2.1.1 Theory of Change

Theory of Change was formally articulated by Carol Weiss in 1995 as a methodology to explain the causal links between activities, outputs, and long-term outcomes. This framework requires organizations to move beyond simply listing activities and instead articulate the underlying logic of how a specific intervention leads to a desired impact. It serves as a comprehensive description of how and why a desired change is expected to happen in a particular context. The overview focuses on the missing middle between what a project does and how those actions lead to goals being achieved (Mayne, 2022).

Theory of Change was employed to examine the first specific objective concerning project planning practices. This study utilized the framework to map the logical progression from initial planning activities to the successful completion of sports infrastructure. The research investigated how the articulation of causal pathways during the design phase influences the overall predictability of the project.

2.1.2 Resource-Based View (RBV)

The Resource-Based View was pioneered by Birger Wernerfelt in 1984 to explain how the internal assets of a firm determine its strategic position and performance. This theoretical perspective suggests that organizations are bundles of heterogeneous resources that are not easily transferred between competitors. Value is created when a firm manages a set of resources that are valuable, rare, inimitable, and non-substitutable. The theory moved the focus of strategic management from external market forces to the internal strengths and capabilities of the entity. It provides a foundation for understanding the link between asset optimization and competitive advantage (Pinto, 2023).

The Resource-Based View provided the theoretical grounding for the second specific objective regarding resource management practices. This study utilized the RBV framework to analyze how the strategic allocation of human and material assets influenced the performance of sports projects. The study also explored the relationship between the possession of specialized construction talent and the efficiency of the project's financial execution.

2.1.3 Agency Theory

Agency Theory was developed by Michael Jensen and William Meckling in 1976 to analyze the relationship between principals who delegate work and agents who perform it. This model addresses the potential for conflict that arises when the goals of the two parties are not perfectly aligned. It emphasizes the challenges of information asymmetry, where the agent has more information about the task than the principal. The theory suggests that monitoring mechanisms and incentive structures are necessary to ensure the agent acts in the principal's best interest. Its overview focuses on the costs associated with establishing and maintaining these governance controls (Kendrick, 2024).

Agency Theory was applied to the third specific objective of the study, which focuses on risk management practices. The research used this framework to examine how the use of monitoring and contractual controls helps in identifying and reducing project risks. It was proposed that strong alignment between the project owner and the management team leads to more effective risk responses. This theoretical perspective clarified the essential role of governance in safeguarding project investments.

2.1.4 Stakeholder Theory

Stakeholder Theory was advanced by R. Edward Freeman in 1984 as a management framework that prioritizes the interests of all parties affected by an organization's actions. This approach suggests that long-term success is only possible when the needs of shareholders, employees, customers, and the community are balanced. It challenges the notion that managers should focus exclusively on the financial returns of the primary investors. The theory provides a

roadmap for ethical decision-making and sustainable project delivery in public and private sectors. Its overview emphasizes the value generated through inclusive engagement and transparent communication (Patton, 2024).

Stakeholder Theory served as the conceptual basis for the fourth specific objective, which examines monitoring and evaluation practices. The study utilized this theory to investigate how the inclusion of diverse stakeholder perspectives improves the accuracy of project performance evaluations.

2.2 Empirical Review

2.2.1 Project Planning Practices and Success of Projects

Uwayisenga (2023) evaluated the contribution of project planning practices to the successful delivery of commercial building projects in Kigali, Rwanda. The researcher adopted a correlational research design, sampling 80 project coordinators from registered local construction firms to assess their planning rigor. Results indicated that effective scope definition and risk-adjusted planning had a statistically significant impact on reducing budget overruns, with a coefficient of 0.56. The author concluded that the success of Rwandan building projects is heavily dependent on the quality of the initial project charter and milestone setting. It was recommended that local managers receive advanced training in modern planning software to better handle the complexities of Rwanda's expanding urban infrastructure. This study highlights the growing need for professional planning standards to match the pace of development in the Rwandan construction industry.

2.2.2 Project Resource Practices and Success of Projects

Habimana (2022) analyzed the effect of financial resource management on the performance of government-sponsored agricultural projects in Rwanda. The researcher utilized a longitudinal research design, tracking the budget execution and output quality of several regional farming initiatives. Data analysis indicated that transparent financial reporting and strict budget controls led to a 22% increase in the number of project beneficiaries. The study concluded that the success of Rwanda's agricultural transformation depends on the efficient and accountable use of limited financial assets. It was recommended that project administrators utilize automated financial management systems to improve the speed and accuracy of fund disbursements to local cooperatives. This research highlights the critical role of fiscal discipline in achieving national food security objectives and rural development in the Rwandan context.

2.2.3 Project Risk Management Practices and Success of Projects

Ndungutse (2023) examined the role of risk management in the success of digital transformation projects within Rwanda's financial sector. The study utilized a quantitative

approach, collecting data from 70 IT project managers in commercial banks and microfinance institutions in Kigali. Results indicated that the implementation of cybersecurity risk controls had a significant positive impact on the adoption rates of new mobile platforms. The author concluded that the success of Rwanda's move toward a cashless economy depends on the perceived security and reliability of the underlying projects. It was recommended that Rwandan financial institutions invest in continuous vulnerability assessments to mitigate the risks of data breaches and consumer distrust. This research highlights the intersection between technical risk management and consumer confidence in emerging digital markets in Rwanda.

2.2.4 Project Monitoring and Evaluation Practices and Success of Projects

Umugwaneza (2022) analyzed the contribution of monitoring and evaluation practices to the performance of health sector projects in Rwanda, focusing on Ministry of Health initiatives. The study adopted a correlational research design, sampling 85 health project managers and evaluators from various administrative districts. Results showed that regular data quality audits were positively associated with an 18% increase in the efficiency of medical supply distribution networks. The author concluded that the success of Rwanda's health interventions is significantly enhanced by the use of data-driven M&E systems. It was recommended that health project leaders prioritize the training of staff in advanced statistical analysis to improve the quality of technical reports. This study highlights Rwanda's commitment to evidence-based management in the delivery of essential public services and health infrastructure.

3. Methodology

3.1 Research Design

The study utilized a descriptive and correlational research design to examine management behaviors at the Zaria Court Project. Quantitative approaches were applied to analyze numerical data gathered through structured scales, while qualitative techniques provided depth regarding the practical challenges faced by site supervisors. This design allowed the researcher to describe the current state of planning and resource practices while identifying the strength of their relationship with project success. The correlation aspect specifically measured how changes in risk management or evaluation practices influence the overall performance of the sports facility.

3.2 Target Population

The study population consisted of 227 individuals directly involved in the execution and oversight of the Zaria Court Project in City of Kigali. Participants were categorized into distinct groups, including project managers, technical engineers, specialized contractors, and local government representatives.

3.3 Sampling and Sample Size

The sample size for this study was determined using Slovin's Formula to maintain a 5% margin of error.

The resulting sample size of 145 participants were distributed proportionally across the population categories to ensure fair representation. Proportional allocation allowed the researcher to maintain the original weight of each professional group within the final sample. This systematic approach ensures that the views of project managers and site engineers are captured in a balanced manner relative to their presence in the population.

The research employed stratified sampling to categorize the Zaria Court population into groups based on their specific professional roles. Simple random sampling was then used within each stratum to select the specific individuals who received the research instruments. This two-stage approach ensured that technical personnel and administrative staff are represented in the final data according to their importance to the project. The combination of these techniques maximized the accuracy of the findings regarding how different departments perceive management practices.

3.4 Data Collection Instruments and Procedures

The study reviewed project charters, progress reports, and budget statements associated with the Zaria Court Project as part of the data collection procedure. The researcher examined these official records to establish a factual timeline of the project's planning and execution phases. These documents served as a baseline for cross-referencing the primary data collected from the project stakeholders. This procedure enhanced the technical validity of the research by providing verified evidence of management practices.

The researcher distributed structured questionnaires to 145 selected respondents at the Zaria Court Project site. These questionnaires used a five-point Likert scale to measure the effectiveness of project planning and resource allocation. Each respondent received a clear set of instructions to ensure that the data collection process remains uniform across different departments. The study analyzed the resulting numerical data to determine the statistical relationship between management practices and project success.

3.5 Data Analysis

The descriptive analysis utilized a five-point Likert scale to quantify the levels of agreement among respondents regarding project management practices at Zaria Court. Mean

scores were categorized into ranges where values from 1.0 to 1.8 represent strong disagreement and scores from 4.2 to 5.0 signify strong agreement with the management indicators. Standard deviation was used to determine the consistency of the responses and the degree of variance from the calculated mean for each variable. A standard deviation value below 1.0 indicated a homogeneous response pattern, whereas a value above 1.0 signified a heterogeneous distribution of views among the participants (Pallant, 2023).

Inferential analysis was conducted to test the research hypotheses and establish the statistical significance of the relationships between management disciplines and project success. Bivariate analysis through Pearson's Correlation measured the strength and direction of the linear relationship between planning, resources, risk, and evaluation variables. Multiple regression analysis was applied to determine the extent to which these independent variables collectively predict the success of the Zaria Court Project. All statistical conclusions were based on a p-value of 0.05 to ensure that the findings are verified and not a result of random occurrence (Field, 2022).

3.6 Ethical Considerations

The researcher obtained official authorization from the management of the Zaria Court Project before entering the construction premises for data collection. Every respondent received a clear explanation of the research purpose and signed a consent form before participating in the survey or interview. The study ensured that all information gathered from the site is stored securely and used exclusively for academic research purposes. No personal names or identifiable details of the respondents were included in the final report to protect their professional standing within the organization. Participants were informed that they have the right to withdraw from the study at any point without facing any negative consequences or professional pressure.

4. Results and Discussions

4.1 Response Rate

The findings in Table 1 indicate the response rate from the distributed questionnaires to the targeted stakeholders. Specifically, 91.7% of the instruments were completely filled and returned, making a solid foundation for analysis. On the contrary, 8.3% were not returned or remained incomplete. This minor unreturned fraction could be attributed to the extremely busy schedules of site engineers during peak construction hours, or participants being unexpectedly out of the office during the data collection period.

Table 1: Response Rate

Response category	Frequency	Percent
Returned complete questionnaires	133	91.7
Not returned/incomplete	12	8.3
Total	145	100.0

Source: Primary data, July 2026

4.1.1 Project Planning Practices and Project Success

The findings in Table 2 showed that project planning practices were positively associated with the success of the Zaria Court Project. Respondents reported a high overall level of project planning practices ($M = 4.122$, $SD = 0.455$), with Scope Documentation recording the highest mean ($M =$

4.248). Pearson correlation analysis showed a strong positive and statistically significant relationship between project planning practices and project success ($r = 0.861$, $p = 0.000$). Multiple regression further demonstrated that project planning practices had a significant positive contribution to project success ($\beta = 0.388$, $B = 0.410$, $t = 5.775$, $p = 0.000$).

Table 2: Descriptive Statistics on Project Planning Practices

Statement	N	Mean	Std. Deviation
Goal Formulation was clearly done to guide the implementation of the Zaria Court Project in Kigali City, Rwanda.	133	4.150	.500
Timeline Scheduling was properly prepared to support timely completion of activities under the Zaria Court Project.	133	3.857	.351
Stakeholder Consultation was conducted to involve relevant actors in the planning of the Zaria Court Project.	133	4.195	.499
Scope Documentation was clearly prepared to define the expected works and deliverables of the Zaria Court Project.	133	4.248	.434
Cost Estimating was properly conducted to guide budgeting and financial planning of the Zaria Court Project.	133	4.158	.490
Overall	133	4.122	.455

Source: Primary data, July 2026

The findings in Table 2 indicate that respondents consented to the statement that Goal Formulation was clearly done to guide the implementation of the Zaria Court Project in Kigali City, Rwanda. The mean score of 4.150 shows high mean indicates strong positive agreement among respondents, while the standard deviation of 0.500 indicates homogeneous responses among respondents. This suggests that the statement provides meaningful evidence for explaining Project Planning Practices.

Respondents gave positive views on the statement that Timeline Scheduling was properly prepared to support timely completion of activities under the Zaria Court Project. The mean score of 3.857 reflects high mean indicates strong positive agreement among respondents, and the

standard deviation of 0.351 shows homogeneous responses. This means that the item was useful in showing how respondents perceived Project Planning Practices.

The statement that Stakeholder Consultation was conducted to involve relevant actors in the planning of the Zaria Court Project was positively rated by respondents. The mean score of 4.195 demonstrates high mean indicates strong positive agreement among respondents. The standard deviation of 0.499 indicates homogeneous responses, meaning that respondents' views showed the required level of consistency for interpreting Project Planning Practices.

The results show that respondents supported the statement that Scope Documentation was clearly prepared to define the expected work and deliverables of the Zaria Court Project. The mean score of 4.248 highlights very high mean

indicates strong positive agreement among respondents, while the standard deviation of 0.434 shows homogeneous responses. This implies that the statement captured an important aspect of Project Planning Practices.

In relation to the statement that Cost Estimating was properly conducted to guide budgeting and financial planning of the Zaria Court Project, respondents expressed high mean indicates strong positive agreement among respondents. This is confirmed by the mean score of 4.158. The standard deviation of 0.490 shows homogeneous responses, which strengthens the interpretation of respondents' views on Project Planning Practices.

The findings indicate that respondents consented to project Planning Practices. The overall $M = 4.122$ shows high mean indicates strong positive agreement among respondents, while $SD = 0.455$ indicates homogeneous responses among respondents.

Nguyen (2022) found that early-stage planning improves urban infrastructure success by reducing rework through rigorous scope definition. This supports the current findings because scope documentation, goal formulation, timeline scheduling, stakeholder consultation, and cost estimating were positively rated in the Zaria Court Project.

In the same direction, Muszyńska (2022) reported that integrated planning frameworks improve stakeholder expectations in multidisciplinary projects. This aligns well with the findings because stakeholder consultation and structured planning strengthened transparency, coordination, and smoother execution.

Together, the findings resonate with Theory of Change (Weiss, 1995), which explains that clear pathways from inputs to outcomes guide project success. Therefore, planning practices supported the Zaria Court Project by linking planned activities with expected infrastructure results.

4.1.2 Resource Management Practices and Project Success

The findings in Table 3 indicate that resource management practices were positively associated with the success of the Zaria Court Project. The overall mean for resource management practices was 4.110 ($SD = 0.454$), indicating a high level of resource management practices, with Skills Matching recording the highest mean ($M = 4.278$). Pearson correlation analysis showed a strong positive and statistically significant relationship between resource management practices and project success ($r = 0.812$, $p = 0.000$). In the multiple regression model, resource management practices had a significant positive contribution to project success ($\beta = 0.203$, $B = 0.197$, $t = 3.127$, $p = 0.002$).

Table 3: Descriptive Statistics on Resource Management Practices

Statement	N	Mean	Std. Deviation
Staff Hiring was properly conducted to ensure availability of competent personnel for the Zaria Court Project.	133	4.158	.490
Material Sourcing was effectively managed to ensure timely availability of construction materials for the Zaria Court Project.	133	3.820	.386
Fund Allocation was properly done to support implementation of planned activities under the Zaria Court Project.	133	4.143	.446
Skills Matching was considered to assign qualified workers to appropriate tasks in the Zaria Court Project.	133	4.278	.450
Inventory Tracking was regularly conducted to control materials and equipment used in the Zaria Court Project.	133	4.150	.500
Overall	133	4.110	.454

Source: Primary data, July 2026

Respondents positively rated the statement in Table 3 that Staff Hiring was properly conducted to ensure availability of competent personnel for the Zaria Court Project. $M = 4.158$ reflects high mean indicates strong positive agreement among respondents, and $SD = 0.490$ shows homogeneous responses. This means that the item provided relevant evidence for understanding Resource Management Practices.

The statement that Material Sourcing was effectively managed to ensure timely availability of construction materials for the Zaria Court Project recorded positive responses from respondents. $M = 3.820$ demonstrates high mean indicates strong positive agreement among respondents. $SD = 0.386$ indicates homogeneous responses, showing that the responses were useful for interpreting Resource Management Practices.

For the statement that Fund Allocation was properly done to support implementation of planned activities under the Zaria Court Project, respondents showed high mean indicates strong positive agreement among respondents. This is supported by $M = 4.143$. $SD = 0.446$ shows homogeneous responses, confirming the level of response consistency in explaining Resource Management Practices.

The results for the statement that Skills Matching was considered to assign qualified workers to appropriate tasks in the Zaria Court Project were positive. $M = 4.278$ shows very high mean indicates strong positive agreement among respondents, and $SD = 0.450$ indicates homogeneous responses. This suggests that the statement contributed to the measurement of Resource Management Practices.

The findings indicate that respondents consented to the statement that Inventory Tracking was regularly conducted to control materials and equipment used in the Zaria Court Project. The descriptive values (mean score = 4.150; standard deviation = 0.500) show high mean indicates strong positive agreement among respondents with homogeneous responses. This suggests that the statement provided meaningful evidence for explaining Resource Management Practices.

Resource Management Practices received positive responses from respondents. The overall (Mean score = 4.110; standard deviation = 0.454) indicates high mean indicates strong positive agreement among respondents and homogeneous responses.

Al-Nasseri (2022) found that optimized labor scheduling improves productivity and reduces project costs. This supports the current findings because staff hiring, material sourcing, fund allocation, skills matching, and inventory tracking were positively rated in the Zaria Court Project.

Similarly, Olurominiyi (2022) showed that lack of skilled supervisors increases delays and material waste in public construction projects. This aligns well with the findings because effective staffing and inventory control helped reduce resource gaps and support implementation quality.

The findings also resonate with the Resource-Based View (Wernerfelt, 1984), which explains that valuable internal resources improve performance when properly deployed. Therefore, resource management supported project success through effective use of skilled labor, materials, funds, and technical capacity.

4.1.3 Risk Management Practices and Project Success

The findings in Table 4 indicate that risk management practices were positively associated with the success of the Zaria Court Project. The overall mean for risk management practices was 4.144 ($SD = 0.456$), indicating a high level of risk management practices, with Response Testing recording the highest mean ($M = 4.323$). Pearson correlation analysis showed a strong positive and statistically significant relationship between risk management practices and project success ($r = 0.828$, $p = 0.000$). Regression analysis further showed that risk management practices had a significant positive contribution to project success ($\beta = 0.157$, $B = 0.136$, $t = 2.194$, $p = 0.031$).

Table 4: Descriptive Statistics on Risk Management Practices

Statement	N	Mean	Std. Deviation
Risk identification was conducted to recognize possible challenges affecting the Zaria Court Project.	133	4.195	.499
Risk assessment was carried out to determine the likelihood and effect of risks on the Zaria Court Project.	133	3.880	.327
Risk mitigation measures were applied to reduce the effects of risks on the Zaria Court Project.	133	4.158	.490
Response Testing was conducted to check whether planned risk responses were suitable for the Zaria Court Project.	133	4.323	.470
Risk monitoring was regularly conducted to follow up risks during the implementation of the Zaria Court Project.	133	4.165	.495
Overall	133	4.144	.456

Source: Primary data, July 2026

Respondents showed positive views on the statement in Table 4 that Risk identification was conducted to recognize possible challenges affecting the Zaria Court Project. (Mean score = 4.195; standard deviation = 0.499) confirms high mean indicates strong positive agreement among respondents with homogeneous responses. This indicates that

the statement was useful in interpreting Risk Management Practices.

The statement that Risk assessment was carried out to determine the likelihood and effect of risks on the Zaria Court Project was supported by respondents. The interpretation values (mean score = 3.880; standard deviation = 0.327)

show high mean indicates strong positive agreement among respondents and homogeneous responses. This strengthens the explanation of Risk Management Practices.

The results show that respondents agreed with the statement that Risk mitigation measures were applied to reduce the effects of risks on the Zaria Court Project. (Mean score = 4.158; standard deviation = 0.490) reflects high mean indicates strong positive agreement among respondents with homogeneous responses. This suggests that the item had value in measuring Risk Management Practices.

The findings indicate that respondents consented to the statement that Response Testing was conducted to check whether planned risk responses were suitable for the Zaria Court Project (M = 4.323; SD = 0.470). M shows very high mean indicates strong positive agreement among respondents, while SD indicates homogeneous responses. This suggests that the result supports the interpretation of Risk Management Practices.

The statement that Risk monitoring was regularly conducted to follow up risks during the implementation of the Zaria Court Project recorded positive descriptive results (M = 4.165; SD = 0.495). M reflects high mean indicates strong positive agreement among respondents, and SD shows homogeneous responses. This means that the item provided useful evidence for explaining Risk Management Practices.

Overall, respondents positively rated Risk Management Practices (M = 4.144; SD = 0.456). These values show high mean indicates strong positive agreement among respondents with homogeneous responses.

Wu (2023) found that proactive risk identification reduces technical disruptions in large infrastructure projects. This supports the current findings because risk identification, assessment, mitigation, response testing, and monitoring were positively rated in the Zaria Court Project.

Building on this, Adeyemo (2022) reported that formal risk registers reduce financial losses in construction firms. This aligns well with the findings because systematic risk monitoring helped protect the project from cost increases, safety threats, and implementation disruptions.

The findings further resonate with Agency Theory (Jensen and Meckling, 1976), which explains that monitoring and control mechanisms reduce opportunistic behavior and project uncertainty. Therefore, risk management strengthened project success by protecting budget, safety, and delivery standards.

4.1.4 Monitoring and Evaluation Practices and Project Success

The findings in Table 5 reveal that monitoring and evaluation practices were positively associated with the success of the Zaria Court Project. Monitoring and evaluation practices recorded an overall mean of 4.137 (SD = 0.462), indicating a high level of monitoring and evaluation practices, with Feedback Collection recording the highest mean (M = 4.353). Pearson correlation analysis showed a strong positive and statistically significant relationship between monitoring and evaluation practices and project success ($r = 0.815$, $p = 0.000$). Regression analysis showed a statistically significant positive contribution to project success ($\beta = 0.254$, $B = 0.280$, $t = 4.118$, $p = 0.000$).

Table 5: Descriptive Statistics on Monitoring and Evaluation Practices

Statement	N	Mean	Std. Deviation
Activity Monitoring was regularly conducted to track implementation of the Zaria Court Project.	133	4.143	.463
Quality Checking was carried out to ensure that works under the Zaria Court Project met required standards.	133	3.842	.366
Progress Reporting was regularly done to communicate the implementation status of the Zaria Court Project.	133	4.150	.500
Feedback Collection was conducted to obtain views from relevant stakeholders of the Zaria Court Project.	133	4.353	.480
Performance Review was conducted to assess achievements and areas for improvement in the Zaria Court Project.	133	4.195	.499
Overall	133	4.137	.462

Source: Primary data, July 2026

The findings in Table 5 indicate that respondents consented to the statement that Activity Monitoring was regularly conducted to track implementation of the Zaria Court Project. The mean score of 4.143 shows high mean indicates strong positive agreement among respondents, while the

standard deviation of 0.463 indicates homogeneous responses among respondents. This suggests that the statement provides meaningful evidence for explaining Monitoring and Evaluation Practices.

Respondents gave positive views on the statement that Quality Checking was carried out to ensure that works under the Zaria Court Project met required standards. The mean score of 3.842 reflects high mean indicates strong positive agreement among respondents, and the standard deviation of 0.366 shows homogeneous responses. This means that the item was useful in showing how respondents perceived Monitoring and Evaluation Practices.

The statement that Progress Reporting was regularly done to communicate the implementation status of the Zaria Court Project was positively rated by respondents. The mean score of 4.150 demonstrates high mean indicates strong positive agreement among respondents. The standard deviation of 0.500 indicates homogeneous responses, meaning that respondents' views showed the required level of consistency for interpreting Monitoring and Evaluation Practices.

The results for the statement that Feedback Collection was conducted to obtain views from relevant stakeholders of the Zaria Court Project were positive. $M = 4.353$ shows very high mean indicates strong positive agreement among respondents, and $SD = 0.480$ indicates homogeneous responses. This suggests that the statement contributed to the measurement of Monitoring and Evaluation Practices.

The findings indicate that respondents consented to the statement that Performance Review was conducted to assess achievements and areas for improvement in the Zaria Court Project. The descriptive values (mean score = 4.195; standard deviation = 0.499) show high mean indicates strong positive agreement among respondents with homogeneous responses. This suggests that the statement provided meaningful evidence for explaining Monitoring and Evaluation Practices.

Monitoring and Evaluation Practices received positive responses from respondents. Overall Mean score = 4.137; standard deviation = 0.462 indicates high mean indicates strong positive agreement among respondents and homogeneous responses.

Siddiqui (2022) found that frequent monitoring and real-time data analysis improve project efficiency and reduce misuse of funds. This supports the current findings because activity monitoring, quality checking, progress reporting, feedback collection, and performance review were positively rated.

In addition, Amoatey (2022) showed that evaluation feedback loops improve adherence to infrastructure quality standards. This aligns well with the findings because regular reviews and stakeholder feedback helped verify whether project activities met technical and public expectations.

The findings also resonate with Stakeholder Theory (Freeman, 1984), which emphasizes balancing the interests of affected parties. Therefore, monitoring and evaluation supported success by improving accountability, feedback use,

quality control, and stakeholder-responsive project delivery.

5. Conclusions and Recommendations

5.1 Conclusion

The study concluded that the success of the Zaria Court Project depended on the coordinated application of project planning, resource management, risk management, and monitoring and evaluation practices. However, the issues identified in timeline scheduling, material availability, risk preparedness, quality control, and progress communication require continued attention. Addressing these areas would support timely completion, efficient resource use, technical safety, stakeholder confidence, and sustainable use of the sports facility.

5.2 Recommendations

The section below describes the recommendations of the study based on research findings:

1. The Ministry of Sports should require integrated digital scheduling and progress-monitoring systems in major sports infrastructure projects. This requirement would improve coordination among multiple contractors, support timely mobilisation, and enable early identification of implementation delays.
2. Project management should maintain an updated risk register, continuous hazard identification, and a digital reporting dashboard covering schedules, quality checks, emerging risks, and corrective actions. This would support prompt decisions, transparent communication, and timely response to implementation challenges.
3. Project owners should ensure the timely release of approved funds and support diversified local and regional supply arrangements for critical construction materials. This would limit procurement interruptions and reduce exposure to international shipping delays and sudden price fluctuations.

References

- Adeyemo, O. (2022). Risk management practices and the performance of construction firms in Nigeria. *Journal of Construction in Developing Countries*, 27(1), 45–63.
- Ajadi, M. T., Ibraheem, T. O., & Ajadi, A. W. (2023). Perceived influence of management practices on sports development: A case study of Kwara State Sports Commission, Nigeria. *Scope Journal*, 47(6), 28–35.

- Al-Nasseri, H. (2022). Resource management in oil and gas projects: A study of efficiency and productivity in Oman. *International Journal of Energy Economics and Policy*, 12(3), 88–97.
- Amanya, F. S., & Njenga, G. (2022). Construction delays and project cost overrun: A case of Regional Cybercrime Center in Gasabo District, Rwanda. *Journal of Entrepreneurship & Project Management*, 6(1), 34–52.
- Amoatey, C. T. (2022). The role of monitoring and evaluation in the delivery of infrastructure projects in Ghana. *Journal of Public Procurement*, 22(2), 120–138.
- Field, A. (2022). *Discovering statistics using IBM SPSS statistics*. Sage Publications.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.
- Gatsinzi, J., & Kamande, P. (2023). Project management practices and performance of construction projects: A case of Kigali Golf Club and Kigali Arena stadium projects under supervision of Rwanda Housing Authority. *Journal of Entrepreneurship & Project Management*, 7(11), 59–71.
- Habimana, J. P. (2022). Financial management and the success of agricultural projects in Rwanda. *Journal of Agricultural Science and Practice*, 7(3), 45–59.
- Hakizimana, E. (2022). Planning and implementation of energy access projects: Evidence from Rwanda Energy Group. *Journal of Energy and Natural Resources*, 11(1), 5–18.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Kendrick, T. (2024). *Identifying and managing project risk: Essential tools for failure-proofing your project*. Amacom.
- Khan, S., Ahmed, R., & Khan, N. (2024). Project success and critical success factors of construction projects from the perspective of a multicultural team. *Journal of Construction Innovation*, 15(2), 1–20.
- Mayne, J. (2022). The theory of change approach to evaluation. In *The Sage handbook of evaluation*. Sage Publications.
- Mbanzabugabo, J. B., & Mulyungi, P. (2025). Project managers' leadership styles, resource allocation and completion of Amahoro Stadium renovation project. *International Journal of Entrepreneurship and Project Management*, 10(1), 1–15.
- Meghji, Z. (2024). *2022 FIFA World Cup: Economic impact on Qatar and regional spillovers*. IMF Regional Economic Outlook.
- Munganyinka, A. (2024). Local sourcing of materials and affordable housing success in Rwanda. *International Journal of Housing Markets and Analysis*, 17(1), 12–30.
- Muszyńska, K. (2022). Integrated planning and project performance in the European digital economy. *Procedia Computer Science*, 196, 450–458.
- Mutuku, J. M. (2022). Influence of project planning on the completion of road projects in Kenya. *International Journal of Project Management*, 40(2), 115–128.
- Mwanza, W. P. (2026). *Project management practices and performance of building construction projects in Kakamega County in Kenya*. JKUAT Institutional Repository.
- Ndungutse, A. (2023). Cybersecurity risk management and digital transformation in Rwanda's banking sector. *African Journal of Information Systems*, 15(2), 1–18.
- Nguyen, L. D. (2022). Planning rigor and quality in Vietnamese urban infrastructure projects. *Journal of Management in Engineering*, 38(4), 04022025.
- Olurominiyi, O. (2022). Resource management challenges in Nigerian public construction projects. *Journal of Engineering, Design and Technology*, 20(1), 56–74.
- Pallant, J. (2023). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. Routledge.
- Patton, M. Q. (2024). *Utilization-focused evaluation*. Sage Publications.
- Pinto, J. K. (2023). *Project management: Achieving competitive advantage*. Pearson.
- Siddiqui, A. W. (2022). Monitoring and evaluation in Pakistan's public sector: A study of efficiency and transparency. *International Journal of Public Administration*, 45(5), 389–405.

- Umugwaneza, A. (2022). Data-driven monitoring and the performance of health projects in Rwanda. *Rwanda Journal of Medicine and Health Sciences*, 5(1), 67–82.
- Umurangamirwa, S., & Bazimya, A. (2025). Effect of project delays on performance of construction projects in Rwanda, Gasabo District: A case of Zaria Court Project by Real Contractors Ltd. *Journal of Research Innovation and Implications in Education*, 9(2), 865–872.
- Uwayisenga, D. (2023). Scope definition and budget performance in Rwanda's construction industry. *International Journal of Construction Management*, 23(4), 610–625.
- Weiss, C. H. (1995). Nothing as practical as a good theory: Exploring theory-based evaluation for comprehensive community initiatives for children and families. *New Approaches to Evaluating Community Initiatives*, 1, 65–92.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180.
- Wu, Y. (2023). Risk management in high-speed rail projects: The Chinese experience. *Transport Policy*, 130, 112–125.