# Full Project Summary – Sales & Profit Analysis Dashboard (Power BI)

## **Project Overview**

This project focuses on building an interactive Sales & Profit Analysis Dashboard in Power BI to evaluate business performance and uncover insights from sales data. The dataset included details such as order date, shipping mode, customer segment, region, product category, sales, profit, and returns.

# **Process & Methodology**

#### 1. Data Cleaning & Preparation

- Used Power Query to clean raw data, remove unnecessary columns, handle missing values in returns, and standardize date formats.
- Ensured data consistency for accurate reporting and analysis.

#### 2. Data Modeling & Calculations

- Created DAX measures for KPIs such as total sales, total profit, profit margin, and year-over-year growth.
- Designed calculated columns to improve category-wise and regional comparisons.

#### 3. Dashboard Development

- Built an interactive dashboard with visuals such as bar charts, line charts, maps, and tables.
- Added slicers and filters for region, category, and customer segment to improve interactivity.

## **Key Insights**

- Technology products generated the highest sales, showing consistent demand across regions.
- Furniture sub-categories revealed weaker profitability, suggesting cost optimization opportunities.
- The West region performed strongly, while other regions lagged, indicating scope for regional strategy improvements.
- Customer segmentation analysis highlighted valuable consumer groups contributing to revenue growth.
- Seasonal patterns showed fluctuations in sales and profit, guiding inventory and marketing decisions.

# **Outcomes & Impact**

The dashboard provides actionable insights for businesses to:

- Focus on profitable product categories.
- Improve weak-performing segments.
- Strengthen regional strategies based on performance trends.
- Support data-driven decision-making with clear visual storytelling.

### **Tools & Skills Used**

- Power BI Dashboard creation & visualization
- Power Query Data cleaning & transformation

- DAX Calculated measures & KPIs
- Business Intelligence Translating data into actionable insights

## Conclusion

This project demonstrates how Power BI can transform raw sales data into a strategic decision-making tool. By combining data cleaning, DAX measures, and visualization techniques, the dashboard not only tracks sales and profit performance but also uncovers hidden patterns in customer behavior, categories, and regions. The insights gained can help businesses boost revenue, reduce inefficiencies, and drive smarter decisions.