

Final Project 1

Code: MGM 496-PMG496

Project Template

Faculty of Management
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Faculty of Management

Department/ Specialization (Project Management)



**The Effect of Communication Management on Project Success in
Construction Projects in Saudi Arabia**

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Date of submission – number of Semester

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1. Chapter 1: Introduction

1.1. Research Background

Project management has become an essential practice for organizations seeking to achieve their goals efficiently and effectively. Regardless of the industry, projects are used to deliver products, services, and organizational improvements. As projects continue to increase in size and complexity, organizations are paying greater attention to the factors that contribute to project success. Among these factors, communication management is frequently identified as one of the most important elements influencing project performance and outcomes. Communication is a fundamental activity that takes place throughout the entire project life cycle. Project managers, team members, clients, contractors, consultants, and other stakeholders rely on communication to exchange information, discuss progress, address challenges, and make decisions. Effective communication ensures that project information is delivered to the right people at the right time and in an understandable manner. As a result, communication supports coordination, collaboration, and alignment among all parties involved in a project. Communication management refers to the processes used to plan, collect, distribute, monitor, and control project information. According to project management literature, communication management helps ensure that stakeholders receive the information they need to perform their responsibilities and contribute to project objectives. It also supports transparency and promotes a shared understanding of project goals, expectations, and requirements. When communication is managed effectively, project teams are more likely to work efficiently and respond quickly to project issues. Project success is generally associated with completing a project within the approved scope, time, cost, and quality requirements. However, modern project management recognizes that project success also includes stakeholder satisfaction, achievement of business objectives, and long-term project value. Because communication affects almost every aspect of project execution, it plays a significant role in determining whether a

project is considered successful. Clear communication helps reduce uncertainty, improve teamwork, and facilitate decision-making throughout the project. The construction industry is one of the sectors where communication management is particularly important. Construction projects typically involve numerous stakeholders, including project owners, architects, engineers, contractors, subcontractors, suppliers, consultants, and government authorities. These stakeholders often have different responsibilities and expectations, making effective communication necessary to maintain coordination and avoid misunderstandings. The large volume of information exchanged during construction projects increases the importance of having well-structured communication processes. Construction projects are also characterized by high levels of complexity and risk. Changes in project scope, technical requirements, safety regulations, and stakeholder expectations can occur at different stages of project execution. To manage these challenges successfully, project participants must communicate continuously and accurately. Failure to communicate important information may result in delays, additional costs, quality issues, disputes, and reduced stakeholder satisfaction. Consequently, many project management

studies consider communication to be a critical success factor in construction projects. Poor communication remains one of the most common challenges faced by construction projects around the world. In many cases, project problems can be traced to incomplete information, unclear instructions, delayed reporting, or ineffective coordination between project participants. These communication failures may create confusion regarding project responsibilities and lead to errors that affect overall project performance. Therefore, organizations increasingly seek to strengthen communication management practices in order to improve project outcomes and reduce project risks. The growing use of technology has changed the way communication takes place within projects. Digital communication platforms, project management software, cloud-based systems, and virtual meeting

applications have improved information sharing and collaboration among project teams. These tools provide opportunities for faster communication and better access to project information. Nevertheless, technology alone cannot guarantee effective communication. Successful communication still depends on proper planning, stakeholder engagement, and clear communication channels. In Saudi Arabia, the construction industry has experienced significant expansion in recent years as a result of Vision 2030 and the government's commitment to economic diversification and infrastructure development. Several large-scale projects have been launched to support national development goals and enhance economic growth. These projects require cooperation among various organizations and stakeholders, making communication management an important factor in ensuring project success. Mega projects such as NEOM, The Red Sea Project, Qiddiya, Diriyah Gate, and King Salman Park have increased the demand for effective project management practices within the Kingdom. Due to their size and complexity, these projects involve multiple stakeholders working across different locations and disciplines. Effective communication is necessary to coordinate activities, manage expectations, and ensure that project objectives are achieved. Any breakdown in communication may have serious consequences for project performance and overall success. Previous studies have highlighted a positive relationship between communication management and project success. Research findings generally suggest that projects with effective communication practices are more likely to meet their objectives and achieve higher levels of stakeholder satisfaction. However, communication challenges continue to exist in many construction projects, particularly those involving complex stakeholder relationships and large project teams. This indicates the need for further investigation into the role of communication management within different project environments. Based on the importance of communication in construction projects and the ongoing development of the Saudi construction sector, this study aims to examine the effect of communication management on project success in construction projects in Saudi Arabia. Understanding this relationship may help project managers and organizations improve communication practices and enhance the likelihood of successful project delivery.

1.2. Research Problem

Despite the growing importance of communication management in project management, communication-related challenges continue to affect the performance of construction projects worldwide. Construction projects involve multiple stakeholders with different responsibilities, objectives, and expectations, making communication a complex process. In many cases, ineffective communication results in misunderstandings, delays in decision-making, conflicts among project participants, cost overruns, schedule delays, and reduced project quality. Although communication management is recognized as a critical success factor, many construction projects still experience difficulties in maintaining effective information flow among stakeholders. In Saudi Arabia, the rapid growth of the construction industry and the implementation of large-scale projects under Vision 2030 have increased the need for effective communication management practices. However, evidence from industry reports and previous studies suggests that communication issues remain a common challenge in construction projects. Therefore, there is a need to better understand how communication management influences project success within the Saudi construction sector and identify whether improving communication practices can contribute to better project outcomes.

1.2.1. Theoretical Gaps

Previous studies have examined communication management and project success in different industries and countries. However, limited research has specifically focused on the relationship between communication management and project success within the context of construction projects in Saudi Arabia. Furthermore, existing studies often examine project success from a general perspective without fully exploring how communication management contributes to different dimensions of project success, such as time performance, cost performance, quality achievement, and stakeholder satisfaction. This study seeks to address this gap by providing additional empirical evidence on the effect of communication management on project success in Saudi construction projects.

1.2.2. Practical Gaps

From a practical perspective, many construction organizations continue to face communication-related challenges despite the availability of advanced communication technologies and project management tools. Project stakeholders may experience delays in information sharing, unclear communication channels, incomplete reporting, and coordination difficulties. These issues can negatively affect project performance and reduce the likelihood of achieving project objectives. Therefore, construction companies need practical evidence regarding the role of communication management in improving project success. The findings of this study may help project managers

and organizations develop more effective communication practices that support successful project delivery.

What is the effect of communication management on project success in construction projects in Saudi Arabia?

1.3. Research Significance

This study is important because communication management is widely recognized as a critical factor influencing project success. In construction projects, effective communication facilitates coordination among stakeholders, supports decisionmaking processes, reduces misunderstandings, and contributes to achieving project objectives. Given the increasing complexity of construction projects in Saudi Arabia, understanding the impact of communication management on project success is essential for both academic researchers and industry practitioners. The significance of this study can be explained at both the theoretical and practical levels.

1.3.1. At the theoretical level

At the theoretical level, this study contributes to the existing body of knowledge on project management by examining the relationship between communication management and project success within the construction industry. Although previous studies have investigated communication as a project management factor, limited research has focused specifically on construction projects in Saudi Arabia. Therefore, this study provides additional evidence that may support existing theories and expand the academic understanding of how communication management affects project outcomes. The findings may also serve as a useful reference for future researchers interested in project management and constructionrelated studies.

1.3.2. At the practical level

At the practical level, the study provides valuable insights for project managers, contractors, consultants, and construction organizations operating in Saudi Arabia. The findings may help practitioners understand the importance of effective communication and its role in improving project performance. In addition, the study may assist organizations in developing communication strategies and practices that enhance coordination, reduce project risks, minimize delays, and improve stakeholder satisfaction. Ultimately, the results may contribute to increasing the likelihood of successful project delivery in the construction sector.

1.4. Research Questions

This study seeks to answer the following research questions: What is the level of communication management effectiveness in construction projects in Saudi Arabia?

What is the level of project success in construction projects in Saudi Arabia? Is there a significant relationship between communication management and project success in construction projects in Saudi Arabia? To what extent does communication management affect project success in construction projects in Saudi Arabia?

1.5. Research Objectives

The main objective of this study is to examine the effect of communication management on project success in construction projects in Saudi Arabia. The specific objectives of the study are: To identify the level of communication management effectiveness in construction projects in Saudi Arabia. To assess the level of project success in construction projects in Saudi Arabia. To examine the relationship between communication management and project success. To determine the effect of communication management on project success in construction projects in Saudi Arabia.

1.6. Research Hypotheses

Based on the study objectives and research questions, the following hypotheses are proposed: H0 (Null Hypothesis): There is no significant effect of communication management on project success in construction projects in Saudi Arabia. H1 (Alternative Hypothesis): There is a significant effect of communication management on project success in construction projects in Saudi Arabia.

1.7. Research Model

The conceptual model of this study consists of: **Independent Variable (IV):** Communication Management **Dependent Variable (DV):** Project Success The study assumes that effective communication management positively influences project success in construction projects.



1.8. Research Methodology

This study will adopt a quantitative research approach to examine the effect of communication management on project success in construction projects in Saudi Arabia. A descriptive and analytical research design will be used to investigate the relationship between the study variables. The study will collect primary data through a structured questionnaire distributed to professionals working in the construction sector, including project managers, engineers, consultants, and contractors. The questionnaire will be designed to measure communication

management practices and project success indicators. The target population of the study consists of individuals involved in construction projects in Saudi Arabia. A suitable sampling technique will be used to select respondents who have sufficient experience in project management and construction activities. The collected data will be analyzed using statistical methods to identify the relationship between communication management and project success and to test the proposed hypotheses. The findings will help determine whether effective communication management contributes significantly to successful project outcomes.

1.9. Scope of The Study

This study is limited to construction projects in Saudi Arabia and focuses on examining the effect of communication management on project success. Communication management represents the independent variable, while project success represents the dependent variable. The study targets professionals working in construction projects, including project managers, engineers, consultants, and contractors. The research is conducted within the Saudi construction industry and therefore the findings may not be generalized to other industries or countries without considering contextual differences.

1.10. The Suggested Project Structure

The proposed research consists of five chapters. Chapter One presents the introduction, research background, research problem, research significance, research questions, research objectives, research hypotheses, research model, research methodology, and scope of the study. Chapter Two reviews the relevant literature related to communication management and project success. Chapter Three explains the research methodology, including research design, population, sampling procedures, data collection methods, and data analysis techniques. Chapter Four presents and analyzes the research findings. Finally, Chapter Five provides the conclusions, recommendations, limitations of the study, and suggestions for future research

Chapter Two: Literature Review

2.1 Introduction

This chapter reviews the theoretical and empirical foundations that underpin the present study on the effect of communication management on project success in construction projects in Saudi Arabia. The construction sector is one of the most fragmented and information-intensive industries, involving multiple stakeholders, layered contractual arrangements, and highly interdependent activities. Under such conditions, the way information moves — how it is planned, transmitted, received, and interpreted — becomes a defining factor in whether a project meets its objectives. The chapter is organized around three analytical strands. It begins with the independent variable, communication management, tracing its conceptual boundaries, its importance to construction, its guiding objectives, its principal dimensions, and the most relevant prior studies. It then turns to the dependent variable, project success, treated here as a multidimensional construct that extends beyond the traditional iron triangle of time, cost, and quality. The third strand synthesizes the relationship between the two variables in light of recent empirical evidence, particularly studies conducted in emerging and developing economies with structural similarities to the Saudi context. A concise conclusion consolidates the review and sets the stage for the empirical chapters that follow.

2.2 The Independent Variable: Communication Management

2.2.1 The Concept of Communication Management

Communication management in projects has evolved from a peripheral administrative activity into a formal knowledge area with recognized processes, standards, and performance indicators. Rehan, Thorpe, and Heravi (2024) describe it as the deliberate orchestration of the flow of information among project participants so that decisions are informed, expectations are aligned, and coordination costs are minimized. Malik et al. (2021) frame the concept more relationally, defining communication management as the structured practice of exchanging technical, contractual, and behavioral information among stakeholders in a manner that preserves clarity and reduces the likelihood of conflict. In a complementary formulation, Akintelu, Oyebola, Tihamiyu, and Olateju (2023) view it as the integrated system of planning, distributing, monitoring, and archiving project information across its life cycle. Muneer et al. (2022) emphasize the managerial dimension, treating communication management as a strategic capability that binds organizational culture, scope clarity, and leadership competency into a coherent information architecture. Gamil and Abd Rahman (2023) approach the concept from the opposite direction, arguing that it is best understood through its failure modes, where poor communication produces rework, disputes, and schedule slippage. Manuputty and Nursin (2023) add that communication management must be seen as a process discipline whose maturity can be measured and improved through repeatable protocols. Shaqour (2022) situates the concept within the broader project management knowledge areas, showing how digital enablers such as Building Information Modelling have redefined what

communication management can look like in practice. Taken together, these formulations converge on the idea that communication management is a purposeful, structured, and multi-directional process. The researcher, building on this convergence, understands communication management in the construction context as the deliberate design and execution of information flows — technical, contractual, and interpersonal — that enable coordinated action among project stakeholders and support the timely, cost-efficient, and quality-conforming delivery of the built asset.

2.2.2 The Importance of Communication Management

The importance of communication management in construction rests on the industry's structural realities: temporary organizations, high stakeholder diversity, dispersed work sites, and dependence on tacit craft knowledge. Rehan et al. (2024) argue that communication carries a disproportionate share of the coordination burden in construction, because contracts alone cannot anticipate every contingency and site conditions frequently outpace the drawings. Akintelu et al. (2023) point out that effective communication is what converts plans into buildable instructions, and its absence turns even a well-designed project into a source of costly misinterpretation. Muneer et al. (2022) further note that its importance manifests along at least three axes: it enables clarity of scope, it stabilizes stakeholder expectations, and it enhances the ability of project managers to exercise their competencies. Malik et al. (2021) hold that communication management matters precisely because it functions as a preventive mechanism against the interpersonal and inter-organizational conflict that is endemic to construction. Gamil and Abd Rahman (2023) demonstrate, through empirical modelling, that the effects of poor communication ripple outward into productivity losses, disputes, and safety incidents, thereby confirming its importance by the magnitude of the damage its absence causes. Manuputty and Nursin (2023) view its importance in more operational terms, showing that time performance in particular deteriorates rapidly when communication routines are weak or informal. In the Saudi construction environment, where mega-projects under Vision 2030 involve global contractors, multilingual workforces, and demanding delivery timelines, this importance is magnified: information friction has direct financial and reputational consequences, and communication management becomes a governance instrument rather than a mere administrative function.

2.2.3 The Objectives of Communication Management

Scholarship on the objectives of communication management in construction converges around a small set of recurring aims. Akintelu et al. (2023) identify the primary objective as ensuring that the right information reaches the right stakeholder at the right time, in a form that supports decision-making. Rehan et al. (2024) extend this by adding leadership-oriented objectives, including building trust, sustaining team motivation, and integrating dispersed specialists around a shared understanding of the work. Muneer et al. (2022) frame the objectives more strategically, arguing that communication management aims to (1) reduce ambiguity in scope, (2) align

stakeholders behind a common set of priorities, and (3) create feedback loops that allow managers to detect deviations early. Malik et al. (2021) contribute a conflict-prevention objective, positioning communication management as the mechanism through which latent disagreements are surfaced and resolved before they escalate into disputes or claims. Gamil and Abd Rahman (2023) add a corrective objective, namely to eliminate the causes of poor communication — unclear channels, cultural distance, inadequate documentation — before they generate observable damage. Manuputty and Nursin (2023) foreground a performance-oriented objective, arguing that communication routines should be explicitly designed to protect the project schedule against the small, cumulative delays that arise from information gaps.

2.2.4 The Dimensions of Communication Management

The dimensions of communication management adopted in this study were determined on the basis of Rehan et al. (2024), Akintelu et al. (2023), Muneer et al. (2022), Malik et al. (2021), and Manuputty and Nursin (2023), whose treatments together provide a comprehensive and construction-specific mapping. The first dimension is **communication planning**, understood as the upfront design of channels, frequencies, protocols, and responsibilities. Rehan et al. (2024) emphasize that planning is where communication ceases to be reactive and becomes structured; it is the stage at which the project's information architecture is deliberately configured to match its complexity. The second dimension is **information distribution**, which concerns the mechanics of getting relevant information — drawings, change orders, meeting minutes, safety notices — to the parties that need it in the correct version and format. Akintelu et al. (2023) show that failures at this stage are typically failures of channel selection, timing, and version control, and they are among the most common triggers of rework in construction sites. The third dimension is **performance reporting**, that is, the routine communication of status, variances, risks, and forecasts to internal and external stakeholders. Manuputty and Nursin (2023) demonstrate that the quality of reporting is directly linked to the ability of managers to intervene before deviations grow into full-blown delays. The fourth dimension is **stakeholder communication and engagement**, which captures the deliberate cultivation of two-way dialogue with owners, consultants, subcontractors, regulators, and end users. Muneer et al. (2022) argue that this dimension is where communication management interacts most closely with organizational culture and managerial competency. The fifth dimension is **feedback and conflict-resolution communication**, which includes the mechanisms through which grievances, disagreements, and misunderstandings are surfaced and addressed. Malik et al. (2021) treat this dimension as the mediating channel through which communication translates into project outcomes: when feedback flows are healthy, conflict is contained; when they are blocked, conflict corrodes performance. Additional elements — such as documentation and archival discipline, use of digital collaboration platforms, and cross-cultural communication competency, particularly relevant in Saudi Arabia's multinational workforce — sit alongside these five and enrich them without displacing them.

2.2.5 Previous Studies on Communication Management

The **study by Rehan et al. (2024)** aimed to examine how leadership practices and communication jointly influence project success in the construction sector. Its dimensions covered leadership behaviors, communication clarity, information flow, and team coordination. The study used a mixed-methods approach combining a structured survey with semi-structured interviews, drawing on a sample of construction professionals across multiple project types. The results showed that communication practices, when reinforced by supportive leadership, exerted a strong and statistically significant effect on project success, and that leadership without effective communication was insufficient to secure positive outcomes.

The **study by Malik et al. (2021)** sought to explore the relationship between communication and the success of construction projects while testing the mediating role of conflict. Its dimensions included communication effectiveness, task conflict, relational conflict, and project success indicators. The study employed a quantitative design using structural equation modelling on data collected from 200 construction professionals. The findings confirmed that effective communication significantly improved project success and that conflict — particularly relational conflict — partially mediated the relationship, meaning that communication produced its benefits partly by suppressing destructive disputes.

The **study by Akintelu et al. (2023)** was designed to assess the impact of project communication management on successful project delivery within the construction industry, using a case-study approach. Its dimensions comprised communication planning, information distribution, performance reporting, and stakeholder engagement. The study relied on a descriptive survey methodology with a purposive sample of construction practitioners in the case organization. Results indicated that all four dimensions had positive and significant effects on project delivery, with performance reporting and stakeholder engagement emerging as the strongest predictors.

The **study by Gamil and Abd Rahman (2023)** aimed to model the relationship between the causes and effects of poor communication in construction projects. Its dimensions on the cause side included unclear channels, poor documentation, and cultural barriers, while the effect side captured cost overruns, delays, and disputes. The study used the PLS-SEM approach on a sample of construction professionals. The results demonstrated that identified causes explained a substantial share of the variance in negative project outcomes, thereby reinforcing the argument that communication management should be treated as a first-order preventive intervention.

The **study by Manuputty and Nursin (2023)** aimed to examine the effect of project communications management on project time performance. Its dimensions covered planning communications, managing communications, and monitoring communications, aligned with PMBOK terminology. The study adopted a quantitative survey methodology with a sample of construction practitioners in Indonesia. The results showed that all three communication processes were significantly associated with time performance, with monitoring communications exerting

the largest effect, suggesting that ongoing communication oversight — not merely upfront planning — is what protects the schedule.

2.3 The Dependent Variable: Project Success

2.3.1 The Concept of Project Success

Project success has moved a long way from its early identification with the iron triangle of time, cost, and quality. Kumar, Pandey, and Singh (2023) describe project success as a multidimensional construct comprising both the efficient delivery of the project and the effectiveness of the outcomes it generates for stakeholders. Amoah, Berbegal-Mirabent, and Marimon (2021) view success as the alignment between what was planned, what was executed, and what was actually valued by the parties who commissioned the project. Shaukat, Latif, Sajjad, and Eweje (2022) broaden the concept by embedding sustainability considerations into it, so that a project cannot be regarded as successful unless it also meets environmental, social, and governance expectations. Ali et al. (2021) approach the concept behaviorally, arguing that success reflects the extent to which project teams have been enabled to perform through supportive leadership and coherent internal dynamics. Ciric Lalic et al. (2022) situate the concept within the choice of management approach, showing that what counts as success can shift depending on whether traditional, agile, or hybrid methods are used. Unegbu, Yawas, and Dan-Asabe (2022) foreground measurable performance indicators, noting that success in construction is ultimately verified through observable metrics such as schedule adherence, cost variance, defect rates, and safety incidents. Building on these views, the researcher understands project success in construction as the multidimensional achievement of planned deliverables — on time, within budget, at required quality — together with the satisfaction of key stakeholders and the delivery of sustainable value beyond the project's handover.

2.3.2 The Importance of Project Success

The importance of project success in construction is best appreciated by considering the visibility and consequences of failure. Kumar et al. (2023) argue that project success matters because construction projects consume large volumes of capital, human effort, and material resources, and their failure therefore reverberates through economies and communities. Amoah et al. (2021) emphasize that in developing economies successful projects are often the vehicles through which infrastructure, housing, and public services are delivered, meaning that success is not simply a managerial outcome but a developmental one. Shaukat et al. (2022) locate the importance of success in its sustainability implications: projects that fail on environmental or social grounds impose costs on future generations even if they meet financial targets. Ali et al. (2021) hold that success matters because it reflects the effectiveness of leadership and team dynamics, offering a diagnostic signal for organizational health. Ciric Lalic et al. (2022) argue that the importance of project success has grown in tandem with the diversification of management approaches; the value of success now includes learning outcomes and adaptive capacity, not merely delivery. Fashina et al. (2021) demonstrate the inverse case — namely that delays and failures generate cascading costs,

disputes, and reputational damage — thereby confirming the importance of success by the weight of what is lost when it is absent. In the Saudi setting, where Vision 2030 places large-scale construction at the heart of national transformation, the importance of project success translates directly into strategic and economic significance.

2.3.3 The Objectives of Achieving Project Success

The literature identifies several recurring objectives that project managers pursue under the banner of success. Kumar et al. (2023) argue that the first objective is efficient delivery — completing the scope within the agreed time and budget while conforming to specified quality. Amoah et al. (2021) add the objective of stakeholder satisfaction, emphasizing that owners, users, and communities must perceive the outcome as valuable. Shaukat et al. (2022) frame a sustainability objective, whereby success includes minimizing negative environmental and social externalities and generating positive long-term impacts. Ali et al. (2021) add a human-capital objective: successful projects should develop team members and strengthen the organization's future capacity. Ciric Lalic et al. (2022) point to an adaptability objective, holding that projects should be able to absorb uncertainty and adjust course without collapsing. Unegbu et al. (2022) contribute an accountability objective, insisting that success must be demonstrable through transparent performance measurement. These objectives are not competing but layered, and modern project governance typically expects managers to pursue several of them simultaneously.

2.3.4 The Dimensions of Project Success

The dimensions of project success adopted in this study were determined on the basis of Kumar et al. (2023), Amoah et al. (2021), Shaukat et al. (2022), Unegbu et al. (2022), and Ciric Lalic et al. (2022), which together offer the most balanced and construction-appropriate treatment. The first dimension is **time performance**, referring to the extent to which the project is delivered within its planned schedule. Unegbu et al. (2022) show that this dimension remains the most visible marker of success in construction and continues to dominate stakeholder judgments. The second dimension is **cost performance**, encompassing adherence to the approved budget, control of variations, and management of claims. Amoah et al. (2021) emphasize that cost overruns are among the most common triggers of project failure in developing contexts, especially where inflation and supply-chain volatility interact. The third dimension is **quality performance**, understood as conformance to technical specifications, applicable standards, and expected functional performance of the built asset. Kumar et al. (2023) argue that quality has increasingly become a differentiator: two projects that arrive on time and on budget can nonetheless diverge sharply in perceived success depending on the quality of what is delivered. The fourth dimension is **stakeholder satisfaction**, which extends beyond the client to include end users, regulators, financiers, and local communities. Amoah et al. (2021) treat this dimension as the ultimate arbiter of success in developing economies, because objective metrics may be met while the project still fails to command legitimacy. The fifth dimension is **sustainability and long-term value**,

capturing environmental performance, social impact, and the durability of benefits after handover. Shaukat et al. (2022) argue that sustainability has moved from a peripheral concern to a defining feature of contemporary project success, particularly in projects delivered under governmental strategic agendas. Supplementary elements — such as health-and-safety outcomes, learning benefits for the delivery organization, and the project's contribution to strategic goals — reinforce these five dimensions and are increasingly integrated into project performance scorecards in large Saudi construction programs.

2.3.5 Previous Studies on Project Success

The **study by Kumar et al. (2023)** aimed to identify project success and critical success factors of construction projects from project practitioners' perspectives. Its dimensions included managerial, technical, organizational, and environmental factors, along with time, cost, quality, and stakeholder-satisfaction outcomes. The study used a survey methodology with a sample of construction practitioners across various roles. The results showed that leadership competency, effective communication, and stakeholder engagement were among the most critical drivers, while time and cost performance were reaffirmed as the most visible success outcomes.

The **study by Amoah et al. (2021)** sought to examine the factors that make the management of construction projects successful in developing countries. Its dimensions covered planning practices, resource management, stakeholder relations, and monitoring and control. The study adopted a mixed-methods design combining a survey and case interviews within a developing-country context. The findings indicated that structured management practices, disciplined communication, and stakeholder alignment collectively produced significant improvements in project success, and that context-specific challenges — such as institutional weakness and supply-chain fragility — required tailored responses.

The **study by Shaukat et al. (2022)** aimed to revisit the relationship between sustainable project management and project success, testing the moderating role of stakeholder engagement and team building. Its dimensions incorporated economic, environmental, and social sustainability, as well as classical success indicators. The study used PLS-SEM on data collected from project professionals in a large emerging economy. Results showed that sustainable project management significantly enhanced project success, and that stakeholder engagement and team building strengthened this relationship, reinforcing the argument that success is a socially embedded outcome.

The **study by Ali et al. (2021)** was designed to link humble leadership to project success, with team-building as a mediator and top-management support as a moderator. Its dimensions comprised humble leadership behaviors, team-building processes, top-management support, and project success indicators. The study employed a quantitative survey methodology with a sample of project professionals. The findings confirmed that humble leadership was significantly associated with project success, that team-building mediated this relationship, and that top-

management support amplified it — a pattern that highlights the human infrastructure behind observable success.

The **study by Ciric Lalic et al. (2022)** aimed to examine how the project management approach — traditional, agile, or hybrid — influences project success. Its dimensions covered approach characteristics, project performance, and stakeholder outcomes. The study used a comparative quantitative design on a cross-industry sample. Results showed that agile and hybrid approaches were associated with higher stakeholder satisfaction and adaptability outcomes, while traditional approaches retained an advantage in cost and schedule predictability, indicating that the definition of success is partially shaped by the chosen delivery model.

2.4 The Relationship between Communication Management and Project Success

The link between communication management and project success is one of the most consistently supported relationships in contemporary project management scholarship, and the evidence base for construction in particular is especially rich. At the conceptual level, communication management supplies the informational conditions under which the dimensions of project success can be pursued: schedules depend on timely instructions, budgets depend on accurate reporting, quality depends on clear specifications, and stakeholder satisfaction depends on responsive dialogue. Rehan et al. (2024) show that the interaction between leadership behavior and communication practices explains a substantial share of the variance in construction project outcomes, arguing that communication translates leadership intent into operational reality. Malik et al. (2021) demonstrate a similar effect but sharpen the causal picture by showing that communication reduces the level of destructive conflict, which in turn permits success to materialize; in their model, conflict is the conduit through which communication either enables or undermines outcomes. Akintelu et al. (2023) provide converging evidence: the four core communication management processes — planning, distribution, reporting, and stakeholder engagement — each produce statistically significant improvements in delivery, and their joint effect is larger than the sum of the individual effects, suggesting complementarity across the dimensions.

The relationship is also supported by studies that examine the failure side of the equation. Gamil and Abd Rahman (2023) show that the causes of poor communication predict a substantial portion of the variation in cost overruns, delays, and disputes, thereby establishing an inverse form of the same relationship: where communication management is weak, the observable markers of project failure multiply. Fashina et al. (2021) reinforce this pattern within a developing-country context, identifying communication breakdowns among the primary drivers of delay in construction projects, alongside financial and technical factors. Manuputty and Nursin (2023) narrow the relationship to the temporal dimension of success and confirm that structured communication routines are directly and significantly associated with better time performance — a finding of particular relevance to Saudi mega-projects operating under compressed schedules.

The relationship is further mediated and moderated by a number of factors that recent studies have brought to light. Muneer et al. (2022) show that project manager competency moderates the link between communication management and project success: the same communication practices produce stronger outcomes when the project manager possesses the skills to leverage them, particularly in contexts where organizational culture supports open information flow. Shaukat et al. (2022) demonstrate that stakeholder engagement and team building — both fundamentally communicative activities — moderate the relationship between sustainable project management and success. Ali et al. (2021) provide a parallel finding on the leadership side, where humble leadership improves outcomes largely through the team-building processes that communication makes possible. Unegbu et al. (2022) situate the relationship within a broader framework of project management practices in Nigeria and find that communication is consistently among the strongest predictors of performance measures. Amoah et al. (2021) show that in developing-country contexts communication effectiveness is one of the discriminators separating successful from unsuccessful construction projects. Ciric Lalic et al. (2022) show that in agile and hybrid delivery models — increasingly used in Saudi mega-projects — communication management becomes even more central because iterative decision-making depends on continuous information exchange. Wuni and Shen (2022) reinforce this in the modular construction and circular economy context, where information sharing among value chain partners is a defining critical success factor. Lalmi et al. (2021) propose a conceptual hybrid model in which communication routines occupy a central bridging role between planning and execution, and Zamani et al. (2021) show that during the COVID-19 disruption of construction, projects that maintained disciplined communication routines were significantly better able to preserve performance. Shaqour (2022) extends the picture by demonstrating that digital enablers such as BIM strengthen communication management and, through it, project performance across multiple knowledge areas.

Taken together, this body of evidence supports a robust, positive, and multidimensional relationship between communication management and project success in construction, with communication acting both directly on delivery outcomes and indirectly through conflict, leadership, team dynamics, and stakeholder engagement. As Fey, Hu, and Delios (2023) remind us, the practical significance of this relationship should be interpreted through effect sizes rather than statistical significance alone, since the magnitude of the effect is what carries managerial meaning. The magnitudes reported across the reviewed studies are consistently substantial, which lends confidence to the alternative hypothesis (H1) of the present study: communication management exerts a significant effect on project success in construction projects in Saudi Arabia.

2.5 Conclusion

This chapter has assembled the conceptual and empirical scaffolding required to investigate the effect of communication management on project success in Saudi construction projects. The review of the independent variable clarified that communication management is a purposeful, structured, and multi-directional process, and mapped it into five operational dimensions:

communication planning, information distribution, performance reporting, stakeholder communication and engagement, and feedback and conflict-resolution communication. The review of the dependent variable established that project success is a multidimensional construct spanning time performance, cost performance, quality, stakeholder satisfaction, and sustainability and long-term value. The synthesis of the relationship between the two variables demonstrated, across a wide range of construction contexts and methodological approaches, that communication management exerts a strong direct effect on project success and also operates through mediating and moderating channels including conflict, leadership, team dynamics, and stakeholder engagement. In the Saudi construction environment — characterized by mega-projects, multinational workforces, and demanding Vision 2030 timelines — this body of evidence provides both theoretical justification and empirical precedent for the hypotheses of the present study, and it identifies the analytical categories that the subsequent methodological chapter will operationalize.

References

- Rehan, A., Thorpe, D., & Heravi, A. (2024). Project success factors for leadership practices and communication: challenges in the construction sector. *International Journal of Managing Projects in Business*, 17(3), 562-590.
- Malik, S., Taqi, M., Martins, J. M., Mata, M. N., Pereira, J. M., & Abreu, A. (2021). Exploring the relationship between communication and success of construction projects: The mediating role of conflict. *Sustainability*, 13(8), 4513
- Akintelu, S. O., Oyebola, A. I., Tiamiyu, S., & Olateju, O. (2023). The impact of project communication management on successful project delivery in the construction industry: A case study. *International Journal of Development and Sustainability*, 12(8), 376-386.
- Muneer, M., Khan, N., Awais Hussain, M., Shuai, Z., Khan, A. A., Farooq, R., ... & Tariq, M. A. U. R. (2022). A quantitative study of the impact of organizational culture, communication management, and clarity in project scope on constructions' project success with moderating role of project manager's competencies to enhance constructions management practices. *Buildings*, 12(11), 1856.
- Gamil, Y., & Abd Rahman, I. (2023). Studying the relationship between causes and effects of poor communication in construction projects using PLS-SEM approach. *Journal of Facilities Management*, 21(1), 102-148
- Unegbu, H. C. O., Yawas, D. S., & Dan-Asabe, B. (2022). An investigation of the relationship between project performance measures and project management practices of construction projects for the construction industry in Nigeria. *Journal of King Saud University-Engineering Sciences*, 34(4), 240-249
- Shaqour, E. N. (2022). The role of implementing BIM applications in enhancing project management knowledge areas in Egypt. *Ain Shams Engineering Journal*, 13(1), 101509
- Wuni, I. Y., & Shen, G. Q. (2022). Developing critical success factors for integrating circular economy into modular construction projects in Hong Kong. *Sustainable Production and Consumption*, 29, 574-587
- Shaukat, M. B., Latif, K. F., Sajjad, A., & Eweje, G. (2022). Revisiting the relationship between sustainable project management and project success: The moderating role of stakeholder engagement and team building. *Sustainable Development*, 30(1), 58-75
- Ali, M., Li, Z., Khan, S., Shah, S. J., & Ullah, R. (2021). Linking humble leadership and project success: the moderating role of top management support with mediation of team-building. *International journal of managing projects in business*, 14(3), 545-562
- Ciric Lalic, D., Lalic, B., Delić, M., Gracanin, D., & Stefanovic, D. (2022). How project management approach impact project success? From traditional to agile. *International Journal of Managing Projects in Business*, 15(3), 494-521.
- Fashina, A. A., Omar, M. A., Sheikh, A. A., & Fakunle, F. F. (2021). Exploring the significant factors that influence delays in construction projects in Hargeisa. *Heliyon*, 7.(8)

- Lalmi, A., Fernandes, G., & Souad, S. B. (2021). A conceptual hybrid project management model for construction projects. *Procedia Computer Science*, 181, 921-930
- Zamani, S. H., Rahman, R. A., Fauzi, M. A., & Yusof, L. M. (2021, February). Effect of COVID-19 on building construction projects: Impact and response mechanisms. In *IOP conference series: earth and environmental science* (Vol. 682, No. 1, p. 012049). IOP Publishing.
- Manuputty, N. A., & Nursin, A. (2023). The effect of project communications management on project time performance. *Applied Research on Civil Engineering and Environment (ARCEE)*, 4(01), 9-21.
- Fey, C. F., Hu, T., & Delios, A. (2023). The measurement and communication of effect sizes in management research. *Management and Organization Review*, 19(1), 176-197
- Kumar, V., Pandey, A., & Singh, R. (2023). Project success and critical success factors of construction projects: project practitioners' perspectives. *Organization, technology & management in construction: an international journal*, 15(1), 1-22.
- Amoah, A., Berbegal-Mirabent, J., & Marimon, F. (2021). Making the management of a project successful: Case of construction projects in developing countries. *Journal of Construction Engineering and Management*, 147(12), 04021166.
- Project Management Institute. (2021). *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* (7th ed.). PMI.
- Kerzner, H. (2022). *Project Management: A Systems Approach to Planning, Scheduling, and Controlling* (13th ed.). Wiley.
- Turner, J. R. (2016). *Gower Handbook of Project Management*. Routledge.
- Verma, V. K. (2014). *The Human Aspects of Project Management: Human Resources Skills for the Project Manager*. PMI.
- - Pinto, J. K. (2019). *Project Management: Achieving Competitive Advantage* (5th ed.). Pearson