# 📊 Sales Data Analysis – Power BI Dashboard

\*\*Electrohub Sales Analytics Project\*\*

This Power BI project explores sales, profit, quantity trends, and discount patterns from raw transactional data for the fictional retail company, Electrohub It provides a dynamic dashboard with actionable insights using filters, slicers, and interactive visuals.

## 📁 Files Included

| File | Description |

|------|-------------|

| `Sales Data Analysis.pbix` | Main Power BI dashboard file |

| `raw data.xlsx` | Cleaned raw data source used in the report |

| `sales data analysis requirements.pptx` | Project requirements and KPIs outlined

## ✅ Key Features

### 1. 📦 \*\*Product Performance\*\*

- Top/Bottom 5 products by \*\*Sales\*\*, \*\*Profit\*\*, and \*\*Quantity Sold\*\*

- Helps identify best-selling and underperforming items

### 2. 📈 \*\*Sales Trends Over Time\*\*

- Visuals to analyze trends by \*\*Day\*\*, \*\*Month\*\*, \*\*Quarter\*\*, and \*\*Year\*\*

- Easily spot seasonal patterns or slumps

### 3. 💰 \*\*Sales vs Profit Correlation\*\*

- Scatterplot showing how revenue aligns (or misaligns) with profitability

### 4. 🆚 \*\*Time Period Comparison\*\*

- Compare \*\*Sales\*\*, \*\*Profit\*\*, and \*\*Quantity Sold\*\* between any two user-selected periods

- Useful for analyzing campaign or seasonal impact

### 5. 🎯 \*\*Discount Insights\*\*

- Average discount per discount category

- Understand how discounts influence sales behavior

### 6. 🛒 \*\*Order Summary\*\*

- Total number of orders processed

- Filters by Product, Date, Customer ID, Promotion Category

### 7. 🧮 \*\*Full Metrics Table\*\*

- All metrics (Sales, Profit, Discount, Net Sales, etc.) filterable via visual slicers

## 🎯 Tools Used

- \*\*Power BI Desktop\*\*

- Power Query for data transformation

- DAX (Data Analysis Expressions)

- Excel for initial data structure

## 📌 Project Use Cases

- 📊 Business Intelligence portfolios

- 🏢 PSU/GET interview demonstrations (e.g., HPCL, Tata Power, NTPC)

- 🧑‍💼 Retail analytics simulations

- 💻 Data visualization practice using real-world metrics

## 📸 Dashboard Preview

A screenshot of a graph

Description automatically generatedA close-up of a graph

Description automatically generatedA screenshot of a graph

Description automatically generatedA screenshot of a computer

Description automatically generated

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