

Internal Control System and Project Performance: A Case of Social Housing Project Supported By Bank of Kigali in Gasabo District, Rwanda

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Abstract: This study explores the effectiveness of internal control systems in improving the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda. Specifically, it attempted to examine the effect of control environment, risk assessment, information and communication, and to evaluate the effect of monitoring on the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda. The research is grounded in agency theory, institutional theory and contingency theory. The study was grounded in agency theory, institutional theory, and contingency theory. A descriptive and correlational research design using a mixed-methods approach were employed to collect quantitative and qualitative data. The target population included 3,487 stakeholders such as project managers, team members, contractors, Bank of Kigali representatives, local government officials, and community beneficiaries. A sample of 359 respondents was selected through stratified random and purposive sampling. Data collection involved structured questionnaires and semi-structured interviews, with instrument validity confirmed through expert review and pilot testing, and reliability assessed using Cronbach's alpha coefficient. The descriptive statistics indicated that respondents generally agreed that the Social Housing Project had a strong control environment, with clearly defined roles and responsibilities ($M = 4.15$, $SD = 0.989$), management regularly updated the accountability structure ($M = 4.35$, $SD = 0.845$), internal audits were effective ($M = 4.40$, $SD = 0.904$), and employees received training on ethical standards ($M = 4.33$, $SD = 0.977$), although timely communication of audit findings was weak ($M = 1.48$, $SD = 0.686$). For risk assessment, respondents agreed that risks were regularly identified ($M = 4.40$, $SD = 0.867$) and assessed based on likelihood and impact ($M = 4.58$, $SD = 0.709$), but development of mitigation plans was low ($M = 1.41$, $SD = 0.880$). Information and communication were generally strong, with timely sharing of information ($M = 4.42$, $SD = 0.965$) and accurate record-keeping ($M = 4.31$, $SD = 0.690$), although staff access to necessary information was limited ($M = 1.53$, $SD = 0.050$). Monitoring showed high supervisory reviews ($M = 4.50$, $SD = 0.731$) and audit reliability ($M = 4.35$, $SD = 0.953$), but internal audit independence was low ($M = 2.33$, $SD = 0.466$). Regression analysis showed that the internal control components explained 73.4% of the variation in project performance ($R^2 = 0.734$). ANOVA results were significant ($F = 209.935$, $p < 0.001$), confirming the model's fit. Coefficient results indicated that control environment ($\beta = 0.487$, $p < 0.001$) and information and communication ($\beta = 0.361$, $p < 0.001$) significantly influenced project performance, while risk assessment ($\beta = 0.097$, $p = 0.061$) and monitoring ($\beta = 0.086$, $p = 0.419$) were not significant predictors. The study concluded that a strong control environment and effective information and communication enhanced the performance of the Social Housing Project, whereas weaknesses in risk mitigation and audit follow-up limited overall effectiveness. It was recommended that the project management strengthen follow-up mechanisms for audit findings, implement risk mitigation plans consistently, and ensure that critical information reaches all staff promptly.

Keywords: internal control system, control system, project performance, social housing, internal control.

1. INTRODUCTION

Infrastructure and social development projects, particularly large-scale investments such as housing, are expected to operate under well-established internal control systems (ICS). These systems are critical for promoting transparency, efficiency, accountability, and compliance with financial and operational standards (World Bank, 2021). When implemented

effectively, internal controls help ensure timely project completion, responsible use of resources, and prevention of fraud and errors. Globally, robust internal control frameworks are often associated with improved project outcomes and enhanced public trust, particularly in projects funded by banks or international donors (OECD, 2022).

In the case of the social housing project supported by the Bank of Kigali in Gasabo District, several challenges have raised concerns regarding the effectiveness of the internal control systems in place. While mechanisms such as financial reporting, procurement procedures, and audits have been introduced, their practical implementation has faced multiple obstacles. Procurement delays, weak coordination among stakeholders, inadequate tracking of funds, and untimely audits have contributed to cost overruns and slow project progress. In some instances, vulnerable households have been displaced without timely relocation, undermining the project's social objectives. Furthermore, limited staff capacity and unclear accountability structures have complicated efforts to deliver the project efficiently (Rwanda Housing Authority, 2024; Transparency Rwanda, 2023).

Previous studies underscore the link between strong internal controls and successful project implementation. For instance, Wamalwa and Mugambi (2020) found that poor internal controls contributed to the failure of public housing projects in Nairobi. Abebe and Mulugeta (2021) identified audit shortcomings as a major cause of delays in Ethiopian urban development projects. Nabwire et al. (2022) highlighted that weak procurement controls led to inflated costs in World Bank-funded Ugandan projects. Similarly, Msuya and Kessy (2023) emphasized that inadequate risk assessment and monitoring reduced the effectiveness of housing projects in Tanzania. In Rwanda, Mukamana (2023) reported persistent weaknesses in enforcing internal controls at the district level, despite national improvements in financial systems.

Despite the increasing number of housing projects and ongoing public financial management reforms in Rwanda, limited empirical research exists on how internal control systems affect the performance of housing projects supported by financial institutions. This lack of localized evidence presents a significant research gap for stakeholders seeking to strengthen project management and accountability mechanisms. Without a clear understanding of how ICS influence project outcomes in the Rwandan context, efforts to improve project delivery may be insufficient. Therefore, this paper evaluates the effectiveness of internal control systems on the performance of the Bank of Kigali-supported Social Housing Project in Gasabo District, aiming to provide actionable insights for improving project efficiency, accountability, and social impact.

1.1 Purpose of the paper

To assess the effectiveness of internal control systems on project performance. A case of the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda.

1.2 Objective of the paper

- a) To assess the effect of control environment on the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda.
- b) To examine the effect of risk assessment on the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda.
- c) To effect of information and communication on the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda.
- d) To evaluate the effect of monitoring on the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda.

2. LITERATURE REVIEW

2.1 Literature Review

This section provides a review of the empirical studies on internal control mechanisms and their effect on project performance. These studies highlight key components such as the control environment, risk assessment, information and communication, and monitoring activities, which play significant roles in determining the success of projects across different regions and sectors. The literature primarily focuses on large-scale infrastructure projects, with notable research conducted in developed countries. However, there is limited exploration of how these control systems are applied in smaller-scale or developing country contexts, particularly in sectors like housing, where the challenges and constraints differ significantly. By examining studies conducted globally, in developed nations, Sub-Saharan Africa, East Africa, and Rwanda, this section aims to identify the strengths and gaps in the existing literature.

2.1.1. Control Environment and Project Performance

Globally, the control environment has been identified as a key determinant of project success, particularly in terms of managing budget and financial performance. A comprehensive study by Flyvbjerg et al. (2023) on large-scale infrastructure projects across various countries indicated that budget overruns were prevalent in over 90% of the projects surveyed. The study emphasized the importance of a strong control environment, which includes effective internal controls for budget monitoring, cash flow tracking, and financial reporting. The research argued that when projects lack a solid control framework, they are more susceptible to cost inflation, resource misallocation, and delays. While this global study provided valuable insights, it did not explore the nuances of regional economic conditions and how these factors might affect the control environment in smaller, developing projects or those in low-income regions.

In developed countries, a strong control environment is generally considered essential for successful project management, particularly in mitigating financial risks. A study by Morris and Hough (2022) on public infrastructure projects in the United Kingdom found that projects with well-established internal control systems, which included regular budget monitoring and forecasting, experienced a reduction in budget overruns by 15-20%. Their research concluded that sophisticated project management tools, along with the commitment of management to uphold internal controls, were fundamental in keeping projects within budget. However, the study's focus on Western economies left a gap in understanding how similar systems could be adapted to developing countries with fewer resources and less advanced financial management infrastructure, making it unclear whether such advanced controls could be practically applied to smaller-scale or public sector projects in lower-income settings.

In Sub-Saharan Africa, budget monitoring and the overall control environment in infrastructure projects are key challenges. A study by Nyang'oro et al. (2022) in Kenya, which looked at road infrastructure projects, found that insufficient budget control led to frequent cost overruns, driven by fluctuating material costs, procurement inefficiencies, and poor project planning. The study emphasized that an effective control environment characterized by strong leadership, staff training, and proper budgeting practices was vital to managing resources efficiently and ensuring projects remained within budget. However, Nyang'oro et al.'s research was limited to road infrastructure and did not assess how control environments might differ for other types of projects such as housing, water, or energy infrastructure. This gap is crucial for projects like the Social Housing Project in Gasabo District, where managing both financial and social impacts is paramount.

In East Africa, particularly in countries like Tanzania, budget monitoring systems have shown positive results in curbing financial inefficiencies in urban infrastructure projects. Mwandosya (2022) found that in several Tanzanian urban infrastructure initiatives, poor budget monitoring led to delays and cost overruns. However, when monitoring systems were properly implemented, financial discrepancies were significantly reduced, and projects were completed on time. Mwandosya's study highlighted the necessity of clear financial oversight and the role of internal controls in ensuring project timelines were met. However, the research was focused exclusively on urban infrastructure, without considering the unique challenges faced by rural or mixed projects, which could offer valuable insights into the control environment of diverse infrastructure sectors. This limitation points to the need for further exploration of financial oversight in different types of infrastructure projects across East Africa (Mwandosya, 2022).

In Rwanda, the Kigali Infrastructure Project (KIP) has been an important example of how budget monitoring and internal controls can contribute to project success. Niyonsenga et al. (2021) examined the financial monitoring systems employed in KIP in Nyarugenge District and found that continuous budget monitoring helped the project stay on track despite challenges such as rising material costs and labor shortages. The study highlighted the role of strong internal controls in reducing financial overruns and ensuring that resources were allocated efficiently. Furthermore, it noted that project delays, rather than initial budget estimates, were often the root cause of cost deviations, underscoring the need for effective time management as part of the overall control environment. However, the study did not account for external factors such as inflation or policy changes, which could have a long-term impact on financial outcomes. This gap is significant for the Social Housing Project in Gasabo District, where similar financial challenges are likely to arise (Niyonsenga et al., 2021).

2.1.2. Risk assessment and Project Performance

Globally, risk assessment is widely acknowledged as a fundamental aspect of successful project management. It plays a crucial role in identifying, analyzing, and mitigating potential threats that could derail project objectives. According to Beck et al. (2024), infrastructure projects that incorporate structured risk assessment frameworks from the planning phase

experience, on average, 30% fewer delays and 25% fewer budget overruns. Similarly, Chen and Wilson (2023) emphasize that timely identification of financial, operational, and compliance risks enables project managers to proactively design mitigation strategies. However, these studies mostly focus on large-scale infrastructure projects in stable environments, making their findings less applicable to socially oriented or region-specific projects in developing contexts.

In developed countries, risk assessment is often integrated with sophisticated project management systems and digital forecasting tools. A study by Patel and Sharp (2023) on European public infrastructure projects found that real-time risk dashboards and predictive analytics significantly improved financial performance and delivery timelines. Their findings show that when risk assessment is embedded throughout the project lifecycle, from feasibility to closure, project teams can react quickly to emerging threats. Edwards (2022) further notes that strong governance structures in high-income nations support continuous risk monitoring and accountability. However, these contexts benefit from stronger institutional capacity and digital infrastructure, which may not reflect the realities of project management in low-income countries like Rwanda.

Across Sub-Saharan Africa, many infrastructure projects continue to suffer due to inadequate risk assessment and management. Ndungu et al. (2022) conducted a cross-national study on public works projects in Kenya, Ghana, and Nigeria, revealing that failure to assess procurement and contractor risks led to widespread cost escalations and project abandonment. The study pointed out that inconsistent stakeholder involvement and lack of formalized risk frameworks were common challenges. Similarly, Obeng (2021) highlighted that while governments are increasingly aware of the importance of risk management, practical implementation is often hampered by budget constraints and capacity gaps. These findings underscore the need for customized risk frameworks suited to local governance and market conditions.

In East Africa, there is growing recognition of risk assessment as a tool for improving project efficiency. Mwakyusa (2023), in a study of Tanzanian municipal infrastructure projects, found that projects with established risk registers and quarterly risk reviews reported fewer contract disputes and maintained better control over cost variations. Khatibu (2021) supported this by showing that donor-funded projects in Uganda and Ethiopia that adopted participatory risk management practices outperformed others in both timeliness and budget adherence. Nevertheless, both studies highlight a lack of emphasis on social development projects, such as affordable housing, where the complexity of social and environmental risks is often underestimated, leaving a gap in sector-specific research.

In Rwanda, the integration of risk assessment into public infrastructure projects is gradually improving, particularly with the growing involvement of financial institutions. Uwera et al. (2024) examined various urban development initiatives in Kigali and observed that proactive risk identification—especially related to contractor performance and inflation—helped projects remain within budget and on schedule. Habimana (2022) also noted that while risk awareness is increasing among project managers, there remains a need for systematic and institutionalized risk assessment practices, particularly in projects involving vulnerable populations. In the context of the Bank of Kigali-supported Social Housing Project in Gasabo District, effective risk assessment is essential to prevent procurement fraud, manage financial uncertainties, and ensure that resettled communities receive timely and quality housing. This reinforces the need for this study to evaluate how internal control systems, including risk assessment components, affect project performance in Rwanda's housing sector.

2.1.3. Information and communication and Project Performance

Globally, effective information and communication systems are widely acknowledged as critical to the success of infrastructure projects. A study by Alvarez and Martin (2024) found that international infrastructure projects that employed real-time information sharing and established clear communication pathways experienced 40% fewer delays and a 30% reduction in cost overruns. The study emphasized that projects lacking timely and transparent communication often struggle with misalignment among stakeholders, scope creep, and rework, which can result in significant delays and budget overruns. Information systems also ensure that corrective actions are taken quickly when discrepancies arise. The lack of standardized communication structures, however, is a major challenge in many regions, especially in low-resource countries, making the global findings less applicable to areas with weaker communication infrastructure.

In developed countries, advanced communication tools and platforms are commonplace in managing large-scale projects. According to a study by Fischer and Löhmann (2022), projects in Germany that utilized integrated digital dashboards linking project managers, contractors, financial officers, and auditors—had significantly more timely responses to emerging issues, reducing delays and financial discrepancies. Their research revealed that projects with well-defined communication protocols, real-time updates, and quick feedback loops between key stakeholders improved overall project timelines and

financial outcomes. Edwards (2023) added that in environments with strong institutional frameworks, decision-making processes are streamlined, ensuring more effective project execution. However, these systems depend on a technological and infrastructural base that is often lacking in developing economies, where technology access and digital literacy may be limited.

In Sub-Saharan Africa, the situation is more complex, as many projects continue to grapple with inadequate information and communication systems, leading to delays and financial mismanagement. A study by Mensah and Kamau (2022) across several countries, including Ghana, Uganda, and South Sudan, demonstrated that poor communication often resulted in misunderstandings between funding bodies, contractors, and project implementers. As a result, projects frequently suffered from delays, scope changes, and cost overruns. The absence of formal communication protocols and transparent information flow not only created operational inefficiencies but also strained relationships between stakeholders, causing friction and delays in decision-making. In addition, Adhiambo (2021) pointed out that in multi-agency projects, the lack of formalized communication systems created silos, making it difficult for agencies to align goals and track progress effectively. These inefficiencies often lead to a lack of accountability, delayed project timelines, and loss of stakeholder confidence.

In East Africa, efforts to enhance communication in infrastructure projects are gaining momentum. A study conducted by Otieno (2023) on Kenyan housing projects indicated that projects that implemented structured communication strategies such as regular project meetings, transparent progress reports, and the use of community liaisons were able to better meet their budgets and timelines. These communication strategies provided a platform for stakeholders to align on expectations, resolve issues promptly, and track progress effectively. Kitur (2022) highlighted similar findings in Tanzania, where clear communication between contractors, local authorities, and community stakeholders was critical in reducing delays and ensuring that resources were used effectively. However, these strategies were often more prevalent in urban infrastructure projects, and there remains a gap in understanding how these communication methods translate to rural or less urbanized contexts, which face different logistical and resource challenges. The research indicated that better information-sharing practices, including the use of online platforms and digital tools, could potentially improve the efficiency of infrastructure projects even further in the East African region.

In Rwanda, where infrastructure projects are central to national development, information and communication are becoming increasingly important. Uwizeyimana and Mugisha (2024) conducted a study on social infrastructure projects in Kigali, including housing developments, and found that projects with regular updates, open channels for feedback, and transparency in financial reporting had better project outcomes. These communication strategies helped reduce miscommunication between stakeholders and increased overall trust in the project's progress. However, the study also highlighted challenges such as delayed communication of project statuses, especially when information was not disseminated in real-time or when updates were unclear. In the context of the Bank of Kigali-supported Social Housing Project in Gasabo District, effective communication is crucial due to the involvement of multiple stakeholders: The Bank of Kigali, the local government, contractors, and the affected communities. Ensuring that information regarding budgetary allocation, project milestones, community concerns, and any delays is communicated clearly and promptly is essential for keeping the project on track.

2.1.4 Monitoring Activities and Project Performance

Globally, robust monitoring activities are recognized as essential to ensuring project success and safeguarding public investment. According to Grant and Zhao (2024), infrastructure projects that implement continuous monitoring mechanisms such as internal audits, performance dashboards, and milestone tracking report nearly 28% fewer delays and maintain closer adherence to budget targets. Their analysis showed that monitoring is not just a review function but a strategic tool for reinforcing accountability, enabling proactive problem resolution, and maintaining alignment with project objectives. However, most of these insights derive from large-scale projects in highly structured environments, which may limit applicability to smaller or resource-constrained settings.

In developed countries, monitoring is often integrated into digital project management systems. A German-based study by Bauer and Holzmann (2023) demonstrated that when project teams utilized real-time site tracking, financial controls, and automated audit alerts, deviations were detected within 48 hours, reducing cost overruns to under 6%. Edwards (2022) also confirms that standardized monitoring protocols and rigorous post-implementation audits contribute significantly to consistent quality and fiscal discipline. Still, such technologically advanced frameworks may not be easily adoptable in low-resource contexts where the necessary infrastructure and expertise are lacking.

In Sub-Saharan Africa, inadequate monitoring frameworks frequently undermine project performance despite strong initial planning. Ndwigwa et al. (2021) reviewed public sector projects in Kenya, Ghana, and Zimbabwe and found that nearly 60% lacked structured monitoring resulting in undetected errors, procurement discrepancies, and missed timelines. Similarly, Adongo (2020) highlighted that monitoring gaps in multi-agency infrastructure initiatives led to cascading inefficiencies, with issues like missing reports and delayed audits going unnoticed until late stages. These cases illustrate the importance of embedding routine control checks early in project cycles and ensuring audit functions are empowered with authority and resources.

In East Africa, efforts to strengthen monitoring have demonstrated positive impacts, particularly in urban development projects. Omari (2023) analyzed municipal infrastructure projects in Dar es Salaam and found that facilities with dedicated monitoring committees and regular inspections saw on-time delivery rates increase by 20%. Katungi (2022) further stated that external audits and community-based monitoring contributed to greater transparency and reduced risk of fraud in donor-funded projects. Yet, these studies also highlight that effectiveness depends on clear mandates, frequent site visits, and the independence of monitoring bodies—factors sometimes missing in larger rural or decentralized projects.

In Rwanda, both public agencies and financial institutions are increasingly emphasizing monitoring as part of project oversight. A study by Nyirahabimana (2024) on urban housing initiatives in Kigali demonstrated that projects with formal monitoring schedules—combining internal audits, progress reports, and beneficiary feedback achieved higher completion rates and fewer financial discrepancies. However, Karamaga (2022) noted that inconsistencies remain in how monitoring results are acted upon across agencies, with delays in implementing corrective measures. In the context of the Bank of Kigali-supported Social Housing Project in Gasabo District, effective monitoring is indispensable. Continuous financial audits, construction site inspections, and stakeholder feedback loops are needed to promptly identify irregularities, enforce compliance, and maintain trust. Properly implemented monitoring activities ensure accountability, deter cost overruns, and support timely delivery of quality housing.

2.2 Agency Theory

Agency Theory, first developed by Jensen and Meckling (1976), focuses on the relationship between principals and agents, where principals (such as the Bank of Kigali and government authorities) delegate tasks to agents (such as project managers and contractors). The theory posits that there is a potential for conflicts of interest between these parties due to differing goals and information asymmetry, which can lead to inefficiencies or misuse of resources (Henry, 2023). Agency Theory suggests that principals can mitigate these risks by implementing control mechanisms such as clear reporting, performance monitoring, and incentives aligned with project objectives. These mechanisms ensure that agents act in the best interest of the principals and reduce agency costs such as project delays, budget overruns, and quality issues (Terrance, 2024).

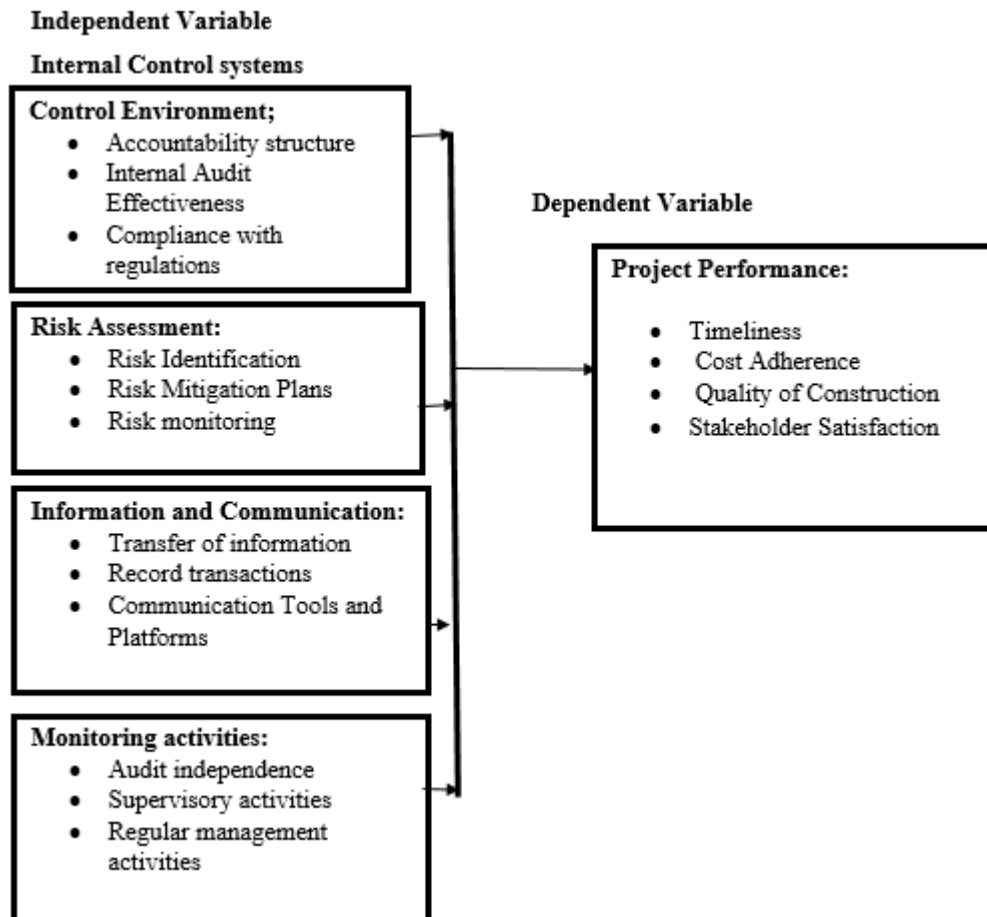
Agency Theory emphasizes the importance of oversight, transparency, and accountability in principal-agent relationships (Theobald, 2020). In the context of the control environment, this theory is highly relevant as it underscores the need for effective internal controls to mitigate the risks associated with information asymmetry and potential conflicts of interest between principals (such as the Bank of Kigali and government authorities) and agents (like project managers, contractors, and developers). By establishing clear financial reporting, budget monitoring, and regular audits, Agency Theory helps explain how these control mechanisms align the interests of all parties involved and ensure efficient use of resources, minimizing issues such as cost overruns, delays, or subpar performance.

For the Social Housing Project in Gasabo District, Agency Theory can provide insights into how the Bank of Kigali can oversee the actions of agents to ensure that project objectives, such as meeting budgetary constraints and maintaining quality, are met. Given the complexity of the project and the number of stakeholders involved, the theory can help evaluate how well-defined control systems, including accountability frameworks, incentivize agents to act in line with the Bank's interests. With an established control environment, this approach reduces the possibility of mismanagement or opportunistic behavior by agents, thus improving the project's overall performance and success.

Finally, Agency Theory highlights the significance of monitoring mechanisms in maintaining alignment between principals and agents. For the Social Housing Project, regular oversight and corrective measures, such as site inspections and progress reports, ensure that agents remain accountable. Applying this theory allows the study to evaluate how the Bank of Kigali can reduce the risk of project delays, cost overruns, and other inefficiencies by fostering a transparent and accountable control environment. By understanding how Agency Theory influences the control mechanisms within the project, the research can provide insights into improving project performance and ensuring alignment with the interests of all stakeholders involved.

2.3 Conceptual Framework

The conceptual framework provides a structured approach to understanding the key factors that influence the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District. It outlines the interrelationships between critical variables such as the control environment, risk assessment, information and communication, and monitoring, which collectively impact the project's success. By integrating relevant theories and concepts, this framework helps in evaluating how these factors contribute to the overall effectiveness and outcomes of the project.



Source: Researcher, 2025

Figure 1: Conceptual Framework

This figure illustrates the conceptual framework for assessing the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda. The independent variable, represented by Internal Control Systems, includes factors such as financial regulations, audit processes, budget monitoring, and compliance with standards. These elements are designed to ensure that resources are used efficiently and that the project's financial and operational activities are managed properly. The dependent variable, which is the performance of the Social Housing Project, is influenced by how effectively the internal control systems function. Strong internal controls are expected to enhance project performance, ensuring that objectives such as timely completion, cost management, and quality standards are met.

The internal control systems, as the independent variable, affect the dependent variable through various mechanisms. For instance, a well-established internal audit process helps detect discrepancies and inefficiencies, leading to corrective actions that improve project timelines and financial management. Similarly, effective budget monitoring ensures that resources are properly allocated, reducing the risk of cost overruns and delays. On the other hand, if the internal control systems are weak or poorly implemented, the project performance could suffer, resulting in issues such as scope creep, delays, or budget overruns.

This interaction between the independent and dependent variables highlights the importance of internal controls in achieving the desired outcomes for the Social Housing Project. The stronger the internal control systems, the better the project performance in terms of adherence to budget, timeline, and quality standards. Therefore, this framework provides a basis for evaluating how the effectiveness of internal controls can directly influence the success of infrastructure projects, particularly in low-resource settings like Rwanda.

3. RESEARCH METHODOLOGY

3.1 Research Design and Population

In this study, a combination of descriptive and correlational research designs were employed to assess how internal control systems, risk assessment, information and communication, and monitoring influence the performance of the Social Housing Project in Gasabo District, Rwanda. The descriptive design focused on mapping the current control environment, risk management practices, communication strategies, and monitoring activities within the project. It provided a comprehensive overview of how these elements are being implemented, their frequency, and the challenges faced by stakeholders involved in the project.

For this study, the target population comprises individuals directly involved in the implementation and management of the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda. This includes project managers, project team members, contractors, subcontractors, local government officials, and community representatives. Specifically, the target population includes 2 project managers, 9 project team members, 6 contractors and subcontractors, 2 local government officials, 6 representatives from the Bank of Kigali, and 3,462 community members and beneficiaries. These groups are critical as they are directly engaged in the design, execution, and oversight of the housing projects, making their perspectives vital for understanding the project's success factors and challenges. The inclusion of this diverse group allows for a comprehensive view of the project's internal control systems, risk assessment practices, information and communication strategies, and monitoring activities. The following table gives details:

Table 1: Table representing target population

Category	Total Population
Project Managers	2
Project Team Members	9
Contractors and Subcontractors	6
Local Government Officials (Gasabo)	2
Bank of Kigali Representatives	6
Community Representatives and Beneficiaries	3462
Total	3487

Source: Bank of Kigali Annual Report, 2024

This table presents the breakdown of the target population involved in the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda. The total population of interest consists of various stakeholders, including 2 project managers, 9 project team members, 6 contractors and subcontractors, 2 local government officials from Gasabo, 6 representatives from the Bank of Kigali, and 3,462 community representatives and beneficiaries. In total, the target population for this study includes 3,487 individuals. These stakeholders are directly involved in or impacted by the project, making them crucial to understanding how internal control systems, risk assessment, communication, and monitoring influence the performance of the housing project.

3.2 Sample design

To determine the appropriate sample size for this study, Yamane's (1967) formula was used. This formula is commonly applied in social science research when the population size is known and a margin of error is specified. With a total population (N) of 3487 and a margin of error (e) set at 5% (0.05), the sample size (n) is calculated using the following formula:

$$n = \frac{N}{1 + N \cdot e^2}$$

Substituting the known values into the formula:

$$n = \frac{3487}{1 + 3487(0.05)^2}$$

$$n = \frac{3487}{1 + 3487(0.0025)}$$

$$n = \frac{3487}{1 + 8.7175}$$

$$n = \frac{3487}{9.7175}$$

$$n \approx 359$$

Thus, the required sample size for this study is approximately 359 individuals. By doing so, the study ensured the collected data accurately reflects the views of the diverse stakeholders involved in the Social Housing Project, allowing for generalizability of the findings to the entire population.

Table 2: Sample Size Calculation

Category	Total Population	Sample Size
Project Managers	2	1
Project Team Members	9	4
Contractors and Subcontractors	6	3
Local Government Officials (Gasabo)	2	1
Bank of Kigali Representatives	6	3
Community representatives and Beneficiaries	3462	347
Total	3487	359

Source: Primary data, 2026

Table 3 presents the sample size calculation for the study, based on the total population of 3,487 individuals involved in or affected by the Social Housing Project in Gasabo District. The sample size was determined using Yamane's (1967) formula to ensure statistical validity, resulting in a total sample size of 359. The sample is stratified to reflect the different categories of stakeholders, with each group proportionally represented according to its presence in the overall population. For instance, while there are only 2 project managers, 1 was selected for the sample, and similarly, 4 project team members were surveyed out of the total 9. A small but representative number of contractors and subcontractors, local government officials, and Bank of Kigali representatives was also included. The largest group, community representatives and beneficiaries, contributed 347 individuals to the sample, ensuring that the views of the community are adequately captured in the study. This approach guarantees that the data collected is comprehensive and reflective of all relevant stakeholder perspectives.

4. RESEARCH FINDINGS AND DISCUSSION

4.1. Response Rate

This study targeted 359 respondents involved in the Social Housing Project in Gasabo District. Out of these, 347 were given questionnaires, of which 310 were returned completed, and 12 respondents participated through interviews. Therefore, a total of 322 respondents provided usable data, while 37 did not participate in either the questionnaire or interview process. Based on this, the overall response rate was 89.4%, indicating strong participation from the targeted stakeholders and providing reliable data for analyzing the effect of internal control systems on project performance.

Table 3: Summary of response rate

Category	Number of Respondents
Targeted Respondents	359
Questionnaires Given	347
Questionnaires Returned Completed	310
Interviews Conducted	12
Did Not Participate	37
Total Usable Responses	322

Source: Field data, 2026

According to Mugenda & Mugenda (2003), a response rate of 50% is adequate for analysis, 60% is good, and 70% or above is very good. In this study, the overall response rate was 89.4%, which is considered excellent. This high response rate indicates strong participation from the targeted stakeholders and provides reliable data for analyzing the effect of internal control systems on the performance of the Social Housing Project in Gasabo District

4.2. Demographic characteristics of the respondents

This study examined the demographic characteristics of the 310 respondents who returned completed questionnaires, as understanding their profiles helps contextualize their perspectives on internal control systems and project performance. The demographic variables considered included gender, age, level of education, and role in the project. These characteristics provide insight into the diversity of participants and help interpret differences in opinions or experiences among the stakeholder groups involved in the Social Housing Project in Gasabo District. The following table gives details:

Table 4: Demographic Characteristics of Respondent

Demographic Variable	Category	Frequency	Percentage (%)
Gender	Male	191	61.6
	Female	119	38.4
	Total	310	100
Age (years)	18–30	83	26.8
	31–40	115	37.1
	41–50	71	22.9
	51+	41	13.2
	Total	310	100
Education Level	Secondary	59	19
	Diploma	91	29.4
	Bachelor's Degree	115	37.1
	Master's Degree & Above	45	14.5
	Total	310	100

Source: Field data, 2026

4.3. Descriptive Statistics

4.3.1 Descriptive statistics of Control Environment

This section presents the descriptive statistics for the first objective of the study, which was to assess the effect of the control environment on the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda. Data were collected using a five-point Likert scale to capture respondents' perceptions of management support, ethical standards, accountability, and adherence to procedures within the project. The following table gives details:

Table 5: Level of agreement of Control Environment on project performance

Statements	N	M	SD
The organization has clearly defined roles, responsibilities, and reporting lines.	310	4.15	.989
Management regularly reviews and updates the accountability structure as needed.	310	4.35	.845
The internal audit function operates independently and reviews risks and controls effectively.	310	4.40	.904
Audit findings are communicated to leadership and addressed in a timely manner.	310	1.48	.686
Employees receive training to understand and follow rules and ethical standards	310	4.33	.977

Source: Field data, 2025-Key: M=Mean, SD=Standard Deviation

The descriptive statistics in Table 6 highlight respondents' perceptions of the control environment and its influence on the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District. Respondents generally agreed that the organization has clearly defined roles, responsibilities, and reporting lines, with a mean of 4.15 (SD = 0.989). This indicates that most stakeholders perceive the project as having a structured framework that clarifies who is accountable for various tasks, thereby reducing confusion, overlapping duties, and inefficiencies. A clear organizational structure is

critical for ensuring that decisions are made promptly and that team members understand their specific responsibilities within the project.

Management's regular review and update of the accountability structure received a high mean score of 4.35 (SD = 0.845), suggesting that respondents recognize ongoing management efforts to strengthen internal controls. This demonstrates that the project leadership is proactive in identifying gaps, revising roles, and improving oversight mechanisms to ensure that the control environment remains effective. Such regular updates help in adapting to project changes, addressing emerging risks, and maintaining high standards of governance, which are crucial for the successful implementation of the housing project.

The internal audit function and employees' training on ethical standards and procedures were also rated highly, with means of 4.40 (SD = 0.904) and 4.33 (SD = 0.977), respectively. These findings suggest that stakeholders consider audits as an independent and effective tool for evaluating risks and internal controls, while staff training ensures that employees are aware of policies, procedures, and ethical expectations. Together, these elements enhance accountability, reduce the likelihood of errors or misconduct, and promote a culture of compliance and responsibility, which positively affects overall project performance.

4.3.2. Descriptive Statistics of Risk Assessment

This section presents the descriptive statistics related to the second objective of the study, which sought to examine the effect of risk assessment on the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda. Data were collected using a five-point Likert scale to capture respondents' perceptions regarding risk identification, risk analysis, and risk mitigation practices within the project, as summarized in the table below:

Table 6: Level of agreement of Risk Assessment on project performance

Statements	N	M	SD
The organization regularly identifies risks that could affect its goals.	310	4.40	.867
Risks are assessed based on their likelihood and impact.	310	4.58	.709
Risk mitigation plans are developed to reduce or manage key risks.	310	1.41	.880
Risk mitigation actions are assigned to responsible staff.	310	4.33	.860
Risk information is shared with management to support decision-making.	310	4.40	.897

Source: Field data, 2025-**Key:** M=Mean, SD=Standard Deviation

Table 7 presents the descriptive statistics for risk assessment, which addresses the second objective of the study: to examine the effect of risk assessment on the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda. Data were collected using a five-point Likert scale to capture respondents' perceptions regarding risk identification, risk analysis, and risk mitigation practices within the project.

The findings indicate that respondents generally agree that the organization regularly identifies risks that could affect project goals (M = 4.40, SD = 0.867) and assesses them based on their likelihood and impact (M = 4.58, SD = 0.709). This suggests that the project has a systematic approach to recognizing potential threats, which allows the management team to anticipate challenges and take preventive measures before risks escalate. Regular risk identification and assessment contribute to better planning, reduce uncertainties, and enable the project team to allocate resources more effectively.

Furthermore, the assignment of risk mitigation actions to responsible staff (M = 4.33, SD = 0.860) and the sharing of risk information with management to support decision-making (M = 4.40, SD = 0.897) indicate strong accountability and communication within the project. These practices ensure that risks are managed by designated personnel and that management is informed of critical issues, which supports timely interventions. Effective communication and delegation of risk-related responsibilities enhance coordination, promote ownership of tasks, and reduce delays or mistakes in project execution.

Despite these positive results, the development of risk mitigation plans received a very low score (M = 1.41, SD = 0.880), revealing a major weakness in the project's risk management practices. While risks are identified and assigned, actionable strategies to reduce or manage them are not consistently implemented. This gap can compromise the project's ability to prevent or minimize negative impacts, potentially affecting efficiency, cost control, timely completion, and the quality of

housing units. Addressing this weakness is essential for strengthening the overall risk management framework, improving responsiveness to challenges, and ensuring that the Social Housing Project achieves its intended outcomes effectively.

4.3.3. Descriptive Statistics of information and communication

This section presents the descriptive statistics for the third objective of the study, which was to examine the effect of information and communication on the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda. Data were collected using a five-point Likert scale to assess respondents' perceptions regarding the adequacy, timeliness, and reliability of information flow and communication mechanisms within the project, as summarized in the table below:

Table 7: Level of agreement of information and communication on project performance

Statements	N	M	SD
Information is shared promptly across relevant departments.	310	4.42	.965
Staff receive the information they need to do their jobs effectively.	310	1.53	.050
Transactions and events are recorded accurately and on time.	310	4.31	.690
Records are stored securely and are easy to retrieve when needed.	310	4.32	.975
Communication methods are regularly reviewed and improved.	310	4.12	.074

Source: Field data, 2025-**Key:** M=Mean, SD=Standard Deviation

Table 8 presents the descriptive statistics for information and communication, addressing the third objective of the study, which sought to examine their effect on the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District. The findings show that respondents generally agreed that information is shared promptly across relevant departments ($M = 4.42$, $SD = 0.965$), indicating that the project has established effective communication channels that facilitate timely dissemination of critical information. Timely communication ensures that all stakeholders are aware of project updates, decisions, and emerging issues, which helps in coordinating activities, minimizing misunderstandings, and supporting efficient project execution.

The results also revealed that transactions and events are recorded accurately and on time ($M = 4.31$, $SD = 0.690$) and that records are stored securely and are easy to retrieve when needed ($M = 4.32$, $SD = 0.975$). This suggests that the project has a reliable system for documenting activities, maintaining transparency, and providing access to information for decision-making purposes. Proper record-keeping enhances accountability and allows management to track progress, monitor compliance with policies, and evaluate project performance against set targets.

4.3.4. Descriptive Statistics of Monitoring

This section presents the descriptive statistics for the fourth objective of the study, which was to evaluate the effect of monitoring on the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda. Data were collected using a five-point Likert scale to capture respondents' perceptions regarding supervision, performance reviews, and follow-up mechanisms used to ensure effective project implementation, as summarized in the table below.

Table 8: Level of agreement of monitoring on project performance

Statements	N	M	SD
Internal audits are conducted independently from management.	310	2.33	.466
Audit results are objective and free from outside influence.	310	4.35	.953
Supervisors regularly check that work follows policies and procedures.	310	4.50	.731
Supervisory reviews help identify and correct issues early.	310	4.36	.096
Management regularly monitors operations and controls.	310	3.32	.666

Source: Field data, 2025-**Key:** M=Mean, SD=Standard Deviation

Table 9 presents the descriptive statistics for monitoring, which addresses the fourth objective of the study: to evaluate the effect of monitoring on the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District. The findings indicate that internal audits are conducted independently from management, but this received a relatively low mean of 2.33 ($SD = 0.466$), suggesting that stakeholders perceive some limitations in audit independence. This implies that

while audits exist, they may still be influenced by management, potentially reducing their effectiveness in objectively identifying risks and ensuring compliance with project policies and procedures. Ensuring truly independent audits is critical for maintaining accountability and transparency within the project.

In contrast, the audit results were perceived as objective and free from outside influence ($M = 4.35$, $SD = 0.953$), reflecting confidence among respondents that findings reported by the audit function are credible and reliable. This highlights that even if the independence of the audit process is questioned, the content of the audit findings is considered trustworthy and can be used as a basis for decision-making. Reliable audit results contribute to informed management actions and strengthen oversight mechanisms that support the success of the housing project.

Supervisory activities were rated highly, with respondents agreeing that supervisors regularly check adherence to policies and procedures ($M = 4.50$, $SD = 0.731$) and that supervisory reviews help identify and correct issues early ($M = 4.36$, $SD = 0.096$). These results suggest that day-to-day monitoring and supervision are strong within the project, allowing for timely detection of errors, deviations, or inefficiencies. Effective supervision ensures that project tasks are executed according to plan, minimizes risks, and enhances performance by providing feedback and corrective measures promptly. However, management's regular monitoring of operations and controls received a moderate mean of 3.32 ($SD = 0.666$), indicating room for improvement in ongoing oversight. While operational monitoring occurs, respondents suggest that it is not fully consistent or comprehensive across all aspects of the project. Strengthening systematic management monitoring would enhance the early identification of potential problems, improve compliance with project standards, and support better overall performance.

From the findings, the study revealed that monitoring plays a critical role in ensuring the effective performance of the Social Housing Project, though some gaps were observed. Interviews with key informants indicated that supervisory checks and performance reviews are generally conducted regularly, helping to identify and correct issues early and maintain adherence to project policies and procedures. However, concerns were raised regarding the independence of internal audits and the consistency of management's operational monitoring, with some respondents noting that audits occasionally face interference and that not all aspects of the project are consistently overseen. These insights suggest that while monitoring mechanisms contribute positively to accountability and project performance, strengthening audit independence and ensuring continuous, comprehensive management oversight are essential for minimizing risks, improving efficiency, and enhancing the overall success of the project.

4.3.5. Project Performance

This section presents the descriptive statistics on the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda. Data were collected using a five-point Likert scale to capture respondents' perceptions regarding key performance indicators such as timely completion of project activities, cost control, quality of housing units, achievement of project objectives, and stakeholder satisfaction. Project performance was assessed to determine the extent to which the project met its planned goals and delivered expected outcomes to beneficiaries.

Table 9: Level of agreement of project performance

Statements	N	M	SD
Projects are completed within the planned timeline.	310	4.33	.795
Project costs stay within the approved budget.	310	4.30	.951
Construction meets the required quality standards.	310	4.34	.958
Work is regularly inspected to ensure quality.	310	1.63	.049
Stakeholders are informed and involved throughout the project.	310	4.10	.924

Source: Field data, 2025-**Key:** M=Mean, SD=Standard Deviation

Table 10 presents respondents' level of agreement regarding the performance of the Social Housing Project. The results indicated a high level of agreement that projects were completed within the planned timeline, with a mean score of 4.33 and a standard deviation of 0.795, suggesting that most respondents perceived timely completion as a strong aspect of project performance. Similarly, respondents agreed that project costs stayed within the approved budget ($M = 4.30$, $SD = 0.951$), indicating effective cost management despite minor variations in responses.

The findings further revealed that construction activities met the required quality standards, as reflected by the highest mean score ($M = 4.34$, $SD = 0.958$). This implied that the quality of housing units was generally satisfactory and aligned with expected standards. In addition, respondents agreed that stakeholders were informed and involved throughout the project, with a mean score of 4.10 and a standard deviation of 0.924, highlighting effective stakeholder engagement and communication during project implementation.

However, the results showed a notably low mean score for the statement on regular inspection of work to ensure quality ($M = 1.63$, $SD = 0.049$). This indicated strong disagreement among respondents, suggesting weaknesses in routine inspection and supervision practices. Such a finding pointed to a critical area requiring improvement, as regular inspection is essential for sustaining quality and preventing defects. Overall, the descriptive results demonstrated that while the Social Housing Project performed well in terms of timeliness, cost control, quality outcomes, and stakeholder involvement, strengthening inspection and monitoring practices was necessary to enhance overall project performance.

From the findings, the study suggested that internal control systems play a significant role in enhancing the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District. Effective control environment, risk assessment, information and communication, and monitoring practices were found to positively influence project performance in terms of timely completion, cost control, quality achievement, and stakeholder involvement. However, weaknesses in regular inspection and monitoring were identified, indicating the need for strengthened supervisory mechanisms to ensure sustained project quality and overall performance.

These findings are in agreement with previous studies which demonstrate that effective internal control systems play a critical role in enhancing project performance. For example, Kamau (2022) established that a strong control environment and proper risk assessment mechanisms significantly improve project cost management, adherence to timelines, and quality standards. Similarly, research by Ofori and Mensah (2021) highlighted that efficient information and communication systems, combined with continuous monitoring, strengthen accountability, transparency, and stakeholder participation in project implementation. The alignment between the current findings and existing empirical evidence confirms that robust internal control practices are vital for improving the performance of development projects, including social housing initiatives

4.3.6. Pearson Correlation analysis

Pearson correlation analysis was used to examine the strength and direction of the linear relationship between internal control system components control environment, risk assessment, information and communication, and monitoring and the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda. The correlation coefficient ranges from -1 to $+1$, where values close to $+1$ indicate a strong positive relationship, values close to -1 indicate a strong negative relationship, and values near 0 indicate no linear relationship; thus, the results provide insights into how variations in internal control practices are associated with changes in project performance

Table 10: Correlation Matrix between independent and dependent variables

		X1	X2	X3	X4	Y
Control Environment (X_1)	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	310				
Risk assessment (X_2)	Pearson Correlation	.812**	1			
	Sig. (2-tailed)	.000				
	N	310	310			
Information and communication (X_3)	Pearson Correlation	.377**	.353**	1		
	Sig. (2-tailed)	.000	.000			
	N	310	310	310		
Monitoring (X_4)	Pearson Correlation	.960**	.804**	.343**	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	310	310	310	310	
Project Performance (Y)	Pearson Correlation	.785**	.689**	.608**	.756**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	310	310	310	310	310

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

Table 11 presents the correlation between the independent variables control environment (X1), risk assessment (X2), information and communication (X3), and monitoring (X4) and the dependent variable, project performance (Y). The results indicate that all four variables are positively and significantly correlated with project performance at the 0.01 level. Control environment (X1) has a strong positive correlation with project performance ($r = 0.785$, $p < 0.01$), showing that clear roles, accountability, and ethical standards greatly enhance project success. Risk assessment (X2) is also positively correlated with project performance ($r = 0.689$, $p < 0.01$), suggesting that identifying, evaluating, and mitigating risks effectively contributes to better project outcomes. Information and communication (X3) shows a moderate positive correlation ($r = 0.608$, $p < 0.01$), highlighting that timely and accurate information flow supports efficient decision-making. Monitoring (X4) has a strong positive correlation with project performance ($r = 0.756$, $p < 0.01$), emphasizing that supervision, performance reviews, and follow-up activities are crucial for ensuring project objectives are achieved.

Overall, the correlation results reveal that each component of the internal control system individually contributes to improving the performance of the Social Housing Project in Gasabo District, with control environment and monitoring exhibiting the strongest associations with project success.

4.3.7. Regression analysis

Regression analysis was employed to examine the relationship between the dependent variable, project performance, and the independent variables, namely control environment, risk assessment, information and communication, and monitoring, in the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda. The analysis aimed to determine the extent to which variations in project performance can be explained by internal control system components, with regression coefficients and significance tests providing empirical evidence on the strength and influence of each variable, as presented in the following tables.

Table 11: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.856 ^a	.734	.730	.23186

a. Predictors: (Constant), control environment, risk assessment, information and communication, and monitoring

Table 12 presents the model summary, showing an R value of 0.856, which indicates a strong positive relationship between the independent variables collectively and project performance. The R^2 value of 0.734 suggests that approximately 73.4% of the variation in project performance is explained by the combined influence of control environment, risk assessment, information and communication, and monitoring. The adjusted R^2 of 0.730 further confirms that the model is a good fit, accounting for the number of predictors while reducing potential bias. The standard error of the estimate (0.23186) indicates a relatively low level of dispersion, implying that the observed project performance data points are closely clustered around the regression line.

Table 12: Anova Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	45.142	4	11.286	209.935	.000 ^b
	Residual	16.396	305	.054		
	Total	61.539	309			

a. Dependent Variable: Project Performance

b. Predictors: (Constant), control environment, risk assessment, information and communication, and monitoring

Table 13 presents the ANOVA results of the regression analysis, which test the overall significance of the model in predicting project performance. The F-value of 209.935 with a significance level (p-value) of 0.000 indicates that the regression model is statistically significant at the 0.01 level. This means that the combined effect of the independent variables control environment, risk assessment, information and communication, and monitoring significantly predicts the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District.

The table also shows that the regression sum of squares (45.142) is substantially higher than the residual sum of squares (16.396), indicating that a large portion of the variation in project performance is explained by the independent variables rather than random error. This reinforces the findings from the model summary, confirming that the internal control system

components collectively have a meaningful impact on the successful implementation and outcomes of the housing project. The ANOVA results provide strong evidence that internal controls, risk management, communication, and monitoring are crucial determinants of project performance in this context.

Table 13: Coefficients Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	-.597	.157	-3.815	.000
	Control Environment (X ₁)	.426	.096	.487	.000
	Risk Assessment (X ₂)	.080	.043	.097	.061
	Information and communication (X ₃)	.475	.042	11.212	.000
	Monitoring (X ₄)	.076	.094	.810	.419

a. Dependent Variable: Project Performance

The regression coefficients in Table 14 show the individual effects of the independent variables on the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District. The constant value ($B = -0.597$, $p = 0.000$) represents the baseline level of project performance when all independent variables are zero, and it is statistically significant. This provides a starting point for understanding how changes in internal control system components influence project outcomes.

Control environment (X₁) has a positive and significant effect on project performance, with a standardized Beta of 0.487 and a significance value of 0.000. This indicates that improvements in clearly defined roles, accountability structures, ethical standards, and adherence to procedures are strongly associated with higher project performance. Similarly, information and communication (X₃) has a significant positive effect on project performance ($Beta = 0.361$, $p = 0.000$), suggesting that timely, accurate, and reliable information flow contributes meaningfully to achieving project objectives. These results highlight that both a strong control environment and effective communication mechanisms are critical drivers of successful project implementation.

4.3.8. Hypothesis Testing

This section presents the results of hypothesis testing conducted to determine whether the internal control system components control environment, risk assessment, information and communication, and monitoring have a statistically significant effect on the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda. The hypotheses were tested using the results from correlation and regression analyses at a 5% level of significance ($p \leq 0.05$), which guided the decision to accept or reject each hypothesis.

Table 14: Hypothesis Testing Results

Hypothesis	Null Hypothesis (H ₀)	t-value	Sig. (p-value)	Decision
H ₀₁	Control environment has no significant effect on project performance	4.448	0.000	Rejected
H ₀₂	Risk assessment has no significant effect on project performance	1.881	0.061	Accepted
H ₀₃	Information and communication have no significant effect on project performance	11.212	0.000	Rejected
H ₀₄	Monitoring has no significant effect on project performance	0.81	0.419	Accepted

Source: Primary data, 2026

The analysis of the hypothesis testing results in Table 15 provides clear insights into the effect of internal control system components on the performance of the Social Housing Project in Gasabo District. The hypothesis testing results indicate that **H₀₁** and **H₀₃** are statistically significant at the 5% level, with p-values of 0.000. This means the null hypotheses for these variables are rejected, showing that both the control environment and information and communication significantly

influence the performance of the Social Housing Project. The positive Beta coefficients (0.487 for control environment and 0.361 for information and communication) further suggest a strong positive impact of these factors on project performance.

Table 15: Diagnostic test results

Diagnostic Test	Test Statistic	Recommended Value	Obtained Value	Conclusion
Normality	Shapiro-Wilk Significance	$p > 0.05$	0.087	Passed
Multicollinearity	Variance Inflation Factor (VIF)	$VIF < 10$	1.684	Passed
Multicollinearity	Tolerance	> 0.10	0.594	Passed
Homoscedasticity	Residual Scatterplot	Random Distribution	Achieved	Passed
Autocorrelation	Durbin-Watson	1.5 – 2.5	1.912	Passed

Source: Researcher (2026)

The results presented in **Table 16** indicate that all assumptions required for multiple regression analysis were satisfied. The normality test using the Shapiro-Wilk statistic produced a significance value of 0.087, which is greater than the threshold value of 0.05, indicating that the data were normally distributed. The multicollinearity test revealed a VIF value of 1.684, which is below the recommended maximum value of 10, and a tolerance value of 0.594, which exceeds the minimum acceptable value of 0.10. These findings confirm the absence of multicollinearity among the independent variables.

The homoscedasticity test showed that the residuals were randomly distributed around the regression line, indicating constant error variance. Furthermore, the Durbin-Watson statistic of 1.912 fell within the acceptable range of 1.5 to 2.5, demonstrating that there was no autocorrelation among the residuals. Therefore, the data met all the assumptions necessary for conducting multiple regression analysis and were considered appropriate for examining the influence of control environment, risk assessment, information and communication, and monitoring activities on the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District, Rwanda. This is consistent with the strong model fit reported in the study ($R^2 = 0.734$) and the statistically significant regression model ($F = 209.935$, $p < 0.001$).

5. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

In conclusion, the study established that the control environment significantly affects the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District. The project demonstrates well-defined roles, responsibilities, and reporting lines, alongside proactive management oversight, internal audits, and staff training on ethical standards, all of which enhance accountability and promote efficient project execution. However, the low score on timely communication and addressing of audit findings indicates a critical gap in the feedback and follow-up process, which can hinder prompt corrective actions and affect project outcomes such as cost control and schedule adherence. Strengthening these mechanisms is therefore essential for optimizing the project's performance.

Regarding risk assessment, the study concluded that the project employs a structured and proactive approach, with regular risk identification, analysis based on likelihood and impact, and assignment of risk responsibilities to relevant staff. These practices support informed decision-making and accountability, helping the project anticipate challenges and respond promptly to emerging issues. Despite this, the very low rating for the development and implementation of risk mitigation plans highlights a weakness in translating risk awareness into actionable strategies, which can negatively influence project efficiency, timely completion, and quality delivery. Addressing this gap is crucial for enhancing the project's resilience and overall success.

The study further concluded that information and communication play a critical role in project performance. Respondents indicated that information is generally shared promptly across departments, and transactions are recorded accurately and stored securely, which supports transparency and coordination. Nevertheless, not all staff consistently receive the information required to perform their tasks effectively, creating inconsistencies, minor errors, and delays. Improving information accessibility and ensuring uniform communication will strengthen coordination, reduce operational inefficiencies, and enhance the overall performance of the Social Housing Project.

Finally, regarding monitoring, the study concluded that supervisory activities and performance reviews are effective in ensuring adherence to policies and procedures and in identifying and correcting issues early. Audit results are generally

considered reliable, but internal audits lack full independence, and management's operational monitoring is inconsistent. These gaps can reduce the effectiveness of oversight mechanisms, limit accountability, and affect project efficiency. Strengthening audit independence, ensuring consistent management monitoring, and improving follow-up on audit recommendations are critical for maximizing the positive impact of monitoring on the Social Housing Project's performance.

5.2. Recommendations

Based on the findings of the study, several actionable recommendations are proposed to enhance the performance of the Social Housing Project supported by the Bank of Kigali in Gasabo District. Firstly, the study revealed gaps in the timely communication and follow-up of audit findings. It is recommended that the project management team establish stronger feedback and follow-up mechanisms to ensure audit recommendations are implemented promptly. This will improve accountability, enable faster corrective actions, and enhance overall project efficiency.

Secondly, although risks are regularly identified and assigned, the development and execution of risk mitigation plans were found to be weak. The project should prioritize creating actionable risk response strategies and ensure that responsible staff implement them effectively. Regular monitoring of these mitigation measures will help reduce potential threats, improve adherence to schedules, control costs, and enhance the quality of housing units delivered.

Thirdly, while information flow and communication across departments are generally timely, not all staff consistently receive the information needed to perform their roles effectively. The project should strengthen internal communication strategies to ensure that every team member has access to critical updates and instructions. This can include structured briefings, regular reporting, and digital communication platforms to improve coordination, reduce errors, and enhance overall project performance.

Lastly, monitoring activities, including supervision, performance reviews, and operational oversight, require reinforcement. The project should ensure the independence of internal audits and enhance management's continuous monitoring of operations. Regular supervisory checks and timely follow-up on audit and review findings will help detect and address issues early, minimize risks, and sustain high performance throughout the project lifecycle. Implementing these recommendations will strengthen internal controls, improve efficiency, and contribute to the successful delivery of the Social Housing Project.

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