

Final Project 2 (PMG497)

Assignment #1

Localization of Lighting Manufacturing and Its Impact on Industrial Competitiveness in
Saudi Arabia

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Table of Contents

- 1. Research Introduction
- 2. Research Problem
- 3. Research Significance
- 4. Research Questions
- 5. Research Objectives
- 6. Research Hypotheses
- 7. Research Model
- 8. Scope of the Study
- 9. Project Structure
- Chapter 2: Literature Review
- References
- Appendix
- Research Instrument Table

Chapter 1

1.1 Research Introduction

Saudi Arabia is accelerating industrial localization under Vision 2030 to diversify its economy, increase local value creation, reduce import dependency, and develop globally competitive manufacturing industries. The lighting manufacturing sector is strategically important because it supports construction, infrastructure, smart cities, energy efficiency, and industrial development. This study examines whether greater localization of lighting manufacturing contributes to higher industrial competitiveness in Saudi Arabia. Localization in this research extends beyond local assembly to include local research and development, engineering capability, local sourcing, manufacturing technologies, and workforce development.

1.2 Research Problem

Despite government initiatives encouraging localization, many lighting manufacturers still rely heavily on imported components, technologies, and supply chains. There is limited empirical evidence explaining how localization affects competitiveness within the Saudi lighting industry. This study addresses that gap.

1.3 Research Significance

Academically, the study contributes to research on industrial localization and competitiveness in an under-studied manufacturing sector. Practically, the findings may support manufacturers, policymakers, investors, and Vision 2030 initiatives in improving localization strategies.

1.4 Research Questions

Main Question: What is the impact of localization of lighting manufacturing on industrial competitiveness in Saudi Arabia?

Sub-questions:

- How does local manufacturing capability affect competitiveness?
- How does local R&D affect competitiveness?
- How does workforce localization affect competitiveness?
- How does local sourcing affect competitiveness?
- What barriers hinder localization?

1.5 Research Objectives

To investigate the impact of localization on industrial competitiveness, evaluate manufacturing capability, local sourcing, R&D, workforce localization, identify barriers, and recommend improvement strategies.

1.6 Research Hypotheses

H1: Localization of lighting manufacturing has a significant positive impact on industrial competitiveness.

H1a: Local manufacturing capability positively influences competitiveness.

H1b: Local R&D positively influences competitiveness.

H1c: Workforce localization positively influences competitiveness.

H1d: Local sourcing positively influences competitiveness.

1.7 Research Model

Independent Variable: Localization of Lighting Manufacturing Dimensions: Local manufacturing capability, Local sourcing, Local R&D, Workforce localization.

Dependent Variable: Industrial Competitiveness Dimensions: Product quality, Cost competitiveness, Innovation capability, Delivery performance, Export competitiveness.

1.8 Scope of the Study

Geographic scope: Saudi Arabia.

Population: Managers, engineers, procurement professionals, consultants and executives in the Saudi lighting manufacturing industry.

Time scope: 2026.

1.9 Project Structure

Chapter 1: Introduction

Chapter 2: Literature Review

Chapter 3: Methodology

Chapter 4: Data Analysis

Chapter 5: Conclusions and Recommendations.

Chapter 2 – Literature Review (Draft Structure)

2.1 Manufacturing Localization

Define localization, its objectives, drivers, and international best practices.

2.2 Saudi Vision 2030 and Industrial Localization

Discuss Vision 2030, NIDLP, local content initiatives and industrial transformation.

2.3 Lighting Manufacturing Industry

Overview of the Saudi lighting industry, supply chain, and localization opportunities.

2.4 Industrial Competitiveness

Discuss quality, innovation, cost, delivery, and export performance.

2.5 Relationship Between Localization and Competitiveness

Summarize theoretical and empirical findings from previous studies.

2.6 Research Gap

Highlight the limited evidence specific to Saudi lighting manufacturing.

2.7 Chapter Summary

Summarize the literature and justify the proposed model.

Appendix A – Draft Questionnaire

Scale: 1=Strongly Disagree ... 5=Strongly Agree

1. 1. Local manufacturing capability in Saudi Arabia has improved significantly.
2. 2. Our company increasingly uses locally manufactured components.
3. 3. Local R&D enhances product quality.
4. 4. Localization improves innovation.
5. 5. Localization reduces lead times.
6. 6. Localization improves cost competitiveness.
7. 7. Localization improves export opportunities.
8. 8. Localization strengthens industrial competitiveness.

Research Instrument Table

Variable	Dimension	Items	Scale
Localization	Manufacturing capability	Q1-Q2	Likert 1-5
Localization	R&D	Q3-Q4	Likert 1-5
Competitiveness	Performance	Q5-Q8	Likert 1-5

References (Starter APA 7 List)

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