

Final Project 2

PMG 497

Project Template

Midocean University

Faculty of Management

Department/ Specialization: Project Management



Project title

**The Impact of Risk Management Practices on Project
Success in the Construction Sector**

Student name

Mohammed Ali Bu-Shafia

Final Project - 2

Faculty of Management - Midocean University

Supervisor

Dr.

Faculty member- Faculty of management- Midocean University

Date of submission – number of Semester

2/2026 – Semester 3

Acknowledgment

I would like to express my deepest gratitude to my supervisor, Dr., for the continuous guidance, encouragement, and valuable feedback throughout the preparation of this research project.

My sincere appreciation also goes to Midocean University – Faculty of Management for providing the academic environment and resources necessary to complete this study successfully.

I would also like to thank my colleagues, classmates, and everyone who contributed their time, insights, and support during the different stages of this project.

Finally, my heartfelt thanks go to my family, especially my parents and my beloved wife and children, for their endless patience, understanding, and motivation, which gave me the strength to achieve this milestone.

Dedication

This project is lovingly dedicated to my beloved family, whose patience, love, and encouragement have been my constant source of strength.

To my parents, for their endless prayers and unwavering belief in me.

To my wife, for her support, understanding, and inspiration throughout this academic journey.

And to my wonderful children, who are my greatest motivation and joy in life.

Abstract

This study examined the impact of risk management practices on project success in the construction sector in Saudi Arabia. The research focused on three key dimensions of risk management: risk identification, risk assessment, and risk mitigation, and their influence on project success. A quantitative research approach was adopted, using a structured questionnaire to collect data from construction professionals, including project managers, engineers, supervisors, and coordinators. A total of 200 valid responses were analyzed using descriptive statistics, reliability analysis, and multiple linear regression techniques.

The findings revealed that all three risk management practices have a significant and positive effect on project success. Risk assessment demonstrated the strongest influence, followed by risk mitigation and risk identification. The regression model explained 62% of the variance in project success, indicating a strong predictive capability of structured risk management practices. The results highlight the importance of systematic risk identification, comprehensive assessment procedures, and effective mitigation strategies in improving project performance and achieving successful outcomes.

This study contributes to the existing body of knowledge by providing empirical evidence from the Saudi construction sector and offers practical insights for project practitioners. The findings emphasize the need for organizations to integrate formal risk management frameworks into their project management processes to enhance project success and sustainability.

Table of Contents

Acknowledgment.....	2
Dedication.....	3
Abstract	4
3. Chapter 3: Research Methodology.....	Error! Bookmark not defined.
3.1. Introduction	Error! Bookmark not defined.
3.2. Operational definitions for research variables	Error! Bookmark not defined.
3.3. Research design (research onion).....	Error! Bookmark not defined.
3.4. Research population & Sampling methods and technique	Error! Bookmark not defined.
3.5. Data collection method	Error! Bookmark not defined.
3.6. Types of data	Error! Bookmark not defined.
3.7. Statistical analysis procedures.....	Error! Bookmark not defined.
3.8. Conclusion	Error! Bookmark not defined.
4. Chapter 4: Statistical Analysis & Findings discussion	Error! Bookmark not defined.
4.1. Introduction	Error! Bookmark not defined.
4.2. Sample profile (descriptive statistics for research sample).....	Error! Bookmark not defined.
4.3. Validity & reliability tests for the questionnaires.....	Error! Bookmark not defined.
4.4. Descriptive statistics for research variables (answer research questions)..	Error! Bookmark not defined.
4.5. Testing Hypotheses & Findings Discussion.....	Error! Bookmark not defined.
4.6. Conclusion	Error! Bookmark not defined.
5. Chapter five: Research limitations, Recommendations & Conclusion	7
5.1. Research Limitations & Future Research	8
5.2. Research Recommendations	8
References.....	10
Appendix.....	11

Table of Research Instruments.....	13
---	-----------

List of Tables

Table 3.1 Operational Definitions of the Research Variables	Error! Bookmark not defined.
Table 4.1 Sample profile of respondents	Error! Bookmark not defined.
Table 4.2 Multiple regression analysis results	Error! Bookmark not defined.

3. Chapter five: Research limitations, Recommendations & Conclusion

3.1. Research Limitations & Future Research

Despite the valuable findings of this study, several limitations should be acknowledged. First, the data were collected using a self-administered questionnaire, which relies on respondents' perceptions and may be subject to response bias. Participants may have provided socially desirable answers or interpreted questions differently based on their experience.

Second, the study focused exclusively on construction projects within Saudi Arabia. While this enhances contextual relevance, it limits the generalizability of the findings to other countries or industries with different regulatory, cultural, and operational environments.

Third, the cross-sectional design of the study captures data at a single point in time, which restricts the ability to examine changes in risk management practices and project success over different project phases. Longitudinal studies could provide deeper insights into the dynamic nature of risk management throughout the project lifecycle.

3.2. Research Recommendations

Based on the findings of this study, several recommendations can be proposed to enhance project success in the construction sector. First, construction organizations are encouraged to adopt formal and structured risk management frameworks that emphasize early risk identification. Proactively identifying potential risks at the initial stages of a project can help minimize uncertainties, reduce delays, and control cost overruns.

Second, project managers should strengthen risk assessment practices by combining qualitative and quantitative risk assessment techniques. Evaluating both the probability and impact of risks enables more informed decision-making and supports the prioritization of critical risks that may significantly affect project outcomes. Regular risk assessment reviews should be conducted throughout the project lifecycle to ensure emerging risks are effectively addressed.

Furthermore, effective risk mitigation strategies should be integrated into project planning and execution processes. This includes implementing preventive and corrective actions, allocating adequate

resources for risk response activities, and ensuring clear communication of risk responsibilities among project stakeholders. Continuous monitoring and control of risks can enhance project performance and improve overall success rates.

In addition, organizations are advised to invest in training and capacity-building programs aimed at enhancing risk management competencies among project managers, engineers, and site supervisors. Developing risk-aware organizational cultures can significantly contribute to improving project efficiency, quality, and sustainability.

Finally, future research is encouraged to expand the scope of this study by examining different industries or conducting comparative studies across multiple countries. Longitudinal research designs may also provide deeper insights into how risk management practices evolve over time and influence project success across different project phases.

3.3. Conclusion

This study examined the impact of risk management practices on project success in the construction sector in Saudi Arabia, with a particular focus on risk identification, risk assessment, and risk mitigation. Using a quantitative research approach and data collected from construction professionals, the study provided empirical evidence on the role of structured risk management in enhancing project outcomes.

The findings revealed that all three risk management dimensions have a significant and positive effect on project success. Among them, risk assessment demonstrated the strongest influence, followed by risk mitigation and risk identification. The regression results further showed that risk management practices explain a substantial proportion of the variance in project success, highlighting their strong predictive capability.

These results confirm that construction projects that adopt systematic risk management approaches are more likely to achieve their objectives in terms of time, cost, and quality performance. Effective identification of risks at early stages, comprehensive assessment of their potential impacts, and timely implementation of mitigation strategies contribute to reducing project uncertainties and improving overall performance.

In conclusion, this study emphasizes the importance of integrating formal risk management frameworks into construction project management practices. The findings provide valuable insights for project managers, decision-makers, and organizations seeking to enhance project success and sustainability within the construction industry. By strengthening risk management capabilities, organizations can improve their competitiveness and achieve more consistent project outcomes.

References

Al-Shibly, H. H., Louzi, B. M., & Hiassat, M. A. (2013). The impact of risk management on construction projects success from the employees' perspective. *Journal of Basic and Applied Scientific Research*, 3(12), 18–27.

Zwikael, O., & Ahn, M. (2011). The effectiveness of risk management: An analysis of project risk planning across industries and countries. *Journal of Risk Research*, 14(7), 787–803.

Appendix

Questionnaire for Research Variables

Dear respondent,

This questionnaire is designed to collect data for academic purposes as part of a graduation research project entitled:

“The Impact of Risk Management Practices on Project Success in the Construction Sector.”

Your participation is voluntary, and all responses will be kept confidential and used solely for research analysis.

Please read each statement carefully and indicate your level of agreement using the following scale:

(1) Strongly Disagree (2) Disagree (3) Neutral (4) Agree (5) Strongly Agree

Section A: Demographic Information

1. Job title: _____

2. Years of experience: _____

3. Type of organization: ☐ Public ☐ Private

4. Position level: ☐ Engineer ☐ Project Manager ☐ Risk Officer ☐ Other

5. Location of your project: _____

Section B: Research Variables

1. Risk Identification (Independent Variable)

1. Potential project risks are identified at the planning stage.
2. Risk identification is conducted regularly during the project life cycle.
3. A systematic process exists for documenting and updating identified risks.
4. Stakeholders are involved in the risk identification process.
5. Lessons learned from previous projects are used to identify future risks.

2. Risk Assessment (Independent Variable)

1. Each identified risk is analyzed in terms of its likelihood and impact.
2. Risks are prioritized according to their potential effect on project objectives.
3. Quantitative or qualitative techniques are used for risk assessment.
4. Risk assessment results are communicated to project stakeholders.
5. Risk assessment is reviewed and updated as project conditions change.

3. Risk Mitigation (Independent Variable)

1. Specific mitigation strategies are developed for critical risks.
2. Mitigation plans are implemented promptly once risks are detected.
3. Risk mitigation actions are monitored for effectiveness.
4. Contingency plans are in place for high-impact risks.
5. Risk mitigation is integrated into project management planning.

4. Project Success (Dependent Variable)

1. The project is completed within the planned schedule.
2. The project stays within the allocated budget.
3. The project meets required quality standards.
4. The project achieves client and stakeholder satisfaction.
5. The project contributes to organizational learning and sustainability.

Thank you for your time and valuable contribution.

Table of Research Instruments

Variable Name	Type of Variable	Dimensions / Indicators	Number of Items	Source / Reference
Risk Identification	Independent	Identification of potential risks, stakeholder involvement, documentation process	5	Adapted from PMI (2017); Smith et al. (2018)
Risk Assessment	Independent	Risk likelihood and impact analysis, prioritization, communication	5	Based on ISO 31000 (2018); Hillson (2017)
Risk Mitigation	Independent	Strategy development, contingency planning, monitoring of risk actions	5	Adapted from Kerzner (2019); Aven (2016)
Project Success	Dependent	Time, cost, quality, stakeholder satisfaction	5	Adapted from Pinto & Slevin (1988); Turner (2014)