

Case Study: Amazon's Customer Satisfaction Survey (Dataset Attached)

Scenario:

Amazon wants to estimate the average customer satisfaction score for a new delivery model using a random sample.

Tasks:

1. Generate a random sample of 50 responses from a 1,000-customer dataset.
2. Calculate:
 - Sample mean and standard deviation
 - 95% confidence interval for the mean satisfaction score
3. Design 5 effective survey questions
4. Compare results across different regions using stratified sampling

Learning Outcome:

- Apply sampling methods and confidence intervals in Excel
- Develop managerial insight from limited data