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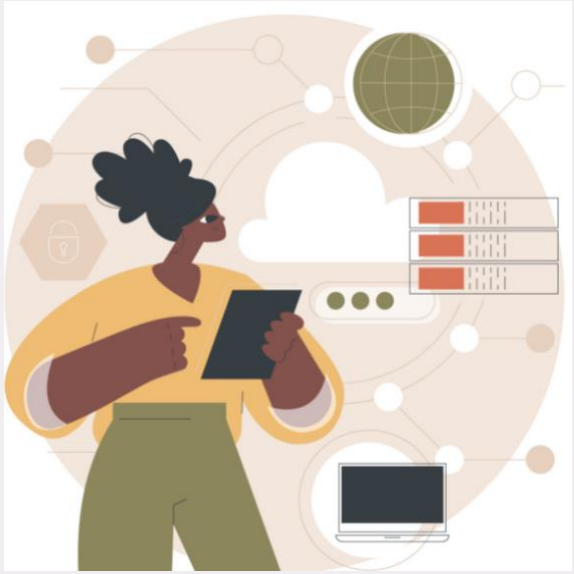
Master 2 in **Construction Projects Management**
Course: **Data Analysis**

05 04 03 02 01 About course

CHAPTER 03

Fieldwork

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2025/2026

05 04 03 02 01

Chapter Objectives

At the end of the chapter, the learner will be able to:

- Understand the Concept of Fieldwork and its importance in data analysis
- Define Clear Objectives for Fieldwork that align with the overall goals of a project or research.
- Discover and Understand the Phases of Fieldwork: From Planning to Analysis





About course

Chapter Content

1. what is Fieldwork?

2. Objectives of Fieldwork

3.Phases of Fieldwork: From Planning to Analysis

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1.What is Fieldwork ?

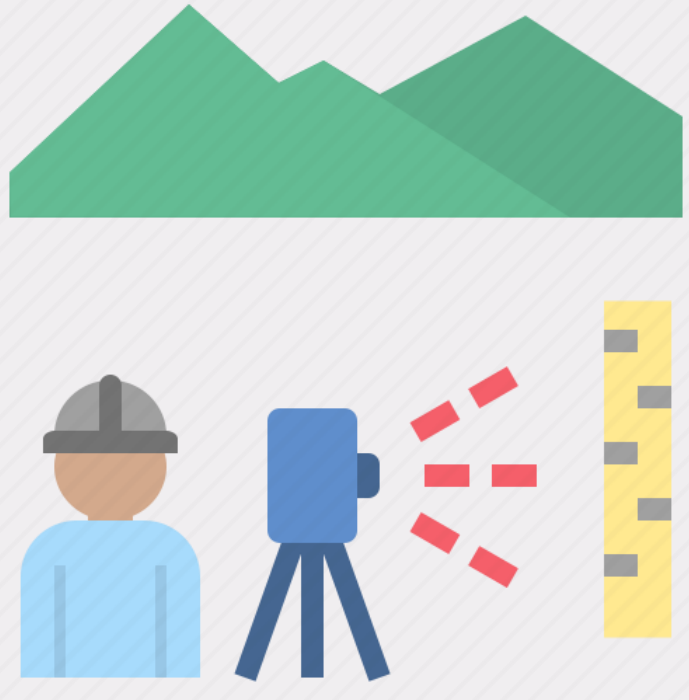
Fieldwork is the process of collecting raw data or information directly from the environment or context relevant to a study, research project, or practical application. It typically involves going outside of controlled or laboratory settings to gather data through observation, measurement, interviews, surveys, or other hands-on techniques

Fieldwork allows **researchers,** to directly engage with the subjects or sites they are studying, ensuring that the data collected is authentic, relevant, and reflective of actual conditions.



1.What is Fieldwork ?

In the context of construction project management, fieldwork may include **site visits** to track project progress, surveys to understand stakeholder satisfaction, or interviews with project managers to assess decision-making processes. The data collected can be used to evaluate factors such as project delays, cost overruns, or resource management, ultimately leading to improvements in project performance.

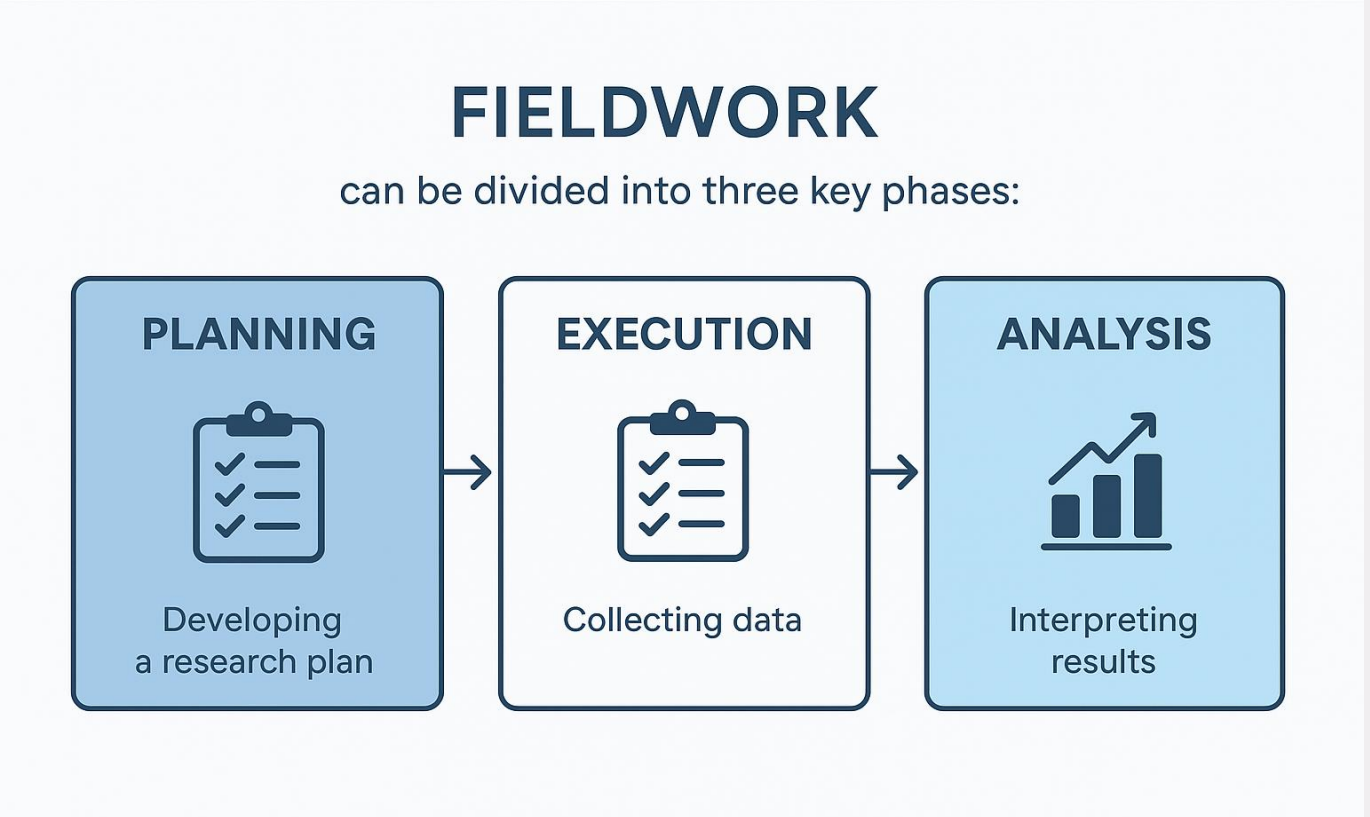


2. Objectives of Fieldwork

- Obtaining firsthand, original or primary data sources as interviews, surveys, or observations. (Zvobgo. k, et al. 2022).
- Validating or challenging existing hypotheses through empirical data from the field.
- Fieldwork can provide rich and detailed information that cannot be obtained through other research methods.
- Establishing direct interactions with participants or stakeholders, which enriches the research process.

03 Phases of Fieldwork: From Planning to Analysis

Fieldwork can be divided into three key phases: **Planning**, **Execution**, and **Analysis**. Each phase plays a critical role in ensuring successful data collection and interpretation



Planning for Fieldwork

03 Phases of Fieldwork: From Planning to Analysis

01 Planning for Fieldwork

Planning is critical to ensure the fieldwork is well-organized, time-efficient, and yields useful data.

Importance of Planning

- Ensures organization and time efficiency
- Enhances data quality and reliability
- Reduces risks and logistical problems
- Provides a clear research framework

03 Phases of Fieldwork: From Planning to Analysis

01 Planning for Fieldwork

Planning for Fieldwork involves several important steps that help researchers prepare before collecting data.

Step 1: Defining Objectives

- **Establish Research Goals**: Clearly define the purpose of the fieldwork and the specific questions it will address.

  Example: A study aimed at identifying causes of frequent cost overruns in infrastructure projects.

- **Expected data:** Define whether the research will focus on quantitative data (e.g., cost data, time schedules) or qualitative data (e.g., interviews with project managers).

03 Phases of Fieldwork: From Planning to Analysis

01 Planning for Fieldwork

Step 2: Designing the Fieldwork Plan

- **Method Selection:** Choose the appropriate methods (e.g., interviews, surveys, observations) based on research goals.

- **Sampling Strategy:** Develop a plan for selecting participants or cases to ensure a representative and relevant sample.

Example: Sampling a range of projects from residential buildings to large infrastructure projects to understand different challenges.

- **Timeline Development:** Create a timeline outlining key stages of the fieldwork and ensure sufficient time for data collection. (Set a timeline that aligns with the construction project's phases (e.g., design, execution, handover).

03 Phases of Fieldwork: From Planning to Analysis

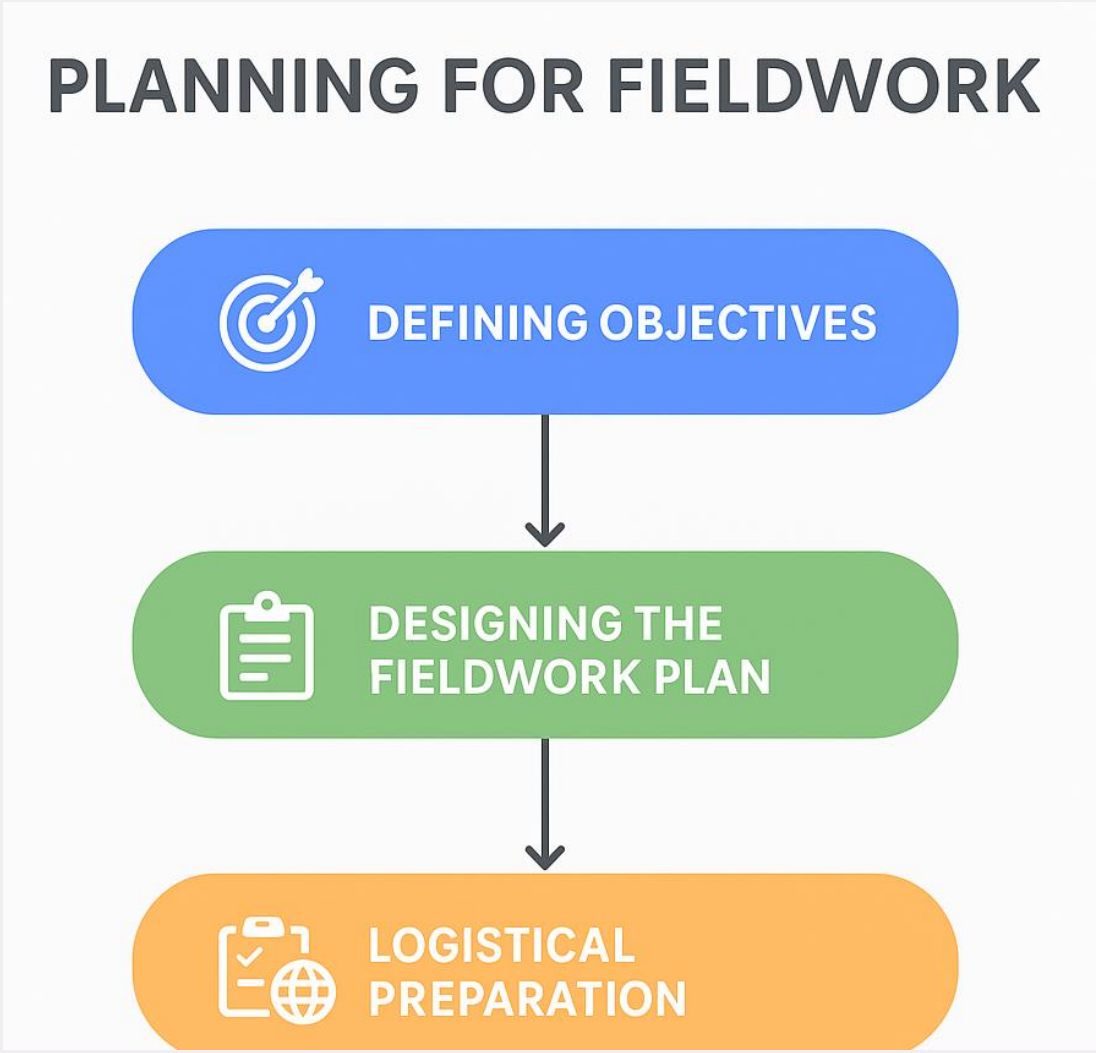
01 Planning for Fieldwork

Step 3: Logistical Preparation

- **Field Site Selection:** Identify and secure access to field sites. (this might involve gaining permission to access active construction sites or company records.)
- **Resource Planning:** Arrange for necessary resources such as equipment, transportation, and personnel. (includes gathering appropriate safety gear, data collection tools (cameras, GPS devices, or software for tracking site activities), and securing travel arrangements.
- **Budgeting:** Allocate financial resources for travel, materials, and personnel.
- **Risk Management:** Prepare contingency plans to handle unexpected challenges like site access issues or equipment failure.

03 Phases of Fieldwork: From Planning to Analysis

01



Executing Fieldwork

03 Phases of Fieldwork: From Planning to Analysis

02 Executing Fieldwork

This phase involves the actual data collection and requires close adherence to the research plan to ensure data accuracy and completeness.

1-1 Data Collection

- **Data Gathering:** Collect data using the methods specified in the research plan (interviews, surveys, observations, etc.)

  Example: In a study on delays, an observer might record how long each phase of construction takes and compare it with the planned schedule.

- **Adaptation:** Be flexible and adapt to any unforeseen conditions or challenges in the field.

03 Phases of Fieldwork: From Planning to Analysis

02 Executing Fieldwork

1-2 Recording and Documentation

- **Systematic Documentation:** Maintain accurate and detailed notes, recordings, and logs to ensure data integrity.

  Example: Documenting site safety violations with photographs and linking them to potential delays in project progress.

- **Backup Procedures:** Ensure multiple data backups (digital and physical) to prevent loss of information.

Analyzing Field Data

03 Phases of Fieldwork: From Planning to Analysis

03 Analyzing Field Data

1-1 Data Cleaning and Preparation

- **Organizing Data:** Sort the raw data into categories such as time, cost, safety, and resources.

  Example: If interviewing project managers, group responses by common themes such as communication issues or budget constraints.

- **Data Cleaning:** Remove errors or incomplete data entries.

03 Phases of Fieldwork: From Planning to Analysis

03 Analyzing Field Data

1-2 Quantitative Data Analysis

- **Statistical Analysis:** Analyze numerical data such as costs, schedules, and resource allocations. Use statistical tools to identify patterns or correlations, such as the relationship between project size and delay frequency.
- **Visualization:** Use charts, graphs, and tables to present quantitative findings.

1-3 Qualitative Data Analysis

- **Thematic Analysis:** Identify themes, patterns, and narratives from qualitative data like interviews or observations.
- **Coding and Categorization:** Organize qualitative data into categories for deeper analysis.

03 Phases of Fieldwork: From Planning to Analysis

03 Analyzing Field Data

1-4 Reporting Findings

- **Writing the Report:** Structure the findings in a comprehensive report, addressing the research questions with support from both qualitative and quantitative data.

- **Presenting Recommendations:** Offer actionable insights and recommendations based on the analyzed data.

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Thank You!