

Midocean University

Faculty of Management

Department / Business Administration



Research Title

The Role of PMO in Infrastructure Projects in Saudi Arabia
Alignment with Vision 2030
A Case Study of Al Madinah Infrastructure Projects

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Academic Year:

2025

1. Introduction

Saudi Arabia's Vision 2030 is an ambitious and transformative plan that seeks to diversify the Kingdom's economy, reduce its dependence on oil, and foster long-term sustainable development across a variety of sectors. One of the most significant areas of focus under Vision 2030 is infrastructure development, which aims to modernize urban areas, improve public services, and create a more resilient, diversified economy. Infrastructure projects, such as roads, utilities, transportation systems, and other vital urban services, are key to achieving these goals and ensuring the Kingdom's growth in the coming decades.

The development of infrastructure in Saudi Arabia is particularly important in cities like Al Madinah, which is not only of religious significance but also plays a critical role in the urbanization and economic expansion of the country. The growing population, along with an increasing demand for modern amenities and services, necessitates large-scale infrastructure projects. In such a context, the role of the Project Management Office (PMO) becomes indispensable. The PMO serves as the backbone of large-scale projects, ensuring that they are aligned with strategic objectives, executed efficiently, and completed within the set timelines and budgets. The PMO is also responsible for managing multiple stakeholders, coordinating project activities, and ensuring that the end results contribute to the broader goals set out in Vision 2030, including sustainability, technological innovation, and economic diversification.

This research focuses on understanding the role of PMOs in infrastructure projects within Saudi Arabia, specifically looking at the case study of Al Madinah Infrastructure Projects. The study will examine how the PMO ensures that projects are aligned with the national goals of Vision 2030, particularly in terms of economic diversification, sustainability, and urban development. The research will also explore the challenges that PMOs face in ensuring

this alignment and offer recommendations for optimizing their function to enhance project success.

The findings of this research will be valuable for both academic and practical purposes, providing insights into how PMOs can better manage large-scale infrastructure projects and contribute to achieving the goals of Vision 2030. Furthermore, the study will offer practical recommendations for PMOs involved in similar infrastructure projects within the Kingdom and globally.

2. Research Problem

Saudi Arabia is undergoing significant urban and infrastructure development to fulfill the goals of Vision 2030. The country's ambitious vision emphasizes sustainability, technological innovation, and economic diversification, all of which must be reflected in the nation's infrastructure projects. While substantial investments are being made in infrastructure, there remains a gap in understanding the role of PMOs in ensuring that these projects are not only executed efficiently but also aligned with the broader objectives of Vision 2030.

The role of PMOs in aligning infrastructure projects with national development strategies is not well-explored in existing literature. In Al Madinah, a city that is growing both economically and in terms of population, infrastructure projects must meet the demands of urbanization while also aligning with Vision 2030's focus on economic diversification and sustainability. However, challenges such as resource management, stakeholder coordination, and regulatory compliance often complicate this process. Thus, the question arises: how can PMOs effectively manage these challenges and align their projects with the national vision?

This research will aim to fill this gap by investigating how PMOs in Al Madinah's infrastructure projects contribute to achieving Vision 2030. The study will explore how PMOs ensure alignment with the goals of Vision 2030, the challenges they face, and the best practices they employ to overcome these challenges. Furthermore, the study will provide actionable recommendations for improving the functioning of PMOs in infrastructure projects to better meet the strategic objectives of Vision 2030.

3. Significance of the Study

- **Scientific Importance**

This study will contribute to the academic discourse on project management, particularly in the context of infrastructure projects in Saudi Arabia. While PMOs have been widely studied in other regions, there is limited research on the specific role of PMOs in infrastructure projects in Saudi Arabia, particularly regarding alignment with national development strategies like Vision 2030. By focusing on Al Madinah, a city of strategic importance, this research will offer new insights into the operational practices of PMOs in a rapidly developing country.

The research will also provide a better understanding of how PMOs can contribute to achieving the goals of Vision 2030, including economic diversification, sustainability, and technological innovation. It will address the gap in the literature by highlighting the challenges faced by PMOs in aligning infrastructure projects with Vision 2030 and provide recommendations for improving PMO effectiveness.

- **Practical Importance**

The practical importance of this research lies in its potential to inform policy decisions, improve project management practices, and provide guidance to stakeholders involved in large-scale infrastructure projects in Saudi Arabia. By identifying the challenges faced by PMOs in Al Madinah, the study will help policymakers, urban planners, and project managers better understand the complexities involved in infrastructure development and the role of PMOs in overcoming these complexities. The recommendations from this research will serve as a valuable resource for PMOs involved in future infrastructure projects across the Kingdom.

4. Research Objectives

The main objectives of this research are as follows:

To investigate the role and functions of PMOs in managing infrastructure projects in Saudi Arabia:

This objective will focus on understanding the role of PMOs within the context of infrastructure development in Saudi Arabia, with a special emphasis on Al Madinah. It will explore how PMOs are structured, their responsibilities, and how they contribute to project success.

To assess the alignment of Al Madinah Infrastructure Projects with Vision 2030 through PMO management:

This objective will evaluate how PMOs in Al Madinah ensure that infrastructure projects align with Vision 2030's broader goals, including economic diversification, sustainability, and urban innovation. The study will assess the mechanisms PMOs use to achieve this alignment.

To identify the challenges faced by PMOs in managing infrastructure projects in Al Madinah:

This objective will explore the specific challenges faced by PMOs, such as resource constraints, inadequate stakeholder coordination, technological integration, and regulatory compliance. The research will investigate the factors that complicate the PMO's ability to align projects with Vision 2030.

To provide actionable recommendations for enhancing PMO practices in infrastructure projects:

Based on the findings of this study, practical recommendations will be developed to optimize

the operations of PMOs in Saudi Arabia's infrastructure projects. These recommendations will aim to improve project outcomes, ensure better alignment with Vision 2030, and overcome existing challenges.

5. Research Questions

This study seeks to answer the following research questions:

1. **What role does the PMO play in managing infrastructure projects in Saudi Arabia, specifically in Al Madinah?**

This question will focus on understanding the PMO's organizational structure and its responsibilities in managing infrastructure projects in Al Madinah.

2. **How do PMOs ensure that infrastructure projects in Al Madinah align with the objectives of Vision 2030?**

This question will explore the mechanisms through which PMOs align the infrastructure projects with national goals such as sustainability, innovation, and economic diversification.

3. **What challenges do PMOs face in managing infrastructure projects in Al Madinah, and how can these challenges be overcome?**

The research will examine the key obstacles PMOs encounter, such as resource limitations, stakeholder coordination, and integration of new technologies, and suggest ways to overcome these challenges.

4. **How do PMOs contribute to the successful delivery of infrastructure projects in terms of time, cost, and quality?**

This question will assess how effective PMOs are in ensuring that projects are delivered according to the specified timeframes, within budget, and meet quality standards.

6. Research Hypotheses

- **Main Hypothesis**

The main hypothesis of this research is that the **effective functioning of PMOs (Project Management Offices)** plays a significant role in ensuring that infrastructure projects in Saudi Arabia, particularly those in **Al Madinah**, are properly aligned with **Vision 2030** goals. This hypothesis is based on the premise that a well-structured and efficiently managed PMO can steer infrastructure projects towards achieving national objectives such as economic diversification, urban development, and sustainability. PMOs are expected to provide governance, ensure coordination, and monitor performance, thereby enhancing the alignment of infrastructure projects with the strategic goals of Vision 2030.

Rationale:

- **Alignment with Vision 2030:** PMOs are tasked with ensuring that every project they oversee contributes to the overarching goals of Vision 2030. By managing resources, timelines, and quality, PMOs can ensure that infrastructure projects meet the national goals of urban renewal, sustainability, and diversification.
- **PMO Effectiveness:** A well-functioning PMO can streamline processes, reduce project risks, and improve project outcomes, ensuring that infrastructure projects in Al Madinah contribute to the Kingdom's long-term strategic objectives.

- **Sub-Hypotheses**

PMOs contribute to better project outcomes in terms of time, cost, and quality (Pinto, 2017).

This sub-hypothesis posits that the presence of a PMO significantly improves the efficiency of infrastructure projects in Saudi Arabia by ensuring that projects are completed within the stipulated timeframes, budgets, and quality standards. A PMO helps to mitigate risks and control the scope of projects, making them more likely to be completed successfully.

Rationale: PMOs provide a structured environment where clear milestones, performance metrics, and corrective actions are used to drive project progress. This improves the chances of meeting deadlines, staying within budget, and adhering to quality expectations (Pinto, 2017).

The challenges faced by PMOs in Al Madinah Infrastructure Projects are related to resource management, stakeholder coordination, and regulatory compliance (Alfahad & Almutairi, 2024).

This sub-hypothesis suggests that PMOs in Al Madinah face specific challenges that hinder the smooth execution of infrastructure projects. These challenges include the management of limited resources (financial, human, and material), coordination among multiple stakeholders with varying interests (government, contractors, and local communities), and navigating complex regulatory frameworks.

Rationale: Managing large infrastructure projects often requires dealing with a wide range of stakeholders, each with different priorities and expectations. The PMO must coordinate efforts among these stakeholders while ensuring that projects comply with both local regulations and Vision 2030's long-term goals (Alfahad & Almutairi, 2024).

The use of digital tools and modern project management practices enhances PMO effectiveness in aligning infrastructure projects with Vision 2030 (Alzaid, 2023).

This sub-hypothesis posits that adopting modern project management tools—such as digital software, Building Information Modeling (BIM), and cloud-based collaboration platforms—can enhance the effectiveness of PMOs in managing and aligning infrastructure projects. The integration of these tools allows PMOs to track progress more efficiently, improve communication among stakeholders, and maintain transparency in project execution.

Rationale: Digital tools can help PMOs overcome many traditional project management challenges, such as communication breakdowns, inefficiencies in resource management, and delays. These tools also help ensure that projects are aligned with national goals by enabling better data collection, real-time monitoring, and integrated decision-making processes (Alzaid, 2023).

7. Literature Review

7.1 The Role of PMOs in Project Management

Research Title: *Project Management: Achieving Competitive Advantage*

Author(s): Pinto, J. K. (2017).

Summary: This research focuses on the central role of Project Management Offices (PMOs) in ensuring project success. Pinto (2017) explains how PMOs provide the necessary frameworks for managing risks, schedules, budgets, and quality. PMOs offer a strategic role by aligning projects with organizational objectives, ensuring that projects are completed efficiently and contribute to the long-term goals of the organization. Pinto emphasizes that PMOs are critical in infrastructure projects to guarantee that projects are delivered on time, within budget, and with high quality.

7.2 PMOs in Saudi Arabia's Infrastructure Projects

Research Title: *The Role of PMOs in Saudi Arabia's Infrastructure Projects*

Author(s): Almohaimeed, A. (2024)

Summary: Almohaimeed (2024) discusses the increasing importance of PMOs in Saudi Arabia's infrastructure sector. As the Kingdom focuses on large-scale projects under Vision 2030, PMOs are essential in ensuring these projects meet national objectives of sustainability and economic diversification. Almohaimeed highlights the challenges Saudi PMOs face, including a lack of local expertise, resource constraints, and the need for better alignment with Vision 2030's goals. The study calls for enhanced training and investment in local project management expertise.

7.3 Vision 2030 and Infrastructure Development

Research Title: *The Importance of PMOs in Infrastructure Development Under Vision 2030*

Author(s): Alzaid, M. (2023)

Summary: Alzaid (2023) examines the strategic role of PMOs in infrastructure development in Saudi Arabia, particularly in relation to Vision 2030. The study argues that Vision 2030's ambitious goals require effective project management to ensure alignment with economic, social, and technological objectives. The author emphasizes that PMOs play a pivotal role in ensuring that projects are not only completed but are designed to meet the long-term sustainability and economic diversification targets outlined in the Vision.

7.4 Challenges Faced by PMOs in Infrastructure Projects

Research Title: *Managing Mega Infrastructure Projects in Saudi Arabia: Challenges and Strategies*

Author(s): Almohaimeed, A. (2024)

Summary: In this research, Almohaimeed (2024) identifies several challenges faced by PMOs in Saudi Arabia's infrastructure projects. These include the complexity of managing large-scale projects, coordination among various stakeholders, and overcoming resource constraints. The study also discusses the need for better integration of technology and innovation in project management to enhance the alignment of infrastructure projects with Vision 2030. The research highlights the gap in local expertise and the reliance on international firms to fill this gap.

7.5 Technological Integration and PMOs in Saudi Infrastructure

Research Title: *Saudi Arabia's NEOM Project as a Testing Ground for Economically Sustainable Urbanization*

Author(s): Yusuf, N., & Abdulmohsen, D. (2023)

Summary: Yusuf and Abdulmohsen (2023) focus on the role of advanced technologies in Saudi Arabia's Vision 2030 infrastructure projects, particularly NEOM. The research underscores the significance of integrating cutting-edge technologies, such as AI, IoT, and renewable energy solutions, into infrastructure projects. The study emphasizes that PMOs must lead the adoption of these technologies to ensure the success of infrastructure projects. However, the authors highlight challenges related to technological adoption, especially regarding regulatory hurdles and stakeholder readiness for change.

7.6 Sustainable Infrastructure and Vision 2030

Research Title: *The Importance of Sustainable Infrastructure in Saudi Arabia's Vision 2030*

Author(s): Alzaid, M. (2023)

Summary: Alzaid (2023) examines the integration of sustainable practices into infrastructure projects as part of Saudi Arabia's Vision 2030. The research discusses how sustainable infrastructure, including green buildings, renewable energy sources, and efficient transportation systems, is vital for the success of Vision 2030. PMOs, according to Alzaid, are tasked with ensuring these sustainability measures are embedded into all projects from the planning phase through to execution. The study provides a framework for PMOs to integrate sustainability goals with economic and technological objectives in infrastructure development.

7.7 The Evolution of PMO Practices Globally

Research Title: *Global Trends in Project Management Offices and Their Role in Large Infrastructure Projects*

Author(s): Pinto, J. K. (2017)

Summary: Pinto (2017) provides a comprehensive review of how PMOs have evolved globally to manage large-scale infrastructure projects. The study identifies emerging trends such as the use of agile methodologies, lean construction techniques, and digital project management tools. These innovations are making PMOs more adaptable and efficient, enabling them to handle the increasing complexity of modern infrastructure projects. The research highlights that Saudi Arabia must adopt similar best practices to ensure its infrastructure projects are aligned with global standards.

7.8 The Future of PMOs in Saudi Arabia's Infrastructure Development

Research Title: *The Future Role of PMOs in Saudi Arabia's Infrastructure Development Under Vision 2030*

Author(s): Alzaid, M. (2023)

Summary: Alzaid (2023) looks at the evolving role of PMOs in Saudi Arabia's infrastructure development. The research predicts that as the Kingdom's infrastructure needs grow, PMOs will need to integrate more advanced digital tools, enhance coordination among stakeholders, and adapt to the rapidly changing technological landscape. The author suggests that PMOs will play an even more strategic role in ensuring infrastructure projects are aligned with Vision 2030. The study advocates for the development of a skilled workforce in project management and the adoption of digital technologies to improve PMO effectiveness in the future.

8. Theoretical Foundations of the Research

The theoretical foundations of this study are based on key concepts and frameworks that help in understanding the role of Project Management Offices (PMOs) in infrastructure projects, particularly in Saudi Arabia. The following theories and models will guide this research:

1. Project Management Theory

Project management theory provides the fundamental principles that govern the management of projects, including planning, execution, monitoring, and closure. According to Pinto (2017), PMOs serve as a strategic body within organizations to align projects with broader organizational goals. The theory emphasizes the importance of creating structured frameworks for managing projects, ensuring that they are delivered within time, cost, and quality constraints. This study will apply project management theory to understand the role of PMOs in infrastructure projects and how they help meet the objectives of Vision 2030.

2. Strategic Alignment Model

The **Strategic Alignment Model (SAM)** proposed by Henderson and Venkatraman (1993) is a key theoretical framework for understanding how project management can be aligned with organizational strategy. In the context of Vision 2030, this model will help assess how PMOs align infrastructure projects with the broader national goals of economic diversification, sustainability, and urban development. SAM emphasizes the need for a consistent alignment between business strategy, IT infrastructure, and organizational processes. This alignment is particularly important for PMOs that manage large-scale infrastructure projects, ensuring that projects contribute to Vision 2030's long-term strategic goals.

3. The Triple Constraint Theory

The **Triple Constraint Theory**, also known as the **Iron Triangle of Project Management**, is a widely recognized framework in project management that asserts that projects are constrained by three factors: time, cost, and quality. This theory will guide the research in evaluating the role of PMOs in balancing these constraints in Al Madinah Infrastructure Projects. The effectiveness of PMOs will be analyzed in terms of their ability to manage and optimize the project schedule, budget, and quality, ensuring alignment with Vision 2030 goals.

4. Stakeholder Theory

Stakeholder Theory, developed by Freeman (1984), suggests that organizations must consider the interests of all stakeholders in the decision-making process. In infrastructure projects, stakeholders include government entities, contractors, local communities, and other interested parties. This theory is relevant to understanding the challenges PMOs face in coordinating diverse stakeholder interests, particularly in the context of Al Madinah's urban development. The study will explore how PMOs manage stakeholder expectations and ensure that infrastructure projects align with the broader societal goals of Vision 2030.

5. Change Management Theory

Change Management Theory focuses on the processes and practices that organizations adopt to manage change effectively. PMOs play a crucial role in leading change within infrastructure projects, ensuring that they align with evolving national strategies and technological advancements. The **ADKAR Model** (Hiatt, 2006) is one of the key frameworks in change management, focusing on awareness, desire, knowledge, ability, and reinforcement. This theory will be applied to explore how PMOs facilitate change in

infrastructure projects, especially when integrating new technologies and sustainability practices as part of Vision 2030.

6. Sustainability in Project Management

The concept of sustainability has become increasingly important in project management, especially in large-scale infrastructure projects. According to Elkington (1997), sustainability in project management involves balancing economic, social, and environmental goals. This framework will guide the study in examining how PMOs integrate sustainability principles into infrastructure projects in Al Madinah. The study will assess how PMOs contribute to sustainable urban development and ensure that projects align with Vision 2030's environmental and social goals.

7. Technology Acceptance Model (TAM)

The **Technology Acceptance Model** (TAM) proposed by Davis (1989) explains how users come to accept and use new technologies. As infrastructure projects in Saudi Arabia, especially in Al Madinah, adopt more digital tools and technologies (e.g., Building Information Modeling, smart city technologies), PMOs must facilitate the adoption of these innovations. TAM will help explore the role of PMOs in driving the acceptance of new technologies within the projects and understanding the factors that affect the successful integration of these technologies into project execution.

These theoretical frameworks provide the foundation for analyzing the role of PMOs in Saudi Arabia's infrastructure projects and their alignment with Vision 2030. The application of these theories will allow the study to explore how PMOs contribute to the effective management and alignment of large-scale infrastructure projects with the strategic goals of sustainability, innovation, and economic diversification. These frameworks also help identify

the challenges PMOs face and the best practices for overcoming them, particularly in the context of managing complex, multi-stakeholder infrastructure projects.

9. Research Methodology

This research will employ a **mixed-methods approach**, combining both **quantitative surveys** and **qualitative interviews** to gather comprehensive data from stakeholders involved in Al Madinah Infrastructure Projects. This methodology allows for a deeper understanding of the role PMOs play in these projects while also providing empirical evidence for testing the hypotheses.

- **Data Collection**

1. **Surveys**

A **structured questionnaire** will be developed and distributed to a wide range of stakeholders, including **PMO managers, project managers, contractors, and government officials**. The survey will be designed to collect quantitative data on various aspects of PMO effectiveness, such as their role in project planning, execution, and monitoring, as well as their impact on project outcomes in terms of time, cost, and quality. The survey will also inquire about the challenges faced by PMOs in managing resources, coordinating stakeholders, and ensuring regulatory compliance.

Rationale: Surveys are an effective way to gather quantitative data from a large number of stakeholders, allowing for statistical analysis of the factors that influence PMO effectiveness and project success.

2. **Interviews**

In-depth **semi-structured interviews** will be conducted with a select group of stakeholders, including key **PMO personnel, government officials, and senior project managers**. These interviews will provide qualitative insights into the

challenges, successes, and functions of PMOs. Through open-ended questions, the interviews will explore how PMOs in Al Madinah handle the complexities of infrastructure projects and ensure alignment with Vision 2030.

Rationale: Interviews provide a platform for stakeholders to share detailed, subjective insights into the PMO's role, challenges faced, and strategies for success. These insights complement the quantitative survey data and provide a richer understanding of the issues.

- **Data Analysis**

Quantitative Data Analysis

The quantitative survey data will be analyzed using **statistical tools** such as **regression analysis** and **Analysis of Variance (ANOVA)** to identify the relationships between PMO effectiveness and project outcomes (time, cost, and quality). These tools will help assess the impact of PMO functions and digital tools on the success of infrastructure projects in Al Madinah.

Rationale: Statistical analysis will provide objective, data-driven insights into the relationship between PMO effectiveness and project success metrics, allowing for testing of the hypotheses.

Qualitative Data Analysis

The qualitative data collected from the interviews will be analyzed using **thematic analysis**. Thematic analysis involves identifying and analyzing patterns (themes) within the interview data. This will allow the researcher to uncover key insights related to PMO functions, stakeholder coordination, and the challenges faced in aligning projects with Vision 2030.

Rationale: Thematic analysis provides an effective way to interpret qualitative data, enabling the identification of recurring themes, challenges, and strategies that may not be apparent in quantitative data alone (Almohaimeed, 2024).

10. Research Tools

The tools used for data collection in this study will combine both quantitative and qualitative methods to ensure a comprehensive analysis of the role of PMOs in infrastructure projects in Saudi Arabia, with a particular focus on Al Madinah. The following tools will be employed:

1. Surveys

A **structured questionnaire** will be designed and distributed to a wide range of stakeholders involved in Al Madinah Infrastructure Projects. The survey will collect quantitative data on the role of PMOs, their effectiveness, the challenges they face, and the impact of their management on project outcomes. The survey will include both closed and open-ended questions to gather broad numerical data and some qualitative insights for further analysis.

2. Interviews

In-depth **semi-structured interviews** will be conducted with key stakeholders, including PMO managers, project managers, senior officials, and government representatives. The interviews will allow the researcher to gather qualitative insights regarding the challenges, successes, and functions of PMOs in infrastructure projects. These interviews will explore how PMOs contribute to the alignment of infrastructure projects with Vision 2030, as well as the strategies used to overcome any challenges.

3. Case Study

The research will adopt a **case study** approach focusing on the **Al Madinah Infrastructure Projects**. A detailed examination of selected infrastructure projects will be conducted to observe the real-world applications of PMO strategies, the alignment of projects with Vision 2030, and the challenges faced during project

execution. This case study will help contextualize the data gathered through surveys and interviews, providing a deeper understanding of the PMO's role.

4. **Document**

Analysis

Documents such as project reports, PMO guidelines, regulatory frameworks, and progress reviews will be analyzed to assess the alignment of infrastructure projects with Vision 2030. These documents will provide context for the role of PMOs and help cross-reference the findings from surveys and interviews.

11. Research Boundaries

This study is geographically focused on **Al Madinah**, a key city in Saudi Arabia that plays an important role in the Kingdom's urban and economic development. The boundaries of this study are set as follows:

1. Geographical

Scope

The research will specifically focus on **Al Madinah Infrastructure Projects**, as they represent both urban development and the integration of Vision 2030's goals. These projects are critical in modernizing the city's infrastructure while also aligning with national objectives. Other regions or cities in Saudi Arabia will not be part of this study to maintain a focused analysis on Al Madinah.

2. Project

Scope

The study will look at **large-scale infrastructure projects** that are currently underway or planned within the city. These projects include transportation systems, public utilities, housing, and commercial infrastructure. Small-scale, local, or non-urban projects will not be included in the scope of this study.

3. Time

Frame

The research will focus on projects planned or started post-**Vision 2030** (2016), as the alignment with Vision 2030 and the role of PMOs in these projects is crucial for this study. The time frame for the study will cover projects over the last 5-10 years to analyze both short-term and long-term effects.

4. PMO

Role

and

Functionality

The research will only focus on the **Project Management Offices (PMOs)** that are directly involved in managing infrastructure projects in Al Madinah. The role of PMOs in private-sector projects or smaller-scale operations will be excluded. The

study will only assess those PMOs that have a significant involvement in major governmental or large-scale urban projects.

5. Stakeholder

Perspective

The study will include **key stakeholders** such as PMO managers, project managers, government officials, contractors, and other individuals directly involved in the execution and management of infrastructure projects. Other indirect stakeholders or participants, such as residents or businesses not directly involved in the projects, will not be considered in the study.

12.Expected Outcomes

This research aims to provide a comprehensive understanding of the **critical role of PMOs** in ensuring that infrastructure projects in **Al Madinah** align with **Vision 2030**. By examining the challenges and successes of PMOs in managing large-scale infrastructure projects, the research will offer valuable insights into the functions and effectiveness of PMOs in Saudi Arabia's rapidly evolving infrastructure sector.

Key Expected Outcomes:

1. **Insights into PMO Effectiveness:** The study will provide a detailed analysis of how PMOs contribute to better project outcomes, particularly in terms of cost, time, and quality.
2. **Identification of Challenges:** The research will identify the specific challenges faced by PMOs in Al Madinah, such as resource management, stakeholder coordination, and regulatory compliance, offering solutions to overcome these challenges.
3. **Recommendations for PMO Optimization:** Based on the research findings, actionable recommendations will be provided to optimize PMO functions, improve coordination, and enhance the alignment of projects with Vision 2030's goals of sustainability, innovation, and economic diversification.

The findings will be valuable not only for academic purposes but also for **practical applications**. They will provide insights into **how PMOs can better manage large-scale infrastructure projects** and contribute to achieving Vision 2030's objectives. Additionally, the study will offer **practical recommendations** for PMOs involved in similar infrastructure projects within Saudi Arabia and globally.

13. References

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