Advanced Sales Performance Analysis Using Excel & Power BI

1. Introduction

This analysis evaluates sales performance using Excel for data preparation and KPI calculation and Power BI for visualization. The goal is to help business stakeholders understand sales trends, profitability, and product performance for better decision-making.

2. KPI Definitions

Total Sales
Definition: Total revenue generated from product sales.
Purpose: Measures overall business performance.

Total Profit
Definition: Total earnings after deducting costs.
Purpose: Indicates business profitability.

Profit Margin
Definition: Profit Margin = Total Profit / Total Sales
Purpose: Evaluates efficiency and pricing strategy.

Total Quantity Sold
Definition: Total number of units sold.
Purpose: Helps assess demand and inventory planning.

Sales Category
Definition: High: Sales > 5000, Medium: Sales ≤ 5000
Purpose: Enables segmentation of products by sales value.

3. Tools & Techniques Used

1. Excel: Calculated columns, Pivot Tables, Pivot Charts.
2. Power BI: DAX Measures, Interactive dashboard, Time and regional analysis.

4. Key Insights from Analysis

1. Product Y generates high sales volume but low profit margins.
2. Sales show seasonal peaks contributing significantly to annual revenue.
3. Some regions show strong sales but comparatively lower profit.
4. A small percentage of products contribute a large share of total sales (Pareto 80/20).

5. Business Recommendations

1. Review pricing and cost structure to improve margins on key products.
2. Increase inventory and marketing during peak seasonal months.
3. Improve margins in low-profit regions via tailored strategies.
4. Monitor KPIs through Power BI dashboards for continuous improvement.

6. Conclusion

This project demonstrates the effective use of Excel for analytics and Power BI for business intelligence. The insights support data-driven decision making and highlight opportunities for growth and margin improvement.