

Optimizing Data Collection Methods for Better Analysis

Part 1: Office Roleplay Dialogue

Scenario: A Data Analyst, Yuki, is working with her colleague, Nathan, to improve **data collection** methods for a new research project.

Nathan: Hey Yuki, we need to refine our **data collection** process for the customer feedback analysis. Any ideas?

Yuki: Yes! First, we should improve our **survey design** to make sure we're asking the right questions.

Nathan: Good point. We also need to consider **sampling**—how do we ensure we get a representative group?

Yuki: We can use stratified **sampling**, dividing respondents into key demographics for more balanced results.

Nathan: That makes sense. What about handling all the incoming data efficiently?

Yuki: We should set up a **data pipeline** to automate data flow from surveys to our analysis tools.

Nathan: That'll definitely help with efficiency. Are there ways to improve **process optimization**?

Yuki: Yes! We can remove redundant steps and automate data validation to reduce errors.

Nathan: Great idea. If we refine the **survey design** and improve the **data pipeline**, we'll get better insights.

Yuki: Exactly! I'll draft an updated plan and we can test the new process next week.

Nathan: Sounds good. Let's aim for a smoother, more accurate **data collection** process.

Part 2: Comprehension Questions

1. What is the main goal of Yuki and Nathan's discussion?

- (A) To create a marketing campaign
- (B) To design a company logo
- (C) To improve data collection methods
- (D) To hire more employees

2. Why is sampling important in data collection?

- (A) It helps get a representative group
- (B) It reduces the number of survey questions
- (C) It eliminates all survey errors
- (D) It speeds up the printing process

3. How does Yuki suggest handling large amounts of incoming data?

- (A) By manually entering responses
- (B) By deleting extra responses
- (C) By making surveys longer
- (D) By setting up a data pipeline

4. What does Nathan suggest to improve process optimization?

- (A) Increasing the number of surveys
- (B) Removing redundant steps and automating data validation

- (C) Changing the company's email system
 - (D) Printing all the survey results on paper
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Part 3: Key Vocabulary Definitions in Japanese

1. **Data Collection (データ収集)** – 必要な情報を集めるプロセス。
 2. **Survey Design (調査設計)** – アンケートや調査の質問を設計し、効果的なデータを収集する方法。
 3. **Sampling (サンプリング)** – データ分析のために母集団の一部を選び、代表的なデータを取得する手法。
 4. **Data Pipeline (データパイプライン)** – データを自動で処理・転送するシステム。
 5. **Process Optimization (プロセス最適化)** – 作業効率を向上させるために、無駄を減らし、システムを改善すること。
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Part 4: Questions & Correct Answers

1. **What is the main goal of Yuki and Nathan's discussion?**
☒ (C) To improve data collection methods
2. **Why is sampling important in data collection?**
☒ (A) It helps get a representative group

3. How does Yuki suggest handling large amounts of incoming data?

☒ (D) By setting up a data pipeline

4. What does Nathan suggest to improve process optimization?

☒ (B) Removing redundant steps and automating data validation