

Module 1: Describing and Summarizing Data

Case Study: Sales Performance of Regional Branches

Scenario:

You are a business analyst at a retail chain. The company wants to evaluate the sales performance of its 8 regional branches last quarter.

Tasks:

1. Import the dataset (branch-wise sales, customer footfall, returns).
2. Calculate:
 - Mean, median, mode, and standard deviation for sales.
 - Identify outlier branches using boxplots.
3. Determine the measures of central tendency.
4. Determine the variance and standard deviation.
5. Graph the distribution of the data and determine whether it is normal or skewed.
6. Create a pivot table using the dataset provided.
7. Create a pivot chart using the same dataset that you used above.
8. Try to use your pivot table and pivot chart to extract some insight from the dataset.
9. Create:
 - Histograms for sales
 - Scatter plots between customer footfall and sales
10. Analyze:
 - Correlation between footfall and sales.

Learning Outcome:

- Understand data distribution
- Use Excel to summarize and visualize data effectively