

The Effect of Communication Efficiency on Project Success in Project-Based Organizations in Riyadh, Saudi Arabia

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1. Chapter 1: Introduction

1.1 Research Background

Communication is widely recognized as one of the main factors that contributes to successful project management. In project-based organizations, employees, project managers, clients, suppliers and other stakeholders depend on effective communication to exchange information, coordinate activities and work toward shared project goals. When communication is clear and timely, team members understand their responsibilities more easily, respond to issues faster and help keep projects on schedule. Poor communication, however, can result in misunderstandings, delays, additional costs and lower project performance (Project Management Institute [PMI], 2021).

As projects continue to grow in size and complexity, organizations need stronger communication practices than ever before. Many projects involve several departments, external partners and advanced technologies, making coordination more challenging. Sharing accurate information at the appropriate time supports teamwork, improves coordination and helps everyone remain focused on achieving project objectives (Kerzner, 2022).

Communication efficiency refers to the extent to which information is exchanged clearly, accurately and at the appropriate time among project participants. It is not simply about communication more often but ensuring that information is useful and reaches the right people when it is needed. Effective communication enables project teams to make informed decisions, respond to unexpected situations and reduce mistakes. (Pinto, 2020).

Project success is commonly measured by completing a project within the planned time, budget and quality requirements. Today, however researchers also consider

stakeholder satisfaction and the achievement of project objectives as important indicators of success (Larson & Gray, 2021).

Previous studies have shown that communication has a positive influence on project outcomes. In contrast, communication problems may lead to conflict, delays and reduce efficiency (Turner, 2016).

Saudi Arabia is currently experiencing significant developments through Vision 2030, with many large-scale projects taking place across different sectors. These projects involve many stakeholders, making communication an essential part of successful project management. For this reason, this study investigates the effect of communication efficiency on project success in project-based organizations in Riyadh, Saudi Arabia.

1.2 Research Problem

Although communication is widely recognized as an important part of project management, many organizations still experience communication-related problems that affect project performance. Delayed information, unclear instructions and poor coordination continue to contribute to project delays, increased costs and stakeholder dissatisfaction. Even with modern communication technologies, many organizations struggle to communicate effectively throughout the project lifecycle (Project Management Institute [PMI], 2021; Kerzner, 2022).

1.2.1 Theoretical Gaps

Many previous studies have examined factors that influence project success, including leadership, organizational culture, team performance and stakeholder

management (Meredith et al., 2019; Pinto, 2020). Although communication has been discussed in project management research, fewer studies have focused specifically on communication efficiency within project-based organizations in Riyadh. In addition, much of the existing research has been conducted in different countries and industries, creating an opportunity to investigate this topic in the Saudi Arabian context (Kerzner, 2022; Project Management Institute [PMI], 2021).

1.2.2 Practical Gaps

Project-based organizations in Riyadh often involve collaboration between different departments, contractors, consultant and clients. Because of this complexity, communication challenges such as delayed responses, incomplete information, poor coordination can still occur. These issues may reduce project performance and negatively affect project quality, schedule and stake holder satisfaction. (Project Management Institute [PMI], 2021; Kerzner, 2022). Although many organizations adapted, the finding of this study are expected to provide useful insights that organizations can use to strengthen their communication practices and improve project performance.

1.3 Research Significance

The significance of this study can be discussed at both the theoretical and practical levels.

1.3.1 At the theoretical level

This research adds to the existing knowledge in project management by exploring how communication efficiency is related to project success in project-based organization located in Riyadh, Saudi Arabia. While previous studies have explored communication in different industries and countries, limited research has focused specifically on communication efficiency in the Saudi Arabia context. Therefore, this study may provide additional evidence that can support future research in project management and organizational communication (Pinto, 2020; Kerzner, 2022).

1.3.2 At the practical level

From a practical perspective, the results of this study may help project manager, team leader and organizational decision-makers better understand the importance of communication efficiency in achieving successful project outcomes. The results may assist organizations in improving communication practices, strengthening teamwork, enhance decision-making, reduce communication related challenges and increasing stakeholder satisfaction. Ultimately, these improvements may contribute to better project performance and a higher likelihood project success (Project Management Institute [PMI], 2021; Larson & Gray, 2021).

References

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1.4 Research Questions

- What is the level of communication efficiency in project-based organizations in Riyadh?
- What is the level of project success in project-based organizations in Riyadh?
- Is there a significant relationship between communication efficiency and project success?
- Does communication efficiency significantly affect project success in project-based organizations in Riyadh?

1.5 Research Objectives

To answer the research questions, the following research objectives have been identified:

- To identify the level of communication efficiency in project-based organizations
- To identify the level of project success in project-based organizations

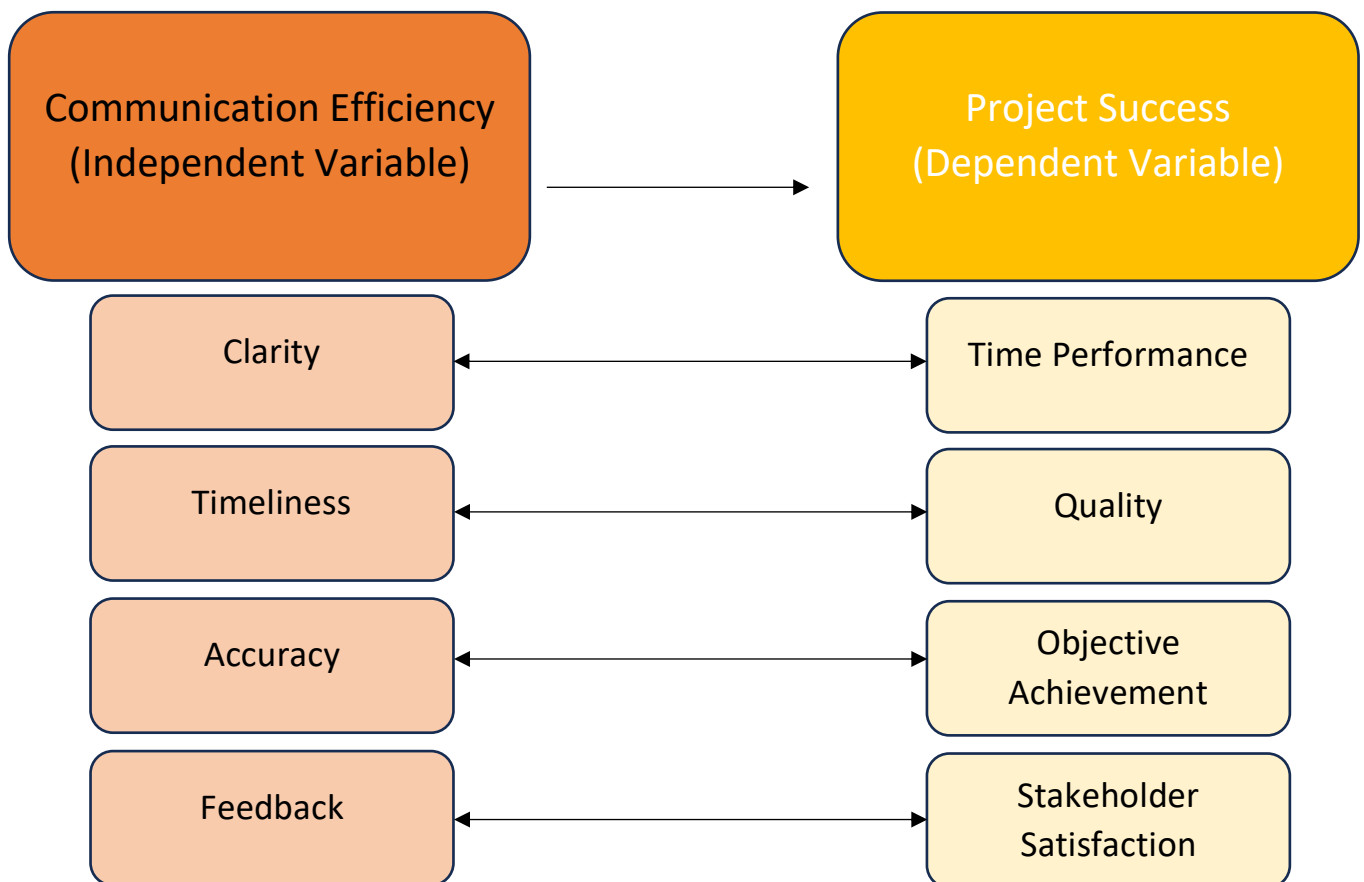
- To examine the relationship between communication efficiency and project success
- To determine the effect of communication efficiency on project success

1.6 Research Hypotheses

The study proposes the following hypothesis:

- Communication efficiency has a positive and statistically significant effect on project success in project-based organizations in Riyadh, Saudi Arabia

1.7 Research Model



Research Model based on literature review and research framework (Pinto, 2020; Kerzner, 2022)

1.8 Suggested Industry / Organization

The empirical study will focus on project-based organizations operating in Riyadh, Saudi Arabia, particularly those in the construction, engineering, information technology, consulting, infrastructure, telecommunications and real estate stakeholders. These industries rely heavily on effective communication among project stakeholders to achieve successful project outcomes (Project Management Institute [PMI], 2021; Kerzner, 2022).

1.9 Brief Research Methodology

This study will use quantitative research approach supported by descriptive and explanatory research designs. Data will be collected through a structured questionnaire distributed to project managers and employees working in project-based organizations in Riyadh. A five-point Likert scale will be used to measure both communication efficiency and project success. After the data is collected, it will be analyzed using SPSS. The analysis will include descriptive statistics, Pearson correlation and simple linear regression to answer the research questions and examine the proposed hypothesis

1.10 The Project Structure

The research project consists of five chapters:

Chapter 1: Introduction

Chapter 2: Literature Review

Chapter 3: Research Methodology

Chapter 4: Data Analysis and Findings

Chapter 5: Conclusions and Recommendations

1.11 References

- Kerzner, H. (2022). Project management: A systems approach to planning, scheduling, and controlling (13th ed.). John Wiley & Sons.
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2.Chapter 2: Literature Review

2.1 Introduction

Communication is widely recognized as one of the key factors that contributes to successful project management. As organizations continue to manage more complex projects, effective communication has become increasingly important for coordinating activities, sharing information and supporting decision-making. Good communication also helps project teams reduce misunderstandings, solve problems more efficiently and achieve project objectives. (Project Management Institute [PMI], 2021).

This chapter reviews previous studies that are related to the two variables examined in this research, namely communication efficiency and project success. It explains the main concepts of both variables, discusses how they are connected and summarize findings from earlier studies. This review helps establish the theoretical background for the study and provides support for the proposed research model.

2.2 The independent variable – Communication Efficiency

Communication efficiency refers to the ability to exchange information clearly, accurately and at the appropriate time among project participants. In project-based organizations, communication take place continuously between project managers, team members, clients, contractors and other stakeholders. According to Pinto (2020), effective communication enables project teams to coordinate their activities, make better decisions and respond quickly to challenges that arise during project implementation.

Several researchers have emphasized that communication is not only about sharing information is understood by everyone involved in project. Kerzner (2022)

explains that effective communication improves coordination between project stakeholders and helps managers monitor project progress more effectively. As a result, project teams are more likely to complete their tasks efficiently and reduce the risk of misunderstandings.

One of the key aspects of communication efficiency is clarity. Information should be communicated in a way that is easy to understand so that employees know their responsibilities and clearly understand the project's objectives. When communication is unclear, misunderstandings and mistakes are more likely to occur which can negatively affect overall project performance (Larson & Gray, 2021).

Another important aspect is timeliness. Project information should be shared at the appropriate time because delays in communication can slow decision-making and interrupt project activities. According to Meredith, Shafer and Mantel (2019) state that timely communication helps project managers to identify potential risks early and take appropriate action before they become more serious.

Accuracy is equally important since project decisions rely on reliable and correct information. Inaccurate or incomplete information can lead to poor planning, unnecessary costs and delays. For this reason, organizations should ensure that information is carefully reviewed and verified before it is shared with project stakeholders (Project Management Institute [PMI], 2021).

Finally, feedback plays an important role in communication efficiency. Regular feedback allows project managers and team members to evaluate project progress, identify communication problems and improve future performance. Turner (2016) argues that organizations with effective communication and feedback systems

generally achieve better project outcomes because they encourage collaboration and strengthen relationship among project stakeholders.

In general, the literature suggests that communication efficiency has a positive impact on project performance. When information is communicated clearly and at the right time, project teams are better able to coordinate their work, minimize risks and improve the chances of delivering successful projects (Pinto, 2020; Kerzner, 2022).

2.3 The dependent variable – Project Success

Project success describes how effectively a project achieves its planned objectives and expected results. In the past, success was mainly measured by whether a project was completed within the planned schedule, budget and quality requirements. More recently, researchers have explained this view by including the achievement of project objectives and stakeholder satisfaction as additional measures of success because they are better represent the overall value of project (Larson & Gray, 2021).

One of the most common indicators of project success is time performance. Completing a project according to the planned schedule demonstrates that project activities have been managed effectively. Delays may increase project costs, reduce productivity and affect stakeholder confidence. Therefore, completing projects on time remains an important measure of successful project management (Project Management Institute [PMI], 2021).

Quality

Quality is another important indicator of project success. Project deliverables should meet the required standards while also satisfying client expectations. Delivering high-quality work can improve an organization's reputation and increase opportunities for future projects. According to Kerzner (2022), maintaining quality throughout the project life cycle is essential because it reflects the effectiveness of project planning, execution and monitoring.

Achievement

Another way to evaluate project success is by looking at whether the project's objectives have been achieved. Every project is carried out to accomplish specific goals, such as improving organizational performance, introducing a new product or service or solving a particular problem . A project can be considered successful when these objectives are achieved effectively and provide value to the organization (Pinto, 2020).

Stakeholder Satisfaction

In recent years, stakeholder satisfaction has become another important indicator of project success. Stakeholders include clients, sponsors, project managers, team members, suppliers and anyone else who is affected by the project. Their level of satisfaction depends on whether the project meets their expectations in terms of quality, communication, cost and overall performance. Turner (2016) explains that projects with satisfied stakeholders are more likely to be viewed as successful because they build trust and encourage long-term cooperation.

Based on the literature, project success is now assessed using more than traditional measures of time, cost and quality. Current project management practices also considers whether project objectives have been achieved and whether stakeholders

are satisfied with the final outcomes. Taking these factors into account provides broader understanding of project performance and is widely recognized in project management research (Larson & Gray, 2021; Project Management Institute [PMI], 2021).

2.4 The relationship between the independent and the dependent variables

Communication efficiency can have direct effect on the success of a project.

Project teams usually include people with different roles and tasks, so they need to share information with each other during the project. If the information is clear and received on time, team members can understand what they need to do and what the project is trying to achieve. Pinto (2020) explains that communication is an important part of teamwork and helps people make decisions during a project.

Project managers also rely on communication to follow the progress of the project. They need to know what tasks have been completed and if the team is facing any difficulties. Without regular communication, some problems may not be noticed early and could become more difficult to solve later. Kerzner (2022) states that communication can reduce misunderstandings and improve the way project team members work together.

Communication can also influence the decisions made during a project. Managers need information they receive about resources, activities and project problems. When the information they receive is not clear or arrives late, it may affect the decision and the progress of the project. The Project Management Institute [PMI], (2021) explains that communication between stakeholders should continue during the different stage of a project.

Problems may happen when communication with a project is weak. At team member may misunderstand an instruction or may not receive an important update at the right time. This can lead to mistakes, repeated work or delays. It may also cause disagreements between team members. Turner (2016) discussed communication problems as one of the reasons that projects may face performance difficulties.

From the previous studies, communication and project success are related. Projects may have better results when information is clear, updates are shared on time and team members are able to give and receive feedback. Larson and Gray (2021) also connect good communication practices with achieving project objectives and stakeholder satisfaction. For this reason, the current study examines whether communication efficiency has a positive and statistically significant effect on project success in project-based organizations in Riyadh, Saudi Arabia.

2.5 Conclusion

This chapter reviewed the literature related to communication efficiency and project success. It explained the concept of communication efficiency and discussed its main dimensions, including clarity, timeliness, accuracy and feedback. The chapter also examined project success by reviewing the indicators commonly used to evaluate project performance, including time performance, quality, achievement of project objectives and stakeholder satisfaction.

The studies reviewed in this chapter indicate that communication efficiency plays an important role in achieving successful project outcomes. Organizations that communicate effectively are generally better at coordinating project activities,

supporting decision making, improving teamwork and achieving project goals. The literature also suggests that communication efficiency is likely to have a positive effect on project success. Overall, the reviewed studies provide a strong theoretical foundation for the proposed research model and support the hypothesis that will be tested in the next chapter.

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Appendix A: Table of Research Instruments

Variable	Dimension	Number of items	Scale
Communication Efficiency	Clarity, Timeliness, Accuracy, Feedback	8	5-Point Likert Scale
Project Success	Time Performance, Quality, Objectives Achievement, Stakeholder Satisfaction, Team Performance	8	5-Point Likert Scale

Appendix B: Questionnaire

This questionnaire is designed to examine how communication efficiency affects the project success in project-based organizations in Riyadh, Saudi Arabia. It is part of a graduation research project at Midocean University. Your response are completely confidential and will be used solely for academic research purposes. Thank you for your participation.

Please select the appropriate answer

1. Gender

- ☐ Male
- ☐ Female

2. Age

- ☐ 20 - 29 years
- ☐ 30 - 39 years
- ☐ 40 - 49 years
- ☐ 50 years or above

3. Education Level

- ☐ Diploma
- ☐ Bachelor's degree
- ☐ Master's Degree
- ☐ Doctorate (PHD)
- ☐ Other

4. Current Job Position

- ☐ Project Manager
- ☐ Project Engineer
- ☐ Team Member
- ☐ Supervisor
- ☐ Other

5. Years of Experience

- ☐ Less than 2
- ☐ 2-5
- ☐ 6-10
- ☐ More than 10

6. Type of Organization

- ☐ Government
- ☐ Private
- ☐ Semi-Government
- ☐ Other

7. Industry Sector

- ☐ Construction
- ☐ Information Technology
- ☐ Telecommunication
- ☐ Healthcare
- ☐ Education
- ☐ Sales and Marketing
- ☐

☐ Real Estate

☐ Other

Please indicate your level agreement with the following statements using the scale below

Scale	Meaning
1	Strongly Disagree
2	Disagree
3	Neutral
4	Agree
5	Strongly Agree

Section A: Communication Efficiency

1. Information is communicated clearly within my organization.
2. Project-related information is shared on time.
3. Team members receive accurate information when performing project tasks.
4. The communication channels used in the organization are effective.
5. Regular feedback is provided regarding project activities and progress.
6. Information is communicated promptly whenever project changes occur.
7. Team members openly share important project information with one.
another.
8. Communication between different departments is effective during project
implementation.

Section B: Project Success

9. Projects are usually completed on time.
10. Projects meet the required quality standards.
11. Project objectives are achieved successfully.
12. Stakeholders are satisfied with project outcomes.
13. Project teams perform effectively during project implementation.
14. Projects are completed within the approved budget.
15. Project deliverables meet client expectations.
16. Project teams achieve the planned project objectives.

Chapter 3: Research Methodology

3.1. Introduction

This chapter explains the research methodology used in this study. It describes how the research will be conducted to examine the effect of communication efficiency on project success in project-based organizations in Riyadh, Saudi Arabia. The chapters present the research design, operational definitions of the research variables, target population, sampling technique, data collection method, research instrument and data analysis procedures. It also discusses the validity and reliability of the research instrument and the ethical considerations following during the study.

3.2. Operational Definitions of Research Variables

This study consists of one independent variable and one dependent variable.

3.2.1 Operational Definitions of Research Variables

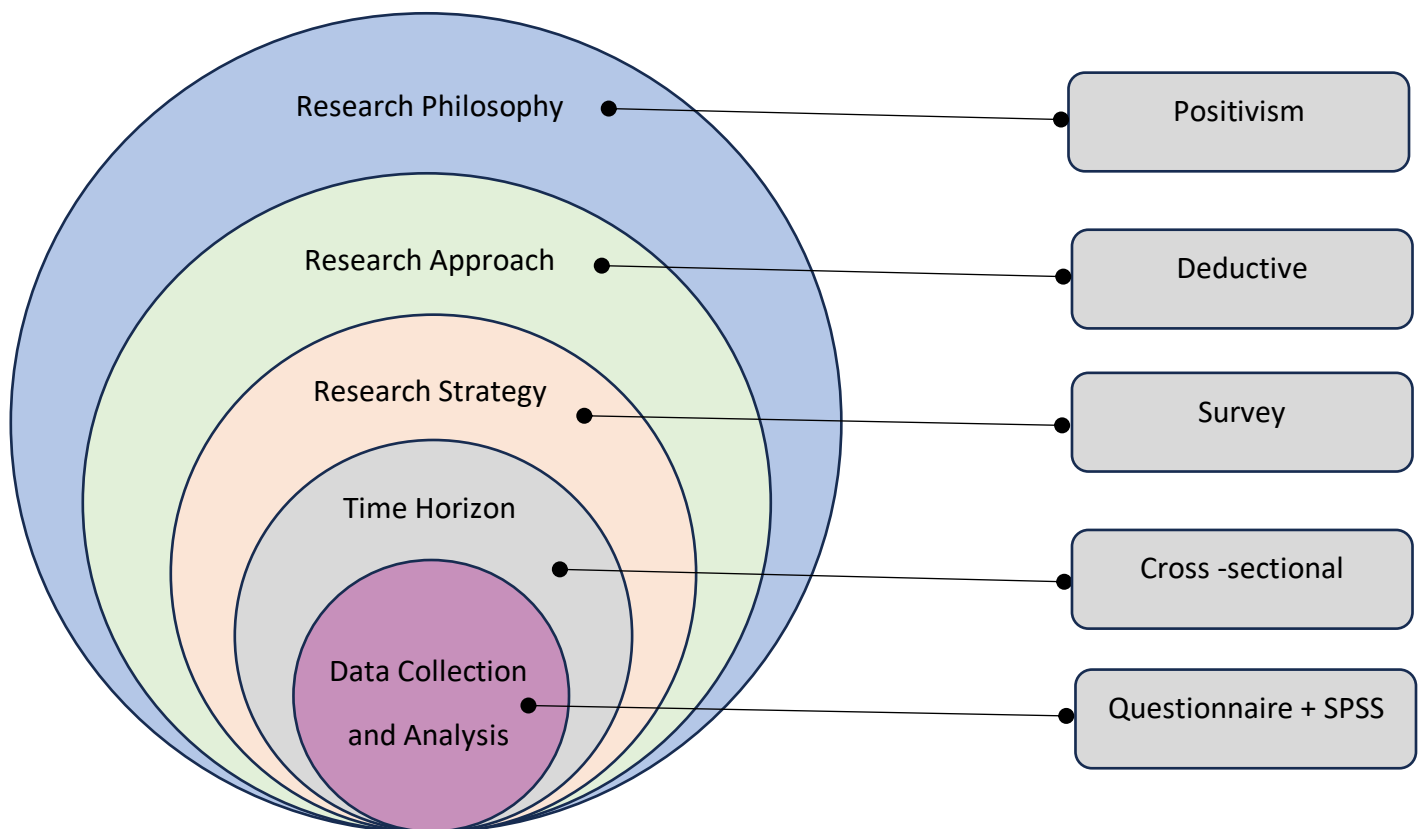
Communication efficiency refers to the ability of project teams to exchange information clearly, accurately and at the appropriate time, It also includes providing regular feedback, sharing project information effectively and using suitable communication channels to support project activities. In this study, communication efficiency will be measured using structured questionnaire completed by employees working in project-based organizations.

3.2.2 Project Success (Dependent Variable)

A project is successful when it meets its objectives. This includes completing it by the deadline, keeping quality standards high, making stakeholders satisfied and achieving the planned outcomes. We'll measure this success by asking study participants complete a structured questionnaire.

3.3 Research Design (Research Onion)

This study follows the Research Onion developed by Saunders et al. (2019), which provides a systematic approach for conducting research.



3.4 Research Population and Sampling Method

The population of this study includes employees who work in project-based organizations in Riyadh, Saudi Arabia. The participants may include project managers, project engineers, supervisors, team members and other employees who are involved in project activities. These employees were chosen because they have experience working in projects and are familiar with communication between project team members.

For this study, convenience sampling will be used to select the participants. This means the questionnaire will be shared with employees who are available and willing to participate in the study. This sampling method was selected because it is a practical way to collect responses within the available time and resources.

The study aims to collect around 50-70 responses from employees working in different project-based organizations in Riyadh. The responses collected will be used to examine the relationship between communication efficiency and project success and to carry out the statistical analysis required for this study.

3.5 Data Collection Method

The structured questionnaire will be used as the main instrument for collecting primary data in this study. The questionnaire is based on previous research related to communication efficiency and project success and is organized into three sections.

The first section collects demographic information, including gender, age, education level, job position, years of experience, type of organization and

industry sector. The second section measures communication efficiency, while the third section focuses on project success.

Responses will be measured using five-point Likert scale ranging from 1 (Strong Disagree) to 5 (Strongly Agree). This scale commonly used in management research because it provides a simple and effective way to measure respondents' opinions and attitudes.

The questionnaire will be distributed electronically through Google Forms to employees working in project-based organizations in Riyadh. Participation will be voluntary, and respondents will be informed that all information provided will remain confidential and will only be used for academic purposes.

3.6 Types of Data

This study uses both primary and secondary data. The primary will be collected from the questionnaire shared with employees working in project-based organizations. Their responses will provide information about their experience with communication and how it may affect the success of projects.

Secondary data is collected from different sources, including books, academic journals, conference papers and other published materials related to project management and communication. These sources are mainly used in the literature review and to provide background information about the research topic.

Both types of data are used in this study. The questionnaire provides information directly from the participants, while the secondary sources help explain and support the topics discussed in the research.

3.7 Statistical Analysis Procedures

After the questionnaire have been collected, the data will be entered into the Statistical Package for the Social Sciences (SPSS) for analysis. SPSS is widely used in business and management research because it provides accurate and reliable statistical results.

Descriptive statistics, including frequencies, percentage, means the standard deviations will be used to describe the demographic characteristics of the respondents and summaries their responses.

The reliability of the questionnaire will then be assessed using Cronbach's Alpha to determine the consistency of the measurement items.

To examine the relationship between communication efficiency and project success, Pearson Correlation Analysis will be conducted. In addition, Simple Linear Regression Analysis will be used to determine whether communication efficiency has significant effect on project success. All statistical tests will be interpreted using a significance level 0.05.

3.8 Conclusion

This chapter presented the methodology adopted for the research. It explained the research design, operational definitions of the variables, target population, sampling technique, data collection method, types of data and the statistical procedures that will be used to analyze the data.

The methodology provides an appropriate approach for examining the effect of communication efficiency on project success in project-based organizations in Riyadh. The following chapter will present the analysis of the collected data, discuss the findings and interpret the results in relation to the research objectives and hypothesis.

Chapter 4: Statistical Analysis & Findings Discussion

4.1 Introduction

This chapter presents the findings from the questionnaire distributed to employees working in project-based organizations in Riyadh, Saudi Arabia. The collected data were analyzed using SPSS to answer the research questions and test the proposed hypothesis. The chapter begins by presenting the respondents' demographic profile, followed by the reliability analysis of the questionnaire. It then discusses the descriptive statistics for the research variables before presenting the hypothesis testing results. Finally, the findings are compared with previous studies in the literature review.

4.2 Sample Profile (Descriptive Statistics)

This section presents the demographic characteristics of the respondents who participated in the study. A total of 58 valid questionnaires were collected from employees working in project-based organizations in Riyadh, Saudi Arabia. The demographic profile includes gender, age, educational level, current position, years of experience, organization type and industry sector. These characteristics provide an overview of the sample used in the study.

4.1 Gender		
Gender	Frequency	Percentage (%)
Male	27	46.6
Female	31	53.4
Total	58	100

Table 4.1 shows that 31 respondents (53%) were female, while 27 respondents

(46.6%) were male. This suggests that both genders were represented in the study, with a slightly higher proportion of female participants.

4.2 Age		
Age Group	Frequency	Percentage (%)
20-29 years	27	46.6
30-39 years	22	37.9
40-49 years	5	8.6
50 years and above	4	6.9
Total	58	100

Table 4.2 indicates that the largest group of respondents (46.6 %) were between 20 and 20-29 years old, followed by respondents aged 30-39 years (37.9%). Smaller percentages were recorded for the 40-49 years (8.6%) and 50 years and above (6.9 %) age groups. These results suggests the most young professional working in project-based organizations.

4.3 Educational Level		
Education Level	Frequency	Percentage (%)
Bachelor's Degree	29	50
Diploma	20	34.5
Master's Degree	5	8.6
Other	4	6.9
Total	58	100

Table 4.3 shows that 29 respondents (50%) held a Bachelor's degree, making it the most common educational qualification among the participants. This was followed by 20 respondents (34.5%) with a Diploma and 5 respondents (8.6%) with a master's degree. The remaining 4 respondents (6.9%) selected qualification that did not fall within the main categories and were therefore grouped under other. The findings indicate that most respondents had higher education qualifications.

4.4 Current Position		
Current Position	Frequency	Percentage (%)
Supervisor	18	31
Team Member	12	20.7
Project Manager	6	10.3
Nurse	2	3.4
Project Engineer	1	1.7
CEO Office Manager	1	1.7
Resident Relations	1	1.7
Business Management	1	1.7
Admin Coordinator	1	1.7
Recruitment	1	1.7
Operations	1	1.7
Teller Exchange Money	1	1.7
Asset Manager	1	1.7
Translator	1	1.7
CFO	1	1.7

Communication Manager	1	1.7
Clerk/Data Auditor	1	1.7
Planning	1	1.7
Medical Laboratory	1	1.7
Business Development Specialist	1	1.7
Protocol and HR officer	1	1.7
CEO Secretary	1	1.7
Director	1	1.7
Procurement Office	1	1.7
Total	58	100

Table 4.4 shows that the largest group of respondents were Supervisor (31%), followed by Team Members (20.7%) and Project Managers (10.3%). Nurses represented 3.45 of respondents, while the remaining participants held a variety of professional and administrative positions each accounting for 1.7%. This variety indicates that the study respondents from different job roles within project-based organizations, providing a broad range of perspectives.

4.5 Years of Experience		
Years of Experience	Frequency	Percentage (%)
Less than 3 years	16	27
2-5 years	22	37.9
6-10 years	11	19
More than 10 years	9	15.5
Total	58	100

Table 4.5 indicates that largest group of respondents (37.9%) ha 2-5 years of work experience. This was followed by respondents with less than 2 years of experience (27.6%), while 19% had 6-10 years and 15.5 had more than 10 years of experience.

4.6 Organization Type		
Organization Type	Frequency	Percentage (%)
Private	47	81
Government	9	15.5
Semi-Government	2	3.5
Total	58	100

Table 4.6 shows that 81% of the respondents worked in private organizations, while 15.5% worked in government organizations and 3.5% were employed in semi-government organizations. These results show that the majority of respondents were obtained from the private sector.

4.7 Industry Sector		
Industry Sector	Frequency	Percentage (%)
Other	29	50
Information Technology	9	15.5
Health Care	7	12.1
Sales and Marketing	5	8.6
Telecommunication	4	6.9

Construction	2	3.4
Real Estate	1	1.7
Education	1	1.7
Total	58	100

Table 4.7 indicates that 50% of the respondents selected Other as their industry sector. This was followed by Information Technology (15.5%), Healthcare (12.1%). Sales and Marketing (8.6%) and Telecommunication (6.9%). Smaller percentages were recorded for Construction (3.4%), Real Estate (1.75%) and Education (1.7%).

4.3 Validity and Reliability Analysis

Before analyzing the data, the reliability of the questionnaire was tested using Cronbach's Alpha. This test was used to determine whether the questionnaire items consistently measured the research variables. A Cronbach's Alpha value of 0.70 or higher indicates that the questionnaire is reliable and suitable for research (Nunnally 1978)

4.8 Reliability Analysis			
Variable	Number of Items	Cronbach's Alpha	Interpretation
Communication Efficiency	8	0.788	Acceptable
Project Success	8	0.887	Good

Table 4.8 shows that Communication Efficiency scale achieved a Cronbach's Alpha value of 0.788, while the Project Success scale recorded 0.887. Since both values are above 0.70, the questionnaire is considered reliable and suitable for the statistical analysis used in this study.

4.4 Descriptive Statistics of the Research Variables

Descriptive statistics were used to summarize the respondents' views on the two research variables: Communication Efficiency and Project Success. The mean and standard deviation were calculated to describe the overall responses. The results are presented in Table 4.9

4.9 Descriptive Statistics of the Research Variables			
Variable	Mean	Standard Deviation	Level
Communication Efficiency	3.70	0.64	High
Project Success	3.84	0.72	High

Table 4.9 shows the mean score for Communication Efficiency was 3.70 with a standard deviation of 0.64. This indicates that the respondents generally agreed the communication within their organization was effective.

The mean score of Project Success was 3.84 with a standard deviation of 0.72. This suggests that respondents had a positive view of project success in their organizations.

Both variables recorded high mean scores, indicating positive perception of communication efficiency and project success among the respondents.

4.5 Hypothesis Testing

This section examines the relationship between communication efficiency and project success. Pearson Correlation Analysis was used to determine the relationship between the two variables, while Simple Linear Regression Analysis was used to test the research hypothesis.

4.5.1 Pearson Correlation Analysis

Variable	Pearson Correlation	Sig. (2-tailed)	Relationship
Communication Efficiency & Project Success	0.781	0.000	Strong Positive

Table 4.5.1 shows a strong positive relation between communication efficiency and project success ($r=0.781$, $p=0.000$). Since the significance value is less than 0.05, the relationship is statistically significant. This means that higher communication efficiency is associated with higher project success.

4.5.2 Simple Linear Regression Analysis

Variable	Beta	t-value	Sig.	Decision
Communication Efficiency > Project Success	0.882	9.371	0.000	Accepted

- $R^2 = 0.611$

That means that 61.1% of the variation in project success is explained by communication efficiency.

Table 4.5.2 presents the results of the regression analysis. The findings show that communication efficiency has a positive and statistically significant effect on project success ($\beta = 0.882$, $t = 9.371$, $p = 0.000$). The model also explains 61.1%

of the variation in project success ($R^2 = 0.611$). Therefore, the research hypothesis is accepted.

4.6 Discussion of Findings (connecting the results with literature)

The findings of this study showed that communication efficiency has a positive and statistically significant effect on project success. This means that projects are more likely to succeed when information is communicated clearly, shared on time and understood by everyone involved.

The results are similar to this reported by Pinto (2020), who explained that effective communication helps project teams coordinate their work and improves project performance. The findings also support Kerzner (2022), who stated that clear communication reduces misunderstandings and helps project teams work together more effectively.

In addition, the results are consistent with Larson and gray (2021), who found that organizations with effective communication practices are more likely to achieve their project objectives and satisfy stakeholders. Likewise, the Project Management Institute [PMI] (2021) highlighted that continuous communication throughout the project life cycle supports better decision-making and contributes to success project delivery.

Based on this finding, the results are consistent with literature reviewed in Chapter 2 and show that communication efficiency plays an important role in improving project success in project-based organizations.

4.7 Conclusion

This chapter presented the results of the data analysis based on the responses collected from employees working in project-based organizations in Riyadh. The findings showed that the questionnaire was reliable and that both communication efficiency and project success received positive responses from participants. The statistical analysis also confirmed that communication efficiency has a positive and statistically significant effect on project success. These findings support the research hypothesis and provide the basis for the conclusions and recommendations presented in the next chapter.