

Chapter Three: Research Methodology

1. Introduction

This chapter outlines the methodological framework adopted to achieve the objectives of the study. It explains the scientific tools and techniques used for data collection and analysis. The methodology aims to measure the impact of Operational Risk Management (ORM) on business continuity at the Arabian United Flat Glass Company.

2. Operational Definitions of Research Variables

To ensure measurement accuracy, the variables are defined as follows:

Independent Variable (Operational Risk Management):

Refers to the organization's ability to identify risks, assess their likelihood, and implement appropriate mitigation plans.

Dependent Variable (Business Continuity):

Represents the stability of production lines and the reduction of downtime caused by operational disruptions.

Moderating Variable (Employee Training):

Refers to the level of awareness, skills, and preparedness of employees in dealing with operational risks.

3. Research Design

This study adopts a descriptive-analytical approach. This design enables the researcher to describe real-world practices within the company and analyze the relationships between variables. It also supports testing the hypothesis that improving ORM practices leads to reduced operational downtime.

4. Population and Sampling Techniques

Population:

The study population includes all employees, engineers, and administrative staff at the Arabian United Flat Glass Company.

Sample:

A sample ranging from 50 to 100 participants will be selected.

Sampling Technique:

Stratified sampling is used to ensure representation from all departments, including production, maintenance, and administration.

5. Data Collection Methods

The study relies on two main sources of data:

Secondary Data:

Collected from previous studies, academic literature, and ISO 31000 risk management standards.

Primary Data:

Collected through a structured questionnaire distributed both electronically and in paper form.

6. Types of Data

The study includes both quantitative and qualitative data:

Demographic Data:

Such as experience level and department.

Measurement Data:

Collected using a five-point Likert scale to evaluate employees' perceptions of ORM effectiveness.

7. Statistical Analysis Procedures

Data will be analyzed using the Statistical Package for Social Sciences (SPSS) through:

- Cronbach's Alpha to test reliability
- Correlation and regression analysis to test hypotheses
- Expert review to ensure content validity

8. Conclusion

This methodology provides a structured scientific framework that links theoretical concepts of risk management with practical application in the glass manufacturing industry. It sets the foundation for the next chapter, which focuses on data analysis and results.