

OBJECTIVES -

1. Collect and Clean Data:

- **Collect:** Get the raw sales data file (CSV, Excel, etc.).
- **Clean:** Remove duplicates, handle missing values, correct data types.

2. Observe Patterns:

- **Summary Stats:** Calculate basic statistics (mean, median, etc.).
- **Visualize:** Use histograms, bar charts, and pie charts to see distributions and frequencies.

3. Analyze Sales:

- **Key Metrics:** Total sales, average sales per transaction, sales trends over time.
- **Segment Analysis:** Sales by product, region, or customer segment.
- **Performance:** Top-selling products, revenue contributions, seasonal trends.
- **Customer Insights:** Average order value, repeat purchase rates.

Insights from Sales Data

1. Sales by Day and Hour:

- Weekends dominate in April; weekdays in May and June. Peak sales: 9 AM - 10 AM.

2. Peak Sales Times:

- Peak activity observed from 8 AM to 10 AM.

3. Total Monthly Sales Revenue:

- January: \$81,677.74
- February: \$76,145.19
- March: \$98,834.68
- April: \$118,941.10
- May: \$156,727.80
- June: \$166,485.90

4. Sales Across Store Locations:

- Hell's Kitchen leads in footfall (50,735) and revenue (\$236,511.17).

5. Average Order Quantity:

- Average of 1.4 orders per person over 6 months.

6. Average Price Per Person on Weekends:

- Average spend of \$4.70 per person on weekends.
- Total weekend revenue (6 months): \$195,224.80
- Total footfall on weekends: 149,116

Learnings

Clean Data with Power Query

- 1. Load Data:** Open Excel and load data into Power Query Editor.
- 2. Remove Duplicates:** Home > Remove Duplicates.
- 3. Handle Missing Values:** Home > Replace Values or Remove Rows.
- 4. Correct Data Types:** Transform > Data Type.
- 5. Trim Spaces:** Transform > Format > Trim.
- 6. Add Conditional Columns:** Add Column > Conditional Column.
- 7. Add Custom Columns:** Add Column > Custom Column.
- 8. Text After Delimiter:** Transform > Split Column > By Delimiter.
- 9. Load Clean Data:** Close & Load.

Analyze Data with Power Pivot

- 1. Load to Power Pivot:** Power Pivot > Add to Data Model.
- 2. Create Relationships:** Diagram View.
- 3. Create Measures:** Home > Calculations > New Measure.
- 4. Build Pivot Tables/Charts:** Insert > PivotTable > From Data Model.