

Sales Analysis Dashboard – Case Study

Objective

The project delivers a complete Power BI Sales Analysis Dashboard to help stakeholders understand revenue drivers, product profitability, regional performance, and customer behavior.

Dataset

- Global Superstore dataset from Kaggle/Tableau
- Contains Orders, Customers, Products, Regions, Shipping data

Business Questions

- Which products and regions drive sales and profit?
- What are the monthly/quarterly trends?
- Which customer segments are most valuable?
- Where do shipping delays or returns affect business?

Methodology

1. Data Cleaning (Power Query)
 - Fixed data types
 - Removed duplicates
 - Created calculated columns (Shipping Delay, Profit Margin)
2. Data Transformation
 - Aggregations by month, region, category
 - Time intelligence (YoY, Rolling 3M)
3. Modelling (Star Schema)
 - Fact Orders + Dim Customers, Products, Regions, Calendar
4. DAX Measures
 - Total Sales, Total Profit, YoY%, Profit Margin, AOV, Customer Count
5. Visualization
 - 12-column grid design
 - Six KPI cards, trends, profit matrix, cohort tables
6. Insights
 - Technology & Office Supplies drive majority profit
 - Furniture category is discount-heavy, reducing margins
 - West region shows strongest growth
 - Shipping delays correlate with higher returns

Limitations

- Sample dataset (not real business data)
- No COGS → cannot compute Gross Margin
- No demographic or behavioral customer data

Next Steps

- Add ML forecasting
- Add RFM segmentation
- Build real-time dashboard