

Final Project 2

PMG 497

Contracting & Procurement in Projects

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Final Project - 2

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Dedication

I dedicate this project to my wife and daughter.

To my wife, thank you for standing by my side, believing in me, and supporting me throughout this journey. Your patience, encouragement, and understanding gave me the strength to keep moving forward.

To my daughter, you are my greatest source of happiness and inspiration. Every achievement becomes more meaningful because of you, and every step I take is driven by the hope of building a better future for you.

This project is dedicated to both of you with love and gratitude.

Abstract

Purpose:

Methodology:

Findings:

Originality & Implication:

Keywords:

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1. Chapter 1: Introduction

1.1. Research Background

The core element that enables an organization to deliver a project on time, within budget and to the highest quality, is effective contracting and procurement management. Every project outcome depends heavily on how an organization plans its procurement, selects and evaluates its suppliers and allocates risks through contract types and administers contracts during execution, especially in modern project industries, characterized by outsourcing, multi-tier supply chains and specialized sub-contracting.

Within (PMBOK) Project Management Body of Knowledge, procurement is not just a transactional activity, it is more of an integrated management process that aligns with the make-or-buy decisions, sourcing strategies and contract governance with project scope, schedule, cost, quality and risk plans. Contracting decisions shape the performance across the project life cycle and of course it influences the incentive structure, the accountability, change control, and dispute likelihood. Regardless of the availability of formal standards and procedures, several projects still experience delays, claims, scope creep and cost overrun related to procurement. The core problem is derived from weak procurement planning, incomplete specifications, misaligned contracts, insufficient supplier evaluation and inadequate contract administration capabilities.

This graduation project will explain the test of the contracting and procurement management exercises in projects and their relationship with the project performance. It aims to identify gaps related to theoretical and practical in how procurement and contract governance are implemented and to propose an empirical model that explains how procurement and contracting capabilities contribute to successful project delivery. This study is placed within the control of the project management system and has an academic understanding and professional practices contribution by providing evidence-based recommendations for improvement in the processes and decisions of the contracting and procurement.

1.2. Research Problem

The root cause of problems in any project underperformance is mainly caused by procurement and contract management. This section expresses the research problem by pointing out the gaps in existing theory and gaps observed in practice, building up to a focused research problem statement and the main research question.

This section is divided into two sub-sections:

1.2.1. Theoretical Gaps

Theoretically, procurement is a key project management knowledge area, but the empirical findings remain shattered regarding which contracting and procurement practices most strongly predict project performances across industries.

Previous studies usually test singular elements (e.g. contract type or supplier selection) without including them in a logical model that links procurement planning, sourcing decisions, contract governance and ongoing contract administration to measurable performance outcomes.

There are not enough data and evidence from emerging markets and the GCC, where regulatory requirements, localization policies and procedures and market structure can shape procurement behavior and supplier relationships.

1.2.2. Practical Gaps

Usually, organizations apply standard contracting templates without tailoring it per contract type, incentives mechanism or risk allocation to meet the project complexity and uncertainty. Overemphasizing the lowest price, while underweighting past performance, capacity, and risk, leading to delivery delays, quality issues and increased change orders are categories under the supplier evaluation process.

Contract administration practices (e.g., change control, claims management, performance monitoring) and inconsistently implemented, resulting in debates, delays in timelines and cost increases.

Main Research Question: How do contracting and procurement management practices influence project performance (time, cost, quality and stakeholder satisfaction) in project-based organizations?

1.3. Research Significance

The study is quite important because it deepens our understanding of how contracting and procurement capabilities influence project success, while also offering practical insights for organizations aiming to reduce procurement risks and strengthen supplier performance.

1.3.1. At the theoretical level

- This study brings together planning in procurement, different sourcing strategies, the selection of contracts and contract administration within a single framework that explains their impact on project outcomes.
- It adds to the procurement and project governance literature by exploring how elements such as supplier performance and the quality of buyer-supplier relationships act as a middleman.
- It will also provide the necessary evidence tailored to the GCC Region, where the delivery of projects depends highly on third party suppliers and subcontractors, making procurement practices mainly critical.

1.3.2. At the practical level

- The results will be able to help the project managers and the procurement department individuals to choose the right contract type and incentive structure that matches the level of risk and uncertainty in their projects.
- It will also offer several practical recommendations for a strong supplier evaluation without depending on the cost alone but also emphasizing the suppliers' capabilities, quality and reliability.
- The study will also highlight different ways to improve the practices related to the contract administration that will include change control, performance tracking, and claims handling to minimize debates and enhance the performance of delivery.

1.4. Research Questions

- To which level does procurement planning quality affect the project performance in terms of clarity of requirements, sourcing strategy, make or buy analysis?
- How does the contract type fit influence the supplier performance and the overall project's outcome?
- What is the general effect of supplier evaluation strictness on the supplier performance?
- How does the contract administration capabilities influence the project performance?
- Does supplier performance intervene the relationship between contracting/procurement practices and the overall project performance?

1.5. Research Objectives

- The main objective is to examine the impact of procurement planning quality on the project performance,
- To assess how effective the contract type fit is on the supplier and the project performance,
- To also investigate the influence of contract administration capabilities on the project performance,
- Finally, to test if the supplier performance intervenes the relationship between contracting/procurement practices and the project performance.

1.6. Research Hypotheses

- The procurement planning quality has a positive and significant effect on the project performance.
- Contract type fit has a positive and significant effect on supplier performance.
- Supplier evaluation strictness has a positive and significant effect on the supplier performance.
- Contract administration capabilities have a positive and significant effect on the project performance.
- The supplier performance has a positive and significant effect on the project performance.
- Supplier performance intervenes the relationship between (1) contract type fit and project performance, and (2) supplier evaluation strictness and project performance.

1.7. Research Model

- **Independent Variables:** Procurement Planning Quality Contract Type Fit Supplier Evaluation Strictness Contract Administration Capabilities
- **Intervening Variables:** Supplier Performance (Delivery Reliability, Quality Assurance, Responsiveness)
- **Dependent Variables:** Project Performance (Cost, Time, Quality and Satisfaction) Expected Relationships
- Independent Variables -> Supplier Performance -> Project Performance, with a direct path from contract administration capabilities to project performance.

1.8. Research Methodology

Suggested industry and organization for the empirical study:

- The study could be conducted within project-based companies in Saudi Arabia that usually rely heavily on external suppliers and subcontractors, such as contractors (construction), engineering consultancies, facility management companies, and large IT companies.
- A suitable setting is a medium to large company that executes several projects using formal processes for tendering, framework agreement or builds contracts, where procurement planning and contract administration are institutionalized.

Research Methodology Brief

- **Research Design:** Quantitative, explanatory, cross-sectional study
- **Population and Sample:** Project Managers, procurement specialists, contract engineers, and project control professionals involved in procurement/contract administration on active or recently completed projects.
- **Data collection:** Developing a structured questionnaire using items adapted from prior studies and standards to measure the procurement planning quality, contract type fit, supplier evaluation strictness, contract administration capabilities, supplier performance and project performance.
- **Ethical Considerations:** informed consent, confidentiality, voluntary participation and anonymized reporting.

1.9. Scope of The Study

Geographical Scope: Riyadh, Saudi Arabia

Sectoral Scope: Project-based organizations with formal procurement and contracting activities

Unit of Analysis: Individual projects and the procurement/contracting practices applied within them.

Time Scope: Projects executed or closed within the last 24 months to ensure respondents can accurately assess practices and outcomes.

1.10. The Project Structure

- Chapter 1: Introduction Background Problem Significance Research questions Objectives
 - Chapter 2: Literature Review Theoretical Foundations Contracting/Procurement constructs Project performance Hypotheses development
 - Chapter 3: Research Methodology Design Sampling measures Data collection Analysis plan Ethics
 - Chapter 4. Results and findings Descriptions Statistics Measurement Model Hypothesis Testing
 - Chapter 5: Discussion and Conclusion Interpretation Implications Limitations Recommendations Future Research
 - References: Appendices Survey Instrument Consent Form Additional Tables
- Chapter 2: Literature Review Introduction The independent variable The dependent variable The relationship between the independent and the dependent variables Conclusion

2. Chapter 2: Literature Review

2.1. Introduction

What we mean by contracting and procurement is that it is the set of processes where the project acquires goods, services and work from external suppliers and governs the resulting contractual relationship. When we have a project based setting, the contracting and procurement management decisions share cost exposure, schedule reliability, quality, outcomes and risk allocation because a significant share of project scope is often delivered by suppliers and subcontractors.

In this chapter, I will be reviewing the theoretical foundations and empirical research related to procurement planning, sourcing strategies, contract types and risk allocation, supplier selection and evaluation and contract management. It also synthesizes prior findings on how contracting and procurement management influences the supplier performance and the overall project cycle as it also provides a basis for developing the study hypothesis and research model.

2.2. The independent variable

The independent variable in this study is represented by contracting and procurement management practices, operationalized through 4 different dimensions.

1. Procurement Planning Quality
2. Contract Type Fit
3. Supplier Evaluation and Assessment
4. Contract Administration Capabilities.

These dimensions reflect both ex-ante governance choice (planning, sourcing and contract design) and ex-post governance practices (administration and control during execution)

Procurement planning quality involves translating project scope into clear requirements, defining sourcing strategy, estimating costs, and preparing procurement documents. High-quality planning reduces ambiguity, supports realistic scheduling, and improves supplier alignment, which can reduce rework and variations.

Contract type fit concerns the alignment of contract form with project uncertainty and complexity. Fixed-price contracts provide cost certainty but may increase change orders under uncertainty, whereas cost-reimbursable and time-and-materials arrangements provide flexibility but require stronger controls to prevent cost escalation. Selecting an appropriate contract form and incentive mechanism can improve risk sharing and motivate performance.

Supplier evaluation rigor refers to the extent to which supplier selection relies on structured, multi-criteria assessment rather than price alone. Common criteria include technical capability, past performance, financial stability, quality systems, and delivery capacity. Rigorous evaluation helps reduce supplier-related risks and improves delivery reliability.

Contract administration capabilities represent the organization's ability to manage the contract during execution, including monitoring supplier performance, managing changes, maintaining records, handling claims, and enforcing governance mechanisms. Strong administration supports timely decision-making, reduces disputes, and keeps deliverables aligned with contractual requirements.

2.3. The dependent variable

The dependent variable is project performance, typically conceptualized using the “iron triangle” (time, cost, and quality) and extended criteria such as client satisfaction, safety, and long-term value. Project performance reflects the effectiveness and efficiency of project delivery and is affected by both internal project management capability and external supplier contributions.

In procurement-intensive projects, supplier performance becomes a critical determinant of project performance because suppliers deliver key components, services, and specialized work packages. Delays, quality nonconformance, or low responsiveness from suppliers can directly translate into schedule slippage, cost overruns, and stakeholder dissatisfaction.

2.4. The relationship between the independent and the dependent variables

Research on project governance suggests that contracting and procurement mechanisms influence performance through both incentive alignment and control. From a transaction cost economics perspective, contract form and governance structures should be matched to uncertainty, asset specificity, and frequency of transactions to reduce opportunism and coordination costs. Agency theory further highlights the role of incentives and monitoring in aligning supplier behavior with project objectives.

Empirical studies in construction and other project-based industries show that poorly defined requirements and weak procurement planning are associated with higher variation orders and claims, which negatively affect cost and time performance.

Similarly, misaligned contract types can create adversarial relationships, increase dispute probability, and reduce collaboration, especially under high uncertainty.

Supplier selection research indicates that multi-criteria evaluation improves the likelihood of selecting capable suppliers, enhancing delivery reliability and quality conformance. Contract administration practices—such as performance monitoring, structured change control, and timely issue resolution—support relational stability and reduce the escalation of conflicts into formal disputes.

Based on the reviewed literature, this study expects contracting and procurement management practices to positively influence supplier performance and, in turn, improve project performance. Supplier performance is therefore conceptualized as an important mechanism linking contracting/procurement decisions to final project outcomes.

2.5. Conclusion

Chapter 2 synthesized the main theoretical and empirical perspectives on contracting and procurement management in projects. The reviewed literature indicates that procurement planning quality, contract type fit, supplier evaluation rigor, and contract administration capabilities are consistently linked to reduced uncertainty, stronger governance, and improved supplier outcomes.

Across project-based sectors, supplier performance emerges as a key mechanism through which contracting and procurement decisions translate into final project performance. Accordingly, the evidence supports the development of an integrative model in which contracting/procurement practices influence project performance directly and indirectly through supplier performance.

This review provides the foundation for the study hypotheses and the proposed research model to be empirically tested in the next phases using survey-based data and appropriate statistical techniques.

3. Chapter 3: Research Methodology

3.1. Introduction

In this chapter i will be explaining the research methodology i adopted to examine and test the impact of contracting and procurement management in the project management performance. It will describe the research design, operational definitions of the research variables, target population, sampling method, data collection method, types of data, and statistical analysis procedures used in my study. The below methodology is going to provide a clear structured approach to collecting and analyzing data in order that will be able to answer the research questions and test the proposed hypotheses.

3.2. Operational definitions for research variables

Independent Variable: Contract and Procurement Management: Contracting and procurement management means the process that is involved in planning procurement activities and actions, selecting qualified suppliers, managing contracts, and ensuring that goods and services are acquired efficiently to support project objectives. In this study, contract and procurement management is measured through 3 different points:

- Procurement Planning
- Supplier Selection
- Contract Administration

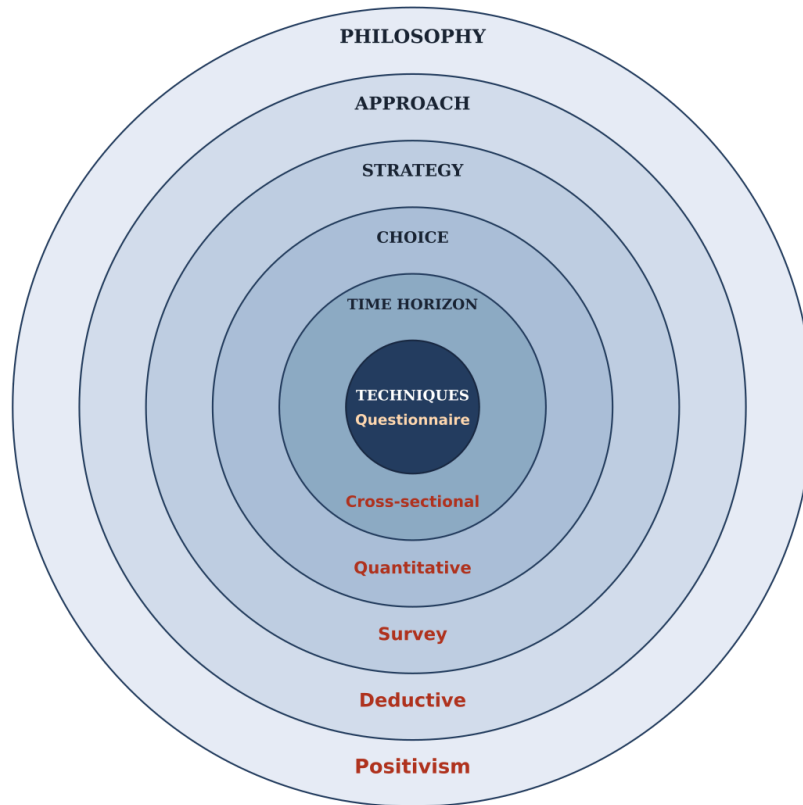
Dependent Variables: Project Performance: It refers to the extent to which a project will successfully achieve all objectives in terms of cost, schedule, quality and the overall project success. It is measured by the following points:

- Cost Performance
- Schedule Performance
- Quality Performance

3.3. Research design (research onion)

In this study I have adopted a quantitative research design because it allows me to collect measurable data and examine the relationship between contracting and procurement management and project performance. The survey strategy that I have selected to collect data from professionals working in project-related industries.

The research methodology follows the research onion model as follows:



LAYER	CHOICE	JUSTIFICATION
Research Philosophy	Positivism	The positivist philosophy was adopted because this study relies on measurable facts and statistical analysis to test the proposed hypotheses.
Research Approach	Deductive	A deductive approach was used because the study is based on existing theories and aims to test the relationship between the independent and dependent variables.
Research Strategy	Survey	A survey strategy was adopted to collect data from respondents using a structured questionnaire.
Research Choice	Quantitative	The study follows a quantitative research approach as numerical data will be collected and analyzed using statistical techniques.
Time Horizon	Cross-sectional	Data will be collected from respondents at a single point in time.
Data Collection Technique	Questionnaire	A structured questionnaire was designed to gather responses from professionals involved in project management and procurement.

3.4. Research population & Sampling methods and technique

Research Population: The target population of my study includes professionals working in project-based entities and organizations, including project managers, procurement offices, contract managers, engineers, and other professionals involved in contracting and procurement activities.

Research Sample: I will be using a sample of professionals who actually worked in project management and procurement and are currently working. These participants will provide information based on their professional knowledge and experience.

Sampling Technique: I will be using a convenience sampling technique because it allows me to collect data from respondents who are readily and willing to participate in the study.

3.5. Data collection method

The primary data will be collected using a questionnaire method that I will be distributing electronically through google forms. The questionnaire will be shared with all professionals that I know that work in project management, procurement, engineering, and contracting sectors. Secondary data will be collected through academic journals, books and previous research studies and of course professional publications related to contracting, procurement management and project performance.

3.6. Types of data

Primary Data: It refers to the information collected directly from respondents and professionals that I know through the questionnaire prepared for this study.

Secondary Data: It consists of information collected from published books, peer-reviewed journal articles, conference papers, reports and other academic sources relevant to the research topic.

3.7. Statistical analysis procedures

The data collected from the questionnaire will be analyzed using SPSS Version 28. Descriptive statistics will first be used to summarize the respondents' demographic information, such as gender, age, job position, and years of experience, as well as the research variables through measures such as the mean and standard deviation.

To ensure the quality of the questionnaire, Exploratory Factor Analysis (EFA) will be used to assess its validity, while Cronbach's Alpha will be used to measure its reliability and internal consistency.

Finally, simple and multiple linear regression analyses will be conducted to test the research hypotheses and examine the relationship between Contracting and Procurement Management and Project Performance, helping determine whether the independent variable has a significant impact on the dependent variable.

3.8. Conclusion

This chapter presented the research methodology that I have adopted for this study. It explains the operational definitions of the research variables and design, target population, sampling technique, data collection method, types of data and statistical analysis procedures. These methods provide a systemic approach for examining the relationship between contract and procurement management and project performance and will support the analysis presented in the following chapter.

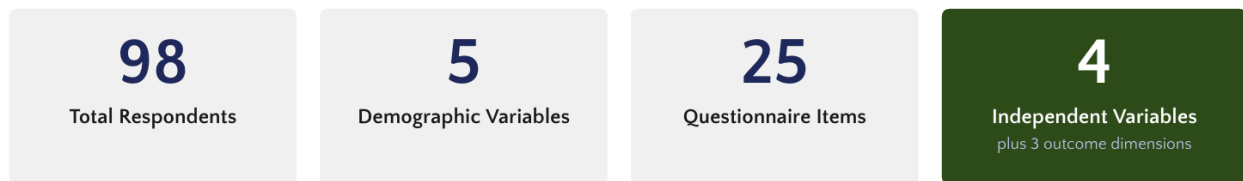
4. Chapter 4: Statistical Analysis & Findings discussion

4.1. Introduction

This chapter presents the statistical analysis and interpretation of the data collected from the questionnaire. The purpose of the analysis is to examine the impact of Contracting and Procurement Management on Project Performance. The chapter includes the demographic profile of the respondents, reliability analysis, descriptive statistics of the research variables, hypothesis testing using regression analysis, the relationship between the findings and previous studies, and a conclusion.

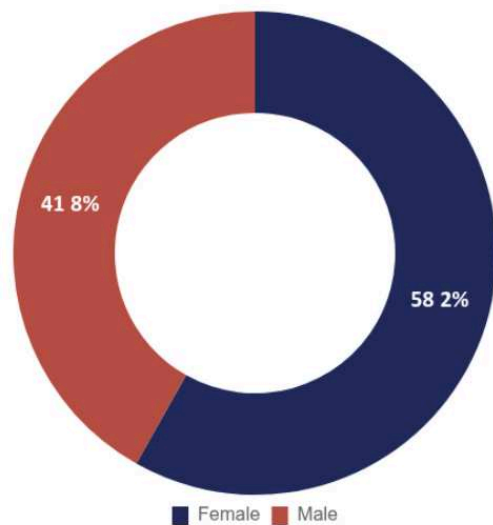
4.2. Sample profile (descriptive statistics for research sample)

A total of **98 valid questionnaires** were collected and included in the statistical analysis. The respondents represented professionals working in project-related roles with different educational backgrounds and years of experience.



Statistics	Gender	Age group	Educational qualification	Years of experience	Current position
N Valid	98	98	98	98	98
N Missing	0	0	0	0	0

4.2.1. Gender Distribution

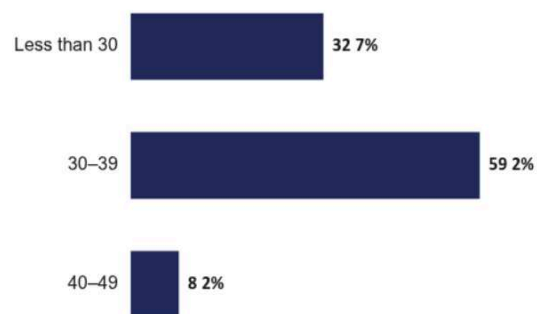


57
Female
 58.2% of respondents

41
Male
 41.8% of respondents

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	41	41.8	41.8	41.8
Female	57	58.2	58.2	100.0
Total	98	100.0	100.0	

4.2.2. Age Distribution



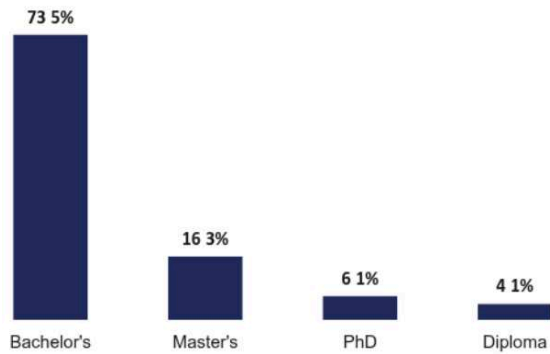
59.2%
 58 of 98 respondents

Ages 30-39 form the largest group

Respondents in their prime project-delivery years dominate the sample; only 8 respondents are 40 or older.

Age group	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 30	32	32.7	32.7	32.7
30-39	58	59.2	59.2	91.8
40-49	8	8.2	8.2	100.0
Total	98	100.0	100.0	

4.2.3. Educational Qualifications



73.5%

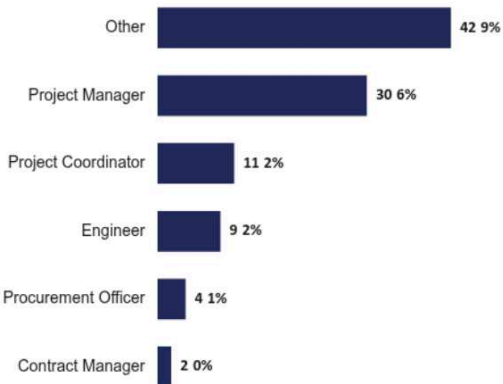
72 of 98 respondents

Most hold a Bachelor's Degree

96% of the sample holds a Bachelor's degree or higher, with 22% carrying a postgraduate qualification.

Educational qualification	Frequency	Percent	Valid Percent	Cumulative Percent
Diploma	4	4.1	4.1	4.1
Bachelor's Degree	72	73.5	73.5	77.6
Master's Degree	16	16.3	16.3	93.9
PhD	6	6.1	6.1	100.0
Total	98	100.0	100.0	

4.2.4. Current Position Distribution



42.9%

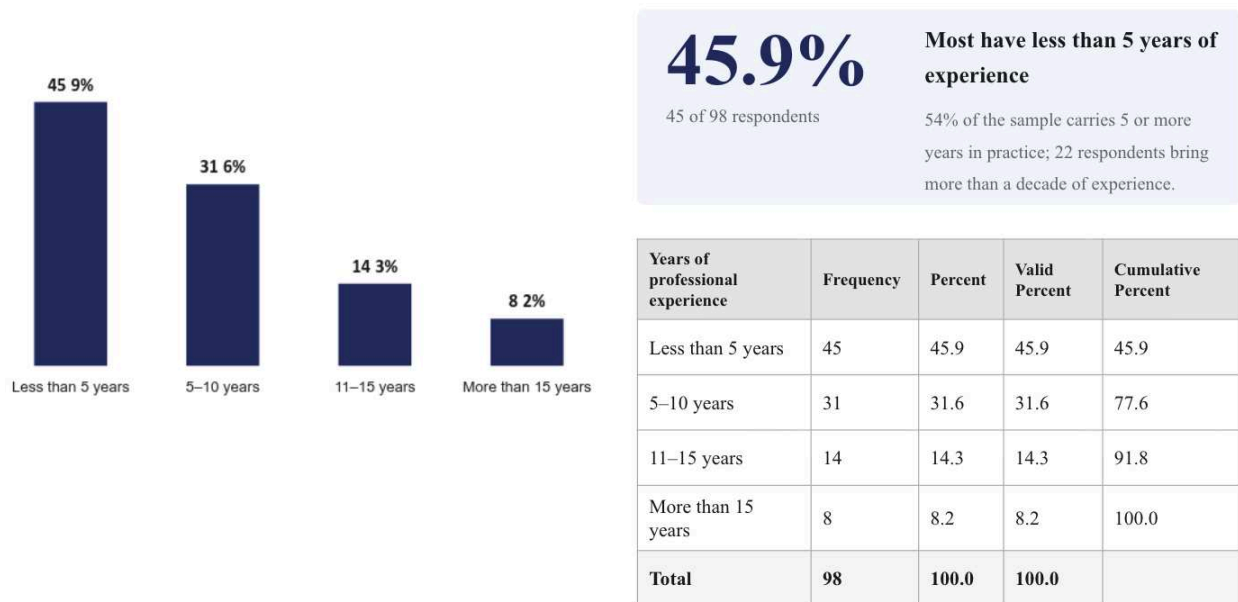
42 of 98 respondents

Largest group holds 'Other' roles

Project managers are the next largest group; 56 respondents hold named project-delivery roles.

Current position	Frequency	Percent	Valid %	Cumulative %
Project Manager	30	30.6	30.6	30.6
Project Coordinator	11	11.2	11.2	41.8
Procurement Officer	4	4.1	4.1	45.9
Contract Manager	2	2.0	2.0	48.0
Engineer	9	9.2	9.2	57.1
Other	42	42.9	42.9	100.0
Total	98	100.0	100.0	

4.2.5. Years of Professional Experience



Interpretation

The sample consisted of both male and female respondents from different age groups, educational levels, and professional backgrounds. Most respondents held a bachelor's degree and had practical experience in project-related work. This diversity indicates that the sample is appropriate for examining the relationship between contracting and procurement management and project performance.

4.3. Reliability tests for the questionnaires

Cronbach's Alpha was used to assess the internal consistency of the questionnaire. According to Hair et al. (2019), a Cronbach's Alpha value of **0.70 or higher** indicates acceptable reliability.

Variable	Cronbach's Alpha	Interpretation
Procurement Planning Quality	0.888	Good
Contract Type Fit	0.906	Excellent

Supplier Evaluation & Assessment	0.880	Good
Contract Administration Capabilities	0.923	Excellent
Contracting & Procurement Management	0.967	Excellent
Cost Performance	0.877	Good
Schedule Performance	0.925	Excellent
Quality Performance	0.921	Excellent
Project Performance	0.957	Excellent
Overall Questionnaire	0.980	Excellent

4.4. Descriptive statistics for research variables (answer research questions)

Descriptive statistics were used to summarize respondents' perceptions of the study variables by calculating the mean and standard deviation for each dimension.

Variable	Mean	Standard Deviation	Level
Independent Variables			
Procurement Planning Quality	3.84	0.90	High
Contract Type Fit	3.65	0.87	High
Supplier Evaluation & Assessment	3.70	0.92	High
Contract Administration Capabilities	3.5	0.93	Moderate
Dependent Variables			
Cost Performance	3.70	0.88	High
Schedule Performance	3.32	1.01	Moderate
Quality Performance	3.82	0.83	High

The descriptive statistics indicate that respondents generally agreed that effective contracting and procurement management practices were implemented in the projects they participated in. Procurement Planning Quality recorded the highest mean score (3.84), indicating that procurement planning is generally perceived positively. Quality Performance also received a high mean score, suggesting that respondents believe effective procurement contributes to achieving project quality.

In contrast, Contract Administration Capabilities and Schedule Performance recorded comparatively lower mean scores. Although these dimensions were still evaluated positively overall, the results suggest that organizations face greater challenges in managing contracts during project execution and in delivering projects according to the planned schedule.

Overall, the findings indicate that respondents perceive contracting and procurement management as an important factor influencing successful project performance.

4.5. Testing Hypotheses & Findings Discussion

Simple linear regression analysis was conducted to examine the impact of Contracting and Procurement Management on Project Performance.

Research Hypothesis

H1: Contracting and Procurement Management has a significant positive impact on Project Performance.

Table 4.4 Model Summary

R	R Square	Adjusted R Square	Std. Error
0.929	0.862	0.861	0.288

The regression model explains **86.2%** of the variation in Project Performance, indicating that Contracting and Procurement Management is a strong predictor of project performance.

Table - ANOVA

F	Significance
601.145	< 0.001

The ANOVA results show that the regression model is statistically significant ($F = 601.145$, $p < 0.001$), indicating that the model is appropriate for explaining the relationship between the study variables.

Table - Regression Coefficients

Variable	B	Std. Error	Beta (β)	t
Constant	0.042	—	0.280	0.780
Contracting & Procurement Management	0.972	0.929	24.518	<0.001

The regression analysis indicates that Contracting and Procurement Management has a positive and statistically significant effect on Project Performance ($\beta = 0.929$, $t = 24.518$, $p < 0.001$). This means that improvements in contracting and procurement management practices are associated with improvements in project performance. Therefore, the research hypothesis is **accepted**.

Relationship with Previous Studies

The findings of this study are consistent with the literature reviewed in Chapter Two. Previous studies have concluded that effective procurement planning, supplier evaluation, contract selection, and contract administration contribute significantly to successful project outcomes. Similarly, the results of this study demonstrate that organizations with stronger contracting and procurement management practices achieve better project performance.

The findings also support the Project Management Institute (PMI), which emphasizes that procurement management is a critical knowledge area that contributes to project success through effective planning, supplier management, and contract administration.

4.6. Conclusion

This chapter presented the statistical analysis of the questionnaire data collected from 98 respondents. The demographic analysis showed that the respondents possessed relevant educational backgrounds and professional experience, making them suitable participants for this study. The reliability analysis confirmed that the questionnaire achieved excellent internal consistency, indicating that the research instrument was reliable.

The descriptive statistics showed that respondents generally had positive perceptions of contracting and procurement management practices, particularly in procurement planning and quality performance. The regression analysis further confirmed that Contracting and Procurement Management has a statistically significant positive impact on Project Performance. Therefore, the research hypothesis was accepted.

Overall, the findings of this study demonstrate that organizations that effectively manage procurement planning, supplier evaluation, contract selection, and contract administration are more likely to achieve better project performance. These findings provide empirical support for the research objectives and establish a foundation for the conclusions and recommendations presented in the next chapter.

SBSS information available if needed to be added to the references list.

5. Chapter five: Research limitations, Recommendations & Conclusion

5.1. Research Limitations & Future Research

5.2. Research Recommendations

5.3. Conclusion

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Appendix A:

Research Questionnaire

The Impact of Contracting & Procurement Management on Project Performance

Dear Participant,

I am conducting this survey as part of my graduation project at **Midocean University**. The purpose of this questionnaire is to examine the impact of contracting and procurement management on project performance. Your participation is highly appreciated.

Please answer the following questions **based on your own professional experience working on projects**. There are no right or wrong answers. All responses will remain confidential and will only be used for academic research purposes.

Response Scale

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

Section A

Demographic Information

1. Gender

- ☐ Male
- ☐ Female

2. Age

- ☐ Less than 30
- ☐ 30–39
- ☐ 40–49
- ☐ 50 years or above

3. Educational Qualification

- ☐ Diploma
- ☐ Bachelor's Degree
- ☐ Master's Degree
- ☐ PhD

4. Years of Professional Experience

- ☐ Less than 5 years
- ☐ 5–10 years
- ☐ 11–15 years
- ☐ More than 15 years

5. Current Position

- ☐ Project Manager
- ☐ Procurement Officer
- ☐ Contract Manager
- ☐ Engineer
- ☐ Quantity Surveyor
- ☐ Project Coordinator
- ☐ Other: _____

Section B

Contracting & Procurement Management

Procurement Planning Quality

Statement	1	2	3	4	5
1. In the projects I have worked on, procurement activities were properly planned before project execution began.	☐	☐	☐	☐	☐
2. Procurement requirements were clearly identified before purchasing decisions were made.	☐	☐	☐	☐	☐
3. Proper procurement planning helped reduce unexpected issues during project execution.	☐	☐	☐	☐	☐
4. Procurement schedules were aligned with the overall project schedule.	☐	☐	☐	☐	☐

Contract Type Fit

Statement	1	2	3	4	5
5. The type of contract used was appropriate for the nature of the project.	☐	☐	☐	☐	☐
6. Contract terms clearly defined the responsibilities of all parties.	☐	☐	☐	☐	☐
7. The selected contract helped reduce project risks.	☐	☐	☐	☐	☐
8. The contract allowed the project team to deal effectively with changes during project execution.	☐	☐	☐	☐	☐

Supplier Evaluation & Assessment

Statement	1	2	3	4	5
9. Suppliers were selected based on clear evaluation criteria, not only on price.	☐	☐	☐	☐	☐
10. The experience and capabilities of suppliers were considered before awarding contracts.	☐	☐	☐	☐	☐
11. The selected suppliers were able to meet the project's requirements.	☐	☐	☐	☐	☐
12. Supplier performance was regularly monitored throughout the project.	☐	☐	☐	☐	☐

Contract Administration Capabilities

Statement	1	2	3	4	5
13. Contracts were managed effectively throughout project execution.	☐	☐	☐	☐	☐
14. Contract changes were handled in a timely and organized manner.	☐	☐	☐	☐	☐
15. Communication between the project team and suppliers was effective.	☐	☐	☐	☐	☐
16. Contract-related issues were resolved without causing significant disruption to the project.	☐	☐	☐	☐	☐

Section C

Project Performance

Cost Performance

Statement	1	2	3	4	5
17. The projects I worked on were completed within the approved budget.	☐	☐	☐	☐	☐
18. Procurement decisions helped control overall project costs.	☐	☐	☐	☐	☐
19. Procurement-related issues caused only minimal cost overruns.	☐	☐	☐	☐	☐

Schedule Performance

Statement	1	2	3	4	5
20. The projects I worked on were completed within the planned schedule.	☐	☐	☐	☐	☐
21. Procurement activities rarely caused delays during project execution.	☐	☐	☐	☐	☐
22. Materials and services were delivered when they were needed.	☐	☐	☐	☐	☐

Quality Performance

Statement	1	2	3	4	5
23. The delivered work met the required quality standards.	☐	☐	☐	☐	☐
24. The materials and services supplied met the project's quality requirements.	☐	☐	☐	☐	☐
25. Overall, I consider the projects I have worked on to have been successful.	☐	☐	☐	☐	☐

Appendix B: Research Instrument Table

Variable	Dimension	Code	Items	References
Independent Variable: Contracting & Procurement Management				
Contracting & Procurement Management	Procurement Planning Quality	PPQ1–PPQ4	4	PMI (2021); Kerzner (2022)
	Contract Type Fit	CTF1–CTF4	4	Bajari & Tadelis (2001); Walker & Rowlinson (2008)
	Supplier Evaluation & Assessment	SEA1–SEA4	4	Choi & Hartley (1996); Thai (2009)
	Contract Administration Capabilities	CAC1–CAC4	4	PMBOK® Guide (2021); Jiang & Li (2019)
Dependent Variable: Project Performance				
Project Performance	Cost Performance	CP1–CP3	3	Kerzner (2022); PMI (2021)
	Schedule Performance	SP1–SP3	3	PMBOK® Guide (2021)
	Quality Performance	QP1–QP3	3	Kerzner (2022); Turner (2014)

Total Number of Questionnaire Items: 25