



Graduation Project 1

Student Name: ALjoharah Ahmad Algunaiman

Student ID: 221000931

Program: Bachelor in Project Management

University: MidOcean

Course Title: Graduation Project 1

Supervisor : Dr.Abdulrahim Nader

Second Semester -2025

Research Title :

**Project Risk Management Practices in Saudi Construction
Projects: A Study on Planning and Execution Challenges**

Introduction

Risk management has become a critical aspect of project management, especially in complex and high-stake industries such as construction. Construction projects in Saudi Arabia, known for their scale, innovation, and ambitious timelines, are often prone to various forms of risks ranging from financial and logistical to regulatory and environmental. The rapid growth of the Saudi construction sector, particularly under the umbrella of Vision 2030, highlights the need for effective risk mitigation frameworks. Large-scale developments such as NEOM, The Red Sea Project, and Qiddiya have demonstrated that without proper planning and risk anticipation, projects can face delays, cost overruns, and even failure.

The introduction of modern project management methodologies in Saudi Arabia has significantly transformed the way projects are planned and executed. Despite this advancement, the literature reveals that risk management practices in many Saudi construction projects still lack standardization. Project managers and stakeholders often encounter difficulties in forecasting potential risks and incorporating proactive strategies in the planning phase. Execution challenges such as labor shortages, supply chain disruptions, regulatory changes, and stakeholder misalignment further compound the problem. As such, this study aims to delve into the current practices of risk management in construction projects across Saudi Arabia, with a special focus on the planning and execution phases.

This research is not only timely but necessary, given the growing complexity of modern construction initiatives. While global risk management frameworks offer a foundation, regional and contextual customization is essential for optimal outcomes. The study explores real-world case studies, empirical data, and insights from professionals in the Saudi construction sector to identify

gaps, best practices, and strategic recommendations. Furthermore, the research emphasizes the role of cultural, economic, and institutional factors in shaping risk responses within the Kingdom.

Ultimately, this project aspires to provide both academic and practical contributions to the field of project risk management. By highlighting the unique challenges faced in the Saudi context and examining the strategies employed to overcome them, the research hopes to inform future policy-making, enhance project outcomes, and support the nation's developmental vision. The findings may serve as a guiding reference for project managers, consultants, and policy makers involved in the construction industry.

Research Problem

Despite the evident growth in Saudi Arabia's construction sector, the industry continues to face persistent challenges associated with risk identification, assessment, and mitigation. These challenges are especially pronounced in the planning and execution stages of construction projects, which are critical for determining project success. The absence of a unified, systematic approach to risk management has led to inconsistent practices across different projects. Often, risk-related decisions are reactive rather than proactive, resulting in increased costs, delayed timelines, and reduced project quality.

A key issue is the disconnect between risk planning and execution. While many construction firms in Saudi Arabia may outline a risk management plan during the initial stages of the project, implementation often falls short due to resource constraints, inadequate training, or lack of stakeholder engagement. Furthermore, external risks such as economic fluctuations, changes in government regulations, and geopolitical factors are not always accounted for in project planning. This leads to scenarios where even well-structured

projects are vulnerable to unexpected disruptions.

Another major concern lies in the cultural and organizational attitudes toward risk. Many local firms lack a risk-oriented mindset and tend to underestimate the potential impact of certain variables. This cultural tendency, coupled with

limited access to risk management tools and data analytics, results in suboptimal decision-making. Moreover, the reliance on traditional construction practices, rather than embracing data-driven and technology-enabled risk assessment models, further hampers effective risk handling.

There is also a noticeable gap in academic research that specifically examines the nuances of risk management within the Saudi construction sector. While international literature offers a wide range of models and frameworks, their applicability in the Saudi context remains under-explored. This poses a challenge for industry professionals who seek localized insights to guide their risk mitigation efforts. As such, this research problem is both practical and academic in nature, calling for a comprehensive study that not only identifies the shortcomings in current practices but also proposes feasible improvements.

In summary, the central problem that this research seeks to address is: How can project risk management practices in Saudi construction projects be improved, particularly during the planning and execution phases, to enhance project success and sustainability? This question underscores the need for a contextualized understanding of risk dynamics in Saudi Arabia's construction industry and the development of tailored strategies that align with national goals and operational realities.

3. Research Significance

The significance of this research lies in its ability to address a pressing need in the Saudi Arabian construction industry. By investigating the gaps and inefficiencies in risk management practices, the study contributes to the optimization of project outcomes. Delays and cost overruns in construction projects do not only affect stakeholders financially, but they also hinder economic development, disrupt urban planning, and negatively impact public

perception. This research supports government and private sector efforts in aligning with Saudi Vision 2030 by promoting robust infrastructure delivery methods that are resilient, timely, and cost-effective.

Furthermore, this study helps elevate the role of local project managers by equipping them with evidence-based strategies to handle planning and execution risks. With rising demand for smart cities, green buildings, and digital transformation, the construction sector must evolve to adopt better predictive models for risk. This research also benefits academic institutions, as it fills the gap in literature regarding localized risk management practices. Ultimately, the outcomes of this research could influence policy, guide professional development programs, and encourage adoption of international best practices adapted to local realities.

4. References

- Albogamy, A., Scott, D., & Dawood, N. (2013). Addressing construction delays in the Kingdom of Saudi Arabia. *International Journal of Project Management*, 31(3), 541–549.
- PMI (2021). *A Guide to the Project Management Body of Knowledge (PMBOK® Guide) – Seventh Edition*. Project Management Institute.
- Alzahrani, J. I., & Emsley, M. W. (2013). The impact of contractors' attributes on construction project success: A post-construction evaluation. *International Journal of Project Management*, 31(2), 313–322.
- Loosemore, M., Raftery, J., Reilly, C., & Higgon, D. (2006). *Risk Management in Projects*. Taylor & Francis.
- Zou, P. X. W., Zhang, G., & Wang, J. (2007). Understanding the key risks in construction projects in China. *International Journal of Project Management*, 25(6), 601–614.

Vision 2030. (2024). Saudi Vision 2030 Official Website.

<https://vision2030.gov.sa>