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Integration Of Quality Management Systems, Anti-Bribery Management Systems, And Green Innovation On Engineering Project Performance: A Systematic Literature Review

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Abstract

The increasing complexity of engineering projects requires organizations to strengthen not only project quality and operational efficiency but also governance effectiveness, organizational integrity, and environmental sustainability. Although previous studies have examined Quality Management System (QMS), Anti-Bribery Management System (ABMS), green innovation, and project performance, these topics have generally been investigated separately. Therefore, this study aims to systematically review the integration of QMS, ABMS, organizational integrity, and green innovation in improving engineering project performance. This research employed a Systematic Literature Review (SLR) approach based on the PRISMA 2020 guidelines. Literature was collected from eight international databases indexed by Scopus, covering publications from January 2015 to December 2025. The initial search identified 1,247 records. Following duplicate removal, title and abstract screening, and full-text eligibility assessment, 77 articles were included

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in the final review. The findings reveal that QMS and ABMS function as governance drivers that strengthen transparency, accountability, compliance, and risk management. Organizational integrity emerges as a critical mediating factor linking governance systems with sustainability outcomes. Furthermore, green innovation acts as a sustainability enabler that enhances project quality, cost efficiency, timely completion, stakeholder satisfaction, and environmental performance. This study proposes an integrative conceptual framework positioning QMS and ABMS as governance drivers, organizational integrity as a mediating mechanism, green innovation as a sustainability enabler, and project performance as the ultimate outcome. The findings contribute to the advancement of engineering project management theory and provide practical guidance for developing transparent, competitive, and sustainable project governance.

Keywords: Quality Management System, Anti-Bribery Management System, Organizational Integrity, Green Innovation, Project Performance, Engineering Project, Systematic Literature Review.

INTRODUCTION

The engineering and construction industry plays a strategic role in driving economic growth, infrastructure development, and enhancing national and global competitiveness. As engineering projects become increasingly complex, organizations face various challenges that extend beyond achieving cost, quality, and schedule targets. These challenges also involve organizational governance, transparency, accountability, environmental sustainability, and increasingly complex risk management. In this context, project success is no longer measured solely by traditional project management indicators but also by an organization's ability to create sustainable value, maintain organizational integrity, and meet the expectations of diverse stakeholders (Kerzner, 2017; Fonseca & Domingues, 2018; Santos et al., 2021; Kumar et al., 2023; OECD, 2023; Rahman et al., 2025).

Growing attention to sustainability issues has encouraged engineering organizations to adopt more environmentally friendly approaches in project execution. The construction and infrastructure sectors are recognized as among the largest contributors to global carbon emissions and natural resource consumption. According to reports from the United Nations Environment Programme (UNEP), the building and construction sector accounts for approximately 37% of global carbon emissions associated with energy consumption and the use of construction materials. This situation requires organizations to implement sustainable development strategies

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capable of reducing environmental impacts without compromising productivity and project performance. Numerous studies have shown that the implementation of green innovation positively contributes to energy efficiency, waste reduction, improved environmental performance, and the creation of competitive advantages for organizations (UNEP, 2021; Chen et al., 2016; Ahmed et al., 2022; Lin et al., 2022; Wang et al., 2023; Zhang et al., 2023; Bukran & Ramdani, 2024).

On the other hand, governance and integrity challenges remain significant issues in the implementation of engineering projects, particularly large-scale construction and infrastructure projects. The complexity of procurement processes, the involvement of multiple stakeholders, and the substantial investment value of projects increase the potential for fraud, corruption, collusion, and bribery. Various international reports indicate that the construction sector is among the industries with the highest corruption risks compared to other sectors. Weak governance practices can lead to project cost overruns, implementation delays, poor-quality outcomes, and diminished stakeholder trust. Therefore, strengthening organizational governance and internal control systems is crucial for improving engineering project success (Transparency International, 2022; Nichols, 2018; Huberts, 2018; Afrianto & Rahmadhani, 2022; Widodo et al., 2022; Kumar et al., 2023; Rahmarta et al., 2024).

One of the most widely adopted approaches for improving governance effectiveness and organizational process quality is the implementation of a Quality Management System (QMS) based on ISO 9001:2015. This quality management standard emphasizes the importance of a process-based approach, customer focus, risk management, evidence-based decision-making, and continuous improvement. The implementation of ISO 9001 has been proven to enhance process consistency, operational effectiveness, service quality, and customer satisfaction across various industries. In the context of engineering projects, QMS implementation plays a critical role in ensuring that every project phase is executed according to established quality standards, thereby supporting the achievement of project objectives more effectively and efficiently (Deming, 1986; Psomas & Antony, 2017; Fonseca & Domingues, 2018; Santos et al., 2021; Hernata & Sulistiawan, 2023; Husen, 2019; Widodo et al., 2022).

However, quality management systems are not specifically designed to address bribery and corruption risks that frequently occur in engineering projects. To address these challenges, many organizations have begun adopting an Anti-Bribery Management System (ABMS) based on ISO 37001:2016 as part of strengthening organizational governance. This standard provides a systematic framework for identifying, preventing, detecting, and addressing bribery risks through

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strengthened organizational policies, due diligence procedures, internal controls, compliance audits, and whistleblowing mechanisms. Several studies indicate that ABMS implementation contributes to improved transparency, regulatory compliance, stakeholder trust, and reduced corruption and fraud risks within organizations (Nichols, 2018; Hamzah et al., 2021; Transparency International, 2022; Afrianto & Rahmadhani, 2022; Widodo et al., 2022; Mutiara et al., 2023; Rahmarta et al., 2024).

The effectiveness of QMS and ABMS implementation is strongly influenced by the level of organizational integrity. Organizational integrity reflects the alignment between organizational values, policies, culture, and behavior in conducting activities ethically, transparently, and responsibly. Organizations with high levels of integrity tend to be more capable of building stakeholder trust, improving governance effectiveness, strengthening regulatory compliance, and creating work environments that support innovation and continuous improvement. Several studies also regard organizational integrity as a mediating factor that explains how governance systems can generate superior and sustainable organizational performance (Huberts, 2018; Hamzah et al., 2021; UNDP, 2021; Widodo et al., 2022; Yuliani et al., 2023; Kumar et al., 2023; Rahman et al., 2025).

In addition to governance and integrity factors, an organization's capability to develop green innovation has become an important determinant of success in modern engineering projects. Green innovation encompasses the development of products, processes, technologies, and management practices that reduce environmental impacts while simultaneously enhancing organizational economic value. Previous studies indicate that organizations with strong governance systems and organizational cultures are generally more successful in implementing green innovation than those with weak management systems. Green innovation not only improves environmental performance but also promotes operational efficiency, cost savings, enhanced corporate reputation, and long-term competitive advantage (Chen et al., 2016; Lin et al., 2022; Ahmed et al., 2022; Wang et al., 2023; Zhang et al., 2023; Rochmah & Taharuddin, 2024; Bukran & Ramdani, 2024).

Although the literature on Quality Management Systems, Anti-Bribery Management Systems, organizational integrity, green innovation, and project performance continues to expand, most studies have been conducted in isolation. Research on ISO 9001 generally focuses on improving organizational quality and efficiency, while studies on ISO 37001 primarily address compliance and corruption prevention. Meanwhile, research on green innovation tends to concentrate on technological and environmental dimensions without considering the role of

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governance and organizational integrity as supporting factors. Consequently, understanding of the simultaneous relationships among quality management systems, anti-bribery systems, organizational integrity, green innovation, and project performance remains relatively limited (Fonseca & Domingues, 2018; Santos et al., 2021; Nichols, 2018; Huberts, 2018; Lin et al., 2022; Wang et al., 2023; Zhang et al., 2023).

Based on this literature review, several research gaps require further attention. First, there is limited research integrating QMS and ABMS within a single organizational governance framework. Second, the role of organizational integrity as a mediating mechanism between governance systems and green innovation has not been comprehensively explored. Third, the relationship between green innovation and project performance within the context of engineering project management has produced mixed findings. Fourth, relatively few studies have conducted a systematic synthesis of the relationships among quality management, anti-bribery governance, organizational integrity, green innovation, and project performance simultaneously. These conditions indicate the need for developing a more comprehensive conceptual framework to explain the interrelationships among these variables (Nichols, 2018; Santos et al., 2021; Hamzah et al., 2021; Lin et al., 2022; Kumar et al., 2023; Wang et al., 2023; Zhang et al., 2023; Rahman et al., 2025).

Based on these research gaps, this study aims to conduct a Systematic Literature Review (SLR) using the PRISMA 2020 guidelines to comprehensively examine the integration of Quality Management Systems, Anti-Bribery Management Systems, organizational integrity, green innovation, and project performance within the context of engineering projects. Through the synthesis of reputable international articles published between 2015 and 2025, this study is expected to generate a deeper understanding of the relationships among governance, integrity, sustainability, and innovation in enhancing project performance. In addition to providing theoretical contributions through the development of an integrative conceptual framework, this research is also expected to offer practical implications for engineering companies, contractors, consultants, and other stakeholders in building project governance systems that are more transparent, competitive, ethical, and sustainable (Page et al., 2021; Santos et al., 2021; Kumar et al., 2023; OECD, 2023; Wang et al., 2023; Zhang et al., 2023; Rahman et al., 2025).

LITERATURE REVIEW

Quality Management System (QMS)

A Quality Management System (QMS) is a management framework designed to ensure

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that organizational processes consistently meet customer requirements and applicable standards through a process-based approach, risk management, quality control, and continuous improvement. The most widely adopted international standard is ISO 9001:2015, which emphasizes the principles of customer focus, leadership, engagement of people, process approach, improvement, evidence-based decision-making, and relationship management. QMS implementation has been shown to positively impact operational efficiency, product and service quality, customer satisfaction, and overall organizational performance. Furthermore, QMS fosters an organizational culture that supports learning, innovation, and continuous improvement, thereby enhancing competitiveness in an increasingly dynamic business environment.

In the context of engineering projects, QMS serves as the foundation of systematic project governance through the standardization of work processes, quality control, risk management, and improved coordination among stakeholders. Several studies indicate that organizations effectively implementing ISO 9001 tend to achieve higher project success rates than those lacking structured quality management systems. QMS enables organizations to reduce process errors, improve project execution consistency, and strengthen their ability to meet project cost, quality, and schedule targets. Therefore, QMS is regarded as one of the primary instruments for supporting the success of engineering projects and sustainable infrastructure development.

However, research also suggests that successful QMS implementation depends not only on formal standards and procedures but also on management commitment, organizational culture, human resource competence, and governance effectiveness. Without strong organizational integrity and leadership support, the benefits of QMS cannot be optimized sustainably. Consequently, integrating QMS with other governance systems has become increasingly important for improving overall organizational effectiveness.

Anti-Bribery Management System (ABMS)

An Anti-Bribery Management System (ABMS) is a management system designed to help organizations systematically prevent, detect, and address bribery risks through strengthened policies, procedures, internal controls, and compliance mechanisms. The primary international standard is ISO 37001:2016, developed by the International Organization for Standardization (ISO) in response to growing global concerns regarding corruption and bribery in both public and private organizations. ISO 37001 provides a framework that enables organizations to identify bribery risks, conduct due diligence on third parties, establish whistleblowing mechanisms, and strengthen ethical organizational culture.

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In the engineering and construction industries, bribery risks tend to be higher than in many other sectors due to large project values, complex procurement processes, and intensive stakeholder interactions. This makes ABMS implementation increasingly relevant for enhancing transparency, accountability, and stakeholder trust. Research indicates that organizations effectively implementing anti-bribery systems are better equipped to manage fraud risks, strengthen regulatory compliance, and improve organizational reputation. ISO 37001 implementation also contributes to reinforcing a culture of integrity, which serves as a critical foundation for sustainable project governance.

Beyond serving as a compliance instrument, ABMS is also considered part of a broader organizational governance framework. Integrating ABMS with other management systems such as ISO 9001, ISO 14001, and ISO 45001 can improve risk management effectiveness and create synergies across organizational functions. This integrated management systems approach enables organizations to manage quality, environment, safety, and integrity in a more coordinated manner, resulting in more comprehensive organizational performance improvements.

Organizational Integrity

Organizational integrity refers to the alignment between organizational values, policies, decisions, and actions in conducting activities ethically, transparently, and responsibly. This concept has gained increasing attention in governance literature because it is considered a key factor in building stakeholder trust, strengthening organizational legitimacy, and enhancing decision-making effectiveness. Organizational integrity extends beyond compliance with formal regulations; it reflects an organizational culture that promotes ethical behavior, accountability, and professionalism throughout all operational activities.

In engineering projects, organizational integrity plays a vital role in minimizing conflicts of interest, reducing fraud risks, and improving project governance quality. Organizations with high levels of integrity tend to establish stronger stakeholder relationships, improve project coordination effectiveness, and reinforce a culture of continuous improvement. Several studies suggest that organizational integrity functions as a mediating variable linking governance systems to organizational performance and the successful implementation of sustainable innovation.

Furthermore, organizational integrity is closely associated with an organization's ability to adopt green innovation. Organizations with strong ethical cultures and sound governance tend to be more open to change, better able to manage innovation-related risks, and more responsive to sustainability demands. Therefore, organizational integrity can be viewed as an important

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mechanism bridging the implementation of QMS and ABMS with the achievement of organizational sustainability objectives.

Green Innovation

Green innovation refers to the development and implementation of products, processes, technologies, or management practices aimed at reducing environmental impacts while simultaneously creating economic value for organizations. This concept has evolved alongside growing concerns about climate change, resource efficiency, the circular economy, and sustainable development. Green innovation includes activities such as adopting energy-efficient technologies, reducing carbon emissions, managing waste, utilizing environmentally friendly materials, and developing more sustainable production systems. The literature indicates that green innovation significantly contributes to improved environmental performance, operational efficiency, corporate reputation, and long-term competitive advantage.

In the engineering and construction sectors, green innovation has become increasingly important due to the high levels of energy and material consumption throughout project life cycles. The implementation of green innovation enables organizations to reduce resource utilization, improve energy efficiency, and minimize the environmental impacts of construction activities. Numerous studies demonstrate that companies investing in green innovation tend to achieve better sustainability performance and enhance competitiveness in markets that increasingly demand environmentally responsible business practices.

Beyond technological factors, the success of green innovation is also influenced by governance quality, management commitment, organizational culture, and organizational integrity. Recent studies indicate that strong governance and ethical organizational cultures can significantly enhance an organization's capacity to develop and implement green innovations effectively. Therefore, green innovation should not be viewed solely as a technical issue but rather as an outcome of the interaction between governance, leadership, and organizational capability.

Project Performance

Project performance is a multidimensional concept used to evaluate the success of a project based on the achievement of predefined objectives. Traditionally, project performance has been measured using the dimensions of cost, quality, and schedule, commonly known as the iron triangle of project management. However, developments in project management literature suggest that project success should also consider stakeholder satisfaction, environmental

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sustainability, organizational value creation, and an organization's ability to manage risks and changes throughout project implementation.

In modern engineering projects, project performance is influenced by various interrelated internal and external factors. Effective quality management systems, strong anti-bribery governance, high organizational integrity, and sustainable innovation capabilities are increasingly recognized as key determinants of project success. Research shows that organizations capable of integrating quality, governance, and sustainability aspects tend to deliver projects that are more efficient, transparent, competitive, and sustainable than organizations managing these aspects separately.

Based on the theoretical review and previous empirical findings, QMS and ABMS can be understood as governance drivers that shape organizational integrity. Organizational integrity, in turn, promotes the successful implementation of green innovation, which ultimately contributes to improved project performance. This relationship forms the conceptual foundation for the integrative research model proposed in this study, linking quality, integrity, sustainability, and project performance within a holistic engineering project management framework.

METHODOLOGY

This study employed a Systematic Literature Review (SLR) approach based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) guidelines developed by Page et al. (2021). This approach was selected because it provides a systematic, transparent, and replicable process for identifying, selecting, evaluating, and synthesizing literature. Through this method, the study aims to develop a comprehensive scientific synthesis regarding the integration of Quality Management Systems (QMS), Anti-Bribery Management Systems (ABMS), Green Innovation, and Project Performance within the context of engineering projects.

The scope of the review was limited to scientific publications published between January 2015 and December 2025. This period was chosen because it encompasses significant developments in the implementation of ISO 9001:2015, the publication of ISO 37001:2016, and the increasing attention given to green innovation and sustainable project management in the engineering and construction sectors. Literature sources were obtained from reputable international databases indexed by Scopus, including Scopus, ScienceDirect, SpringerLink, Emerald Insight, Taylor & Francis Online, Wiley Online Library, Sage Journals, and MDPI. These databases were selected to ensure publication quality, multidisciplinary coverage, and relevance to the research topic.

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The literature search strategy utilized a combination of keywords developed based on the research objectives and terminology commonly used in international publications. The primary keywords included Quality Management System, ISO 9001, Anti-Bribery Management System, ISO 37001, Green Innovation, Environmental Innovation, Sustainability Innovation, Project Performance, Engineering Project, and Construction Project. Boolean operators AND and OR were employed to enhance the sensitivity and specificity of the search results. Additional supporting terms such as organizational integrity, governance, project success, sustainable project management, anti-corruption management, and integrated management systems were also used to broaden the coverage and relevance of the literature.

All retrieved references were exported to Mendeley and Rayyan software to facilitate data management, duplicate detection, and systematic article screening. Inclusion criteria were established to ensure that only relevant and high-quality studies were included in the analysis. Selected articles had to be peer-reviewed international journal publications indexed in Scopus, available in full-text format, written in English, and discussing one or more variables related to QMS, ABMS, organizational integrity, green innovation, or project performance within the contexts of engineering, construction, manufacturing, or project management. Conversely, editorials, book reviews, non-peer-reviewed conference papers, articles without full-text access, and publications not directly relevant to the research focus were excluded from the selection process.

The literature selection process followed the four main stages of PRISMA 2020: identification, screening, eligibility, and inclusion. During the identification stage, literature was collected from all selected databases, resulting in an initial pool of potentially relevant articles. Duplicate records arising from overlapping database searches were then removed. The screening stage involved evaluating titles and abstracts to assess their relevance to the research objectives. Irrelevant articles were excluded at this stage. Articles that passed the screening process proceeded to the eligibility stage, where full-text reviews were conducted to evaluate methodological quality, conceptual relevance, and contributions to the development of the study's theoretical framework. Articles meeting all inclusion criteria were subsequently included in the final synthesis.

Table 1. Literature Identification Results by Database

Database	Number of Articles
Scopus	312

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ScienceDirect	285
SpringerLink	194
Emerald Insight	126
Taylor & Francis Online	104
Wiley Online Library	88
Sage Journals	63
MDPI	75
Total	1,247

The identification stage yielded 1,247 articles from eight international databases. Duplicate screening using Mendeley and Rayyan identified several articles appearing more than once. After duplicate removal, the remaining articles proceeded to title and abstract screening.

Table 2. Screening Results

Stage	Number
Initial search results	1,247
Duplicate articles removed	287
Articles after duplicate removal	960
Articles excluded based on title and abstract	712
Articles advanced to full-text review	248

During the screening stage, most articles were excluded because they did not directly address the relationships among governance, innovation, integrity, and project performance. Other articles were excluded because they focused solely on technical construction or technological aspects without examining management and organizational governance dimensions.

Table 3. Full-Text Eligibility Assessment Results

Reason for Exclusion	Number
Full-text unavailable	18
Topic not relevant	42
Did not address relationships among key variables	47

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Not related to engineering projects	28
Low methodological quality	21
Insufficient empirical data	15
Total	171

The eligibility stage involved a comprehensive evaluation of the 248 articles that passed the initial screening. Each article was critically reviewed to ensure alignment with the study objectives and methodological quality requirements. Following the evaluation process, 171 articles were excluded because they failed to meet the established criteria.

Table 4. Distribution of Final Included Studies

Scopus Quartile	Number of Articles
Q1	39
Q2	22
Q3	10
Q4	6
Total	77

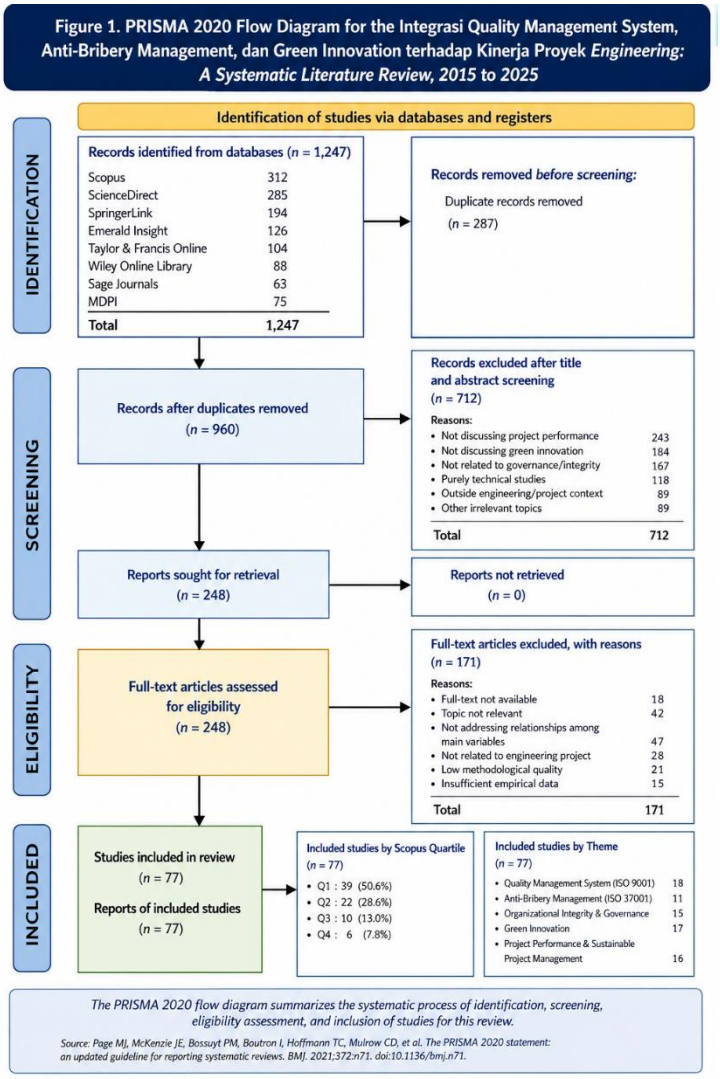
A total of 77 articles were ultimately included in the systematic synthesis. The majority originated from first- and second-quartile journals, indicating that the evidence base used in this study can be considered high quality. These articles were subsequently analyzed using a thematic synthesis approach to identify patterns, common findings, and research gaps related to the integration of QMS, ABMS, organizational integrity, green innovation, and project performance.

Table 5. Distribution of Articles by Research Theme

Theme	Number
Quality Management System and ISO 9001	18
Anti-Bribery Management System and ISO 37001	11
Organizational Integrity and Governance	15
Green Innovation	17
Project Performance and Sustainable Project Management	16
Total	77

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Data analysis was conducted through open coding, axial coding, and selective coding. These stages enabled the identification of key concepts from each article, the grouping of concepts into broader themes, and the development of conceptual relationships among variables. The synthesis produced four major themes: quality governance, anti-corruption governance, sustainability innovation, and project performance. These themes subsequently formed the basis for developing a conceptual model explaining how the integration of quality management systems, anti-bribery management systems, organizational integrity, and green innovation contributes to the sustainable improvement of engineering project performance.



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Figure 1. PRISMA 2020 Flow Diagram Illustrating the Systematic Literature Review Process for the Integration of Quality Management Systems (QMS), Anti-Bribery Management Systems (ABMS), and Green Innovation in Enhancing Engineering Project Performance (2015–2025).

RESULTS AND DISCUSSION

Literature Selection Results Based on PRISMA 2020

The literature search was conducted across eight international databases indexed by Scopus, namely Scopus, ScienceDirect, SpringerLink, Emerald Insight, Taylor & Francis Online, Wiley Online Library, Sage Journals, and MDPI. The initial search yielded 1,247 articles potentially relevant to the research topic. After duplicate removal using Mendeley and Rayyan, 287 duplicate records were identified, leaving 960 unique articles for further screening. The title and abstract screening process resulted in the exclusion of 712 articles that did not align with the research focus. Subsequently, 248 articles underwent full-text evaluation, and 171 articles were excluded because they did not meet the predefined inclusion criteria. Ultimately, 77 articles satisfied all methodological and substantive requirements and were included in this systematic literature review.

Table 6. Summary of Literature Selection Results Based on PRISMA 2020

Stage	Number of Articles
Initial identification results	1,247
Duplicate articles	287
Articles after duplicate removal	960
Articles excluded during screening	712
Full-text articles assessed	248
Articles excluded during eligibility assessment	171
Included articles	77

Analysis of the 77 included articles indicates that research on QMS, ABMS, organizational integrity, green innovation, and project performance has increased significantly since 2020. This trend reflects growing attention from academics and practitioners to governance, sustainability, and organizational integrity issues in modern engineering project management. Most articles were published in Q1 and Q2 Scopus-indexed journals, indicating the high quality of evidence

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utilized in this study.

Thematic Analysis of the Literature Synthesis

Based on the thematic synthesis of the 77 articles that met the inclusion criteria, four major themes consistently emerged in the literature: quality governance, anti-corruption governance, organizational integrity and sustainability, and project performance. These themes form an integrated relationship explaining how engineering organizations can enhance project performance sustainably.

Table 7. Main Themes Identified from the Literature Synthesis

Theme	Frequency
Quality Governance	18
Anti-Corruption Governance	11
Organizational Integrity	15
Green Innovation	17
Project Performance	16
Total	77

The synthesis findings indicate that most studies position governance quality, organizational integrity, and sustainable innovation as strategic factors determining engineering project success. However, most studies still examine these relationships independently, resulting in a lack of integrative models capable of explaining the interrelationships among all variables simultaneously.

Quality Governance Through Quality Management Systems (QMS)

The literature analysis indicates that ISO 9001-based Quality Management Systems (QMS) constitute a fundamental foundation for establishing effective project governance and continuous improvement. Nearly all studies examining ISO 9001 implementation report significant improvements in process quality, operational effectiveness, quality control, and customer satisfaction following the consistent application of quality management systems. QMS implementation enables organizations to develop standardized work procedures, strengthen risk management practices, and improve data-driven decision-making quality.

Within engineering projects, QMS serves not only as a quality control instrument but also

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as a governance mechanism that enhances coordination across organizational functions. Studies indicate that organizations with higher levels of QMS maturity are more capable of reducing project delays, minimizing rework, improving cost efficiency, and increasing stakeholder satisfaction. These findings suggest that governance quality is a critical prerequisite for sustainable engineering project success.

Furthermore, numerous studies emphasize that effective QMS implementation contributes to developing organizational cultures that promote integrity, transparency, and continuous improvement. Therefore, QMS can be viewed as a governance driver that fosters organizational integrity within engineering organizations.

Anti-Corruption Governance Through Anti-Bribery Management Systems (ABMS)

The second dominant theme identified in the literature is the importance of ISO 37001-based Anti-Bribery Management Systems (ABMS) as an instrument for strengthening anti-corruption governance. The synthesis results indicate that organizations implementing ABMS systematically demonstrate higher compliance levels, lower fraud risks, and greater stakeholder trust compared to organizations lacking structured anti-bribery systems.

In the engineering and construction sectors, ABMS is increasingly important due to the complexity of procurement processes, project contracts, and interactions with multiple external parties. The literature demonstrates that mechanisms such as due diligence, whistleblowing systems, compliance audits, and anti-bribery policies can reduce corruption risks and enhance organizational accountability. ISO 37001 implementation also contributes to fostering an ethical culture that ultimately improves project governance effectiveness.

The synthesis further reveals a close relationship between ABMS and organizational integrity. Organizations that effectively implement anti-bribery systems tend to possess stronger transparency cultures, better oversight quality, and higher stakeholder trust. These findings indicate that ABMS serves as a second governance driver that reinforces organizational integrity.

Organizational Integrity as a Mediating Mechanism

One of the key findings of this systematic literature review is the emergence of organizational integrity as a variable bridging governance systems and sustainability outcomes. Most studies suggest that the success of both QMS and ABMS implementation depends heavily on an organization's ability to cultivate a strong culture of integrity. Organizational integrity creates alignment among policies, values, and organizational behavior, thereby enhancing the

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effectiveness of management system implementation.

The synthesis also indicates that organizational integrity contributes to improved decision-making quality, risk management, and stakeholder relationships. Organizations with higher levels of integrity are better positioned to adopt innovative and sustainable practices than organizations with weak governance structures. These findings support the view that organizational integrity functions as a mediating mechanism linking governance systems and green innovation.

Green Innovation as a Sustainability Strategy

A third prominent theme identified in the literature is green innovation as a primary strategy for supporting organizational and engineering project sustainability. Most studies indicate that green innovation contributes to carbon emission reduction, improved energy efficiency, waste minimization, and enhanced organizational reputation. Green innovation also creates competitive advantages through the development of more efficient and environmentally friendly technologies and processes.

An important finding from the synthesis is that successful green innovation is influenced not only by technological factors but also by governance quality and organizational integrity. Organizations possessing robust quality management systems, strong integrity cultures, and effective anti-corruption governance are generally more successful in implementing green innovation than organizations lacking adequate governance foundations. Therefore, green innovation can be viewed as a strategic outcome of governance and integrity integration within engineering organizations.

The Influence of QMS, ABMS, Organizational Integrity, and Green Innovation Integration on Project Performance

Analysis of all included articles reveals a strong consensus that project performance is influenced by a combination of quality, governance, integrity, and sustainability factors. Organizations focusing solely on quality while neglecting integrity and sustainability tend to face limitations in creating long-term value. Conversely, organizations capable of integrating QMS, ABMS, organizational integrity, and green innovation demonstrate higher project success rates than organizations adopting partial approaches.

The synthesis indicates that QMS and ABMS function as governance drivers that strengthen organizational integrity. Organizational integrity subsequently facilitates more effective green innovation implementation. Ultimately, green innovation contributes to improved

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project quality, cost efficiency, timely project completion, stakeholder satisfaction, and environmental sustainability. These relationships form a conceptual model linking governance, integrity, sustainability, and project performance within an integrated engineering project management framework.

Conceptual Model Derived from the Systematic Literature Review

Based on the synthesis of the 77 included articles, this study develops a conceptual model positioning Quality Management Systems (ISO 9001) and Anti-Bribery Management Systems (ISO 37001) as governance drivers, organizational integrity as a mediating variable, green innovation as a sustainability enabler, and project performance as the ultimate outcome. The model demonstrates that improvements in governance quality and organizational integrity are critical prerequisites for successful green innovation implementation and the achievement of sustainable project performance. These findings extend prior literature, which has generally examined the relationships among these variables separately rather than integrating them into a holistic conceptual framework.

DISCUSSION

The findings of this systematic literature review indicate that the success of modern engineering projects can no longer be explained solely through traditional performance dimensions such as cost, quality, and schedule. Increasing project complexity, growing stakeholder expectations, demands for transparency, and sustainability requirements have driven the need for a more comprehensive governance framework. The review demonstrates that the integration of Quality Management Systems (QMS), Anti-Bribery Management Systems (ABMS), organizational integrity, and green innovation forms a complementary governance structure that significantly enhances engineering project performance. QMS serves as the foundation for quality governance by improving process standardization, operational effectiveness, risk management, and continuous improvement, while ABMS strengthens anti-corruption governance through enhanced compliance, accountability, and stakeholder trust. Together, these systems establish a robust governance environment that supports organizational effectiveness and long-term project success.

A key finding of this review is the pivotal role of organizational integrity as a mediating mechanism linking governance systems with sustainability outcomes. Organizations characterized by strong integrity are more capable of translating governance practices into ethical behavior,

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effective decision-making, and stakeholder confidence. This integrity-driven environment facilitates the successful implementation of green innovation, which contributes to energy efficiency, waste reduction, carbon emission control, and improved organizational competitiveness. The synthesis further suggests a sequential relationship in which QMS and ABMS act as governance drivers, organizational integrity functions as a mediator, green innovation serves as a sustainability enabler, and project performance emerges as the ultimate outcome. Consequently, sustainable project success is achieved not merely through technical excellence but through the integration of governance quality, ethical culture, and innovation-oriented sustainability strategies within a holistic engineering project management framework.

CONCLUSION

Based on a Systematic Literature Review of 77 international articles published between 2015 and 2025, this study concludes that the success of engineering projects is determined not only by the achievement of cost, quality, and time objectives but also by the quality of organizational governance, integrity, and sustainability practices. Quality Management Systems (QMS) and Anti-Bribery Management Systems (ABMS) function as governance drivers that strengthen process standardization, risk management, transparency, accountability, and organizational compliance. Furthermore, organizational integrity emerges as a key mediating factor that connects the effectiveness of governance systems with sustainability outcomes by fostering an ethical, transparent, and responsible organizational culture. Strong organizational integrity facilitates the successful implementation of green innovation as a sustainability strategy capable of enhancing operational efficiency, reducing environmental impacts, and creating long-term competitive advantages. Accordingly, this study proposes an integrative conceptual framework that positions QMS and ABMS as governance drivers, organizational integrity as a mediating mechanism, green innovation as a sustainability enabler, and project performance as the ultimate outcome. These findings highlight that the integration of quality management, anti-bribery governance, organizational integrity, and green innovation represents a strategic approach to improving sustainable engineering project performance while strengthening organizational competitiveness in an increasingly complex business environment.

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