

Final Project 1

Code: PMG496

**The Impact of Total Quality Management Implementation
on Project Performance**

**Project Management Program
Midocean University**

The Impact of Total Quality Management Implementation on Project Performance

**A Case Study of SABIC Company in the Kingdom of
Saudi Arabia**

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1. Chapter 1: Introduction

Project management is one of the essential functions in modern organizations, as entities aim to achieve strategic goals through multiple projects. With increasing project complexity, organizations need methodologies that ensure efficiency in cost, time, and quality. Total Quality Management (TQM) has emerged as a key philosophy focused on continuous improvement, employee involvement, and customer satisfaction.

1.1. Research Background

TQM is defined as an integrated approach that emphasizes long-term quality through participation of all employees (Oakland, 2014). Its principles include customer focus, continuous improvement, leadership, employee involvement, and fact-based decision-making.

Project performance is measured through adherence to schedule, cost, quality, stakeholder satisfaction, and return on investment (PMI, 2021). Studies show that weak quality systems and poor communication often lead to project failure (Kerzner, 2017).

SABIC is one of the largest industrial companies globally, known for adopting advanced quality standards and continuous improvement practices. This makes it an ideal case study for examining the impact of TQM on project performance.

1.2. Research Problem

Despite major development in Saudi Arabia under Vision 2030, many projects still face delays, cost overruns, and quality issues. For a global company like SABIC, ensuring high project performance is a strategic challenge

1.2.1. Theoretical Gaps

- Limited studies directly link TQM to project performance in major Saudi industrial companies.
- Most existing models were developed in Western contexts and require validation in Saudi culture.
- Lack of studies examining moderating factors such as organizational culture and leadership.

1.2.2. Practical Gaps

- Difficulty measuring the real impact of TQM on project outcomes.
- Resistance to change and insufficient training hinder effective implementation.
- Variation in TQM benefits depending on project size and complexity.

1.3. Research Significance

In this section, the student should clarify the importance of the study at the theoretical level, and the empirical level

1.3.1. At the theoretical level

- **Provides a framework linking TQM principles with project performance in a Saudi industrial context.**
- **Fills a gap in Arab-region research on quality and project success.**
- **Identifies the most influential TQM dimensions on performance.**

1.3.2. At the practical level

- **Helps SABIC evaluate strengths and weaknesses in its quality practices.**
- **Supports project managers in understanding how TQM improves performance.**
- **Guides other industrial organizations in adopting effective quality systems.**
- **Supports national efforts to enhance competitiveness under Vision 2030.**

1.4. Research Questions

Based on the research problem and the context of SABIC, the following questions guide this study:

- 1. What is the impact of Total Quality Management (TQM) implementation on overall project performance in SABIC?**
- 2. How does customer focus as a TQM dimension affect project quality outcomes in SABIC?**
- 3. To what extent does continuous improvement influence project schedule adherence and cost control in SABIC?**
- 4. What is the role of employee involvement and leadership in enhancing project stakeholder satisfaction within SABIC?**

1.5. Research Objectives

This study aims to achieve the following objectives:

- 1. To examine the impact of TQM implementation on project performance at SABIC.**
- 2. To assess the effect of customer focus on project quality outcomes in SABIC's projects.**
- 3. To determine the influence of continuous improvement on project schedule and cost performance at SABIC**
- 4. To investigate the role of employee involvement and leadership in improving project stakeholder satisfaction within SABIC.**

1.6. Research Hypotheses

The following hypotheses are formulated to be tested empirically:

- **H1: There is a significant positive impact of TQM implementation on project performance at SABIC.**
- **H1a: Customer focus has a significant positive impact on project quality outcomes at SABIC.**
- **H1b: Continuous improvement has a significant positive impact on project schedule and cost performance at SABIC.**
- **H1c: Employee involvement and leadership have a significant positive impact on project stakeholder satisfaction at SABIC.**

1.7. Research Model

The proposed research model illustrates the relationship between the independent variable (TQM Dimensions) and the dependent variable (Project Performance).

Figure 1: Research Model – Impact of TQM on Project Performance

Independent Variable (IV)

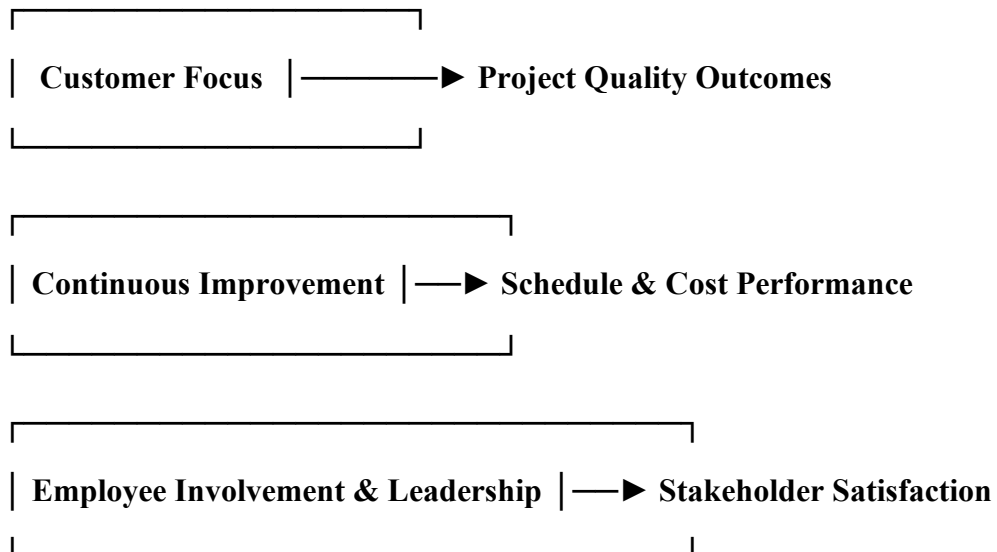
Dependent Variable (DV)

Customer Focus -----> Project Quality Outcomes

Continuous Improvement -----> Schedule & Cost Performance

Employee Involvement & Leadership -> Stakeholder Satisfaction

Graphical representation:



1.8. Research Methodology

This study will adopt a quantitative research approach. A descriptive-analytical method will be used to test the hypotheses.

Element Description

Research Design Cross-sectional survey

- Population Project managers, team leaders, and quality assurance personnel working in SABIC's project departments in Saudi Arabia
- Sample Convenience sample of approximately 150–200 respondents
- Data Collection Structured questionnaire distributed electronically (Google Forms or email)
- Measurement Scale 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree)
- Data Analysis SPSS or SmartPLS software for descriptive statistics, reliability (Cronbach's alpha), correlation, and regression analysis

1.9. Suggested Field Study

The empirical study will be conducted at SABIC (Saudi Basic Industries Corporation) , specifically within its project management and engineering departments in the Eastern Province (Jubail and Dammam) , Kingdom of Saudi Arabia.

Reasons for selecting SABIC:

SABIC is a global leader in petrochemicals and has formally adopted TQM practices.

The company operates large-scale industrial projects under Saudi Vision 2030.

Access to project managers and quality professionals is feasible.

SABIC's commitment to continuous improvement and quality standards makes it an ideal case study.

1.10. Suggested Project Structure

The final graduation project will be organized as follows:

Table 1: Suggested Project Structure

Chapter	Title	Content
Chapter 1	General Framework of the Study	Introduction, problem, significance, questions, objectives, hypotheses, model, methodology, field study, structure
Chapter 2	Literature Review	TQM concepts, Project Performance dimensions, previous studies, relationship between variables
Chapter 3	Research Methodology (Detailed)	Research design, population and sample, data collection instrument, validity and reliability, analysis techniques
Chapter 4	Data Analysis and Results	Descriptive statistics, hypothesis testing, findings presentation (to be completed in Project 2)
Chapter 5	Discussion, Conclusion, Recommendations	Interpretation of results, limitations, practical and theoretical recommendations (to be completed in Project 2)
References	APA Style	All cited sources

Appendix Questionnaire Survey instrument

Update References

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