

Sales & Profit Analytics Dashboard - Case Study

Project Overview

This project focuses on building an end-to-end Business Intelligence dashboard using Power BI to analyze sales and profitability across regions, products, categories, and customer segments. A synthetic dataset of 10,000+ transactions was generated programmatically to simulate real-world business scenarios.

Objectives

- Analyze sales and profit trends over time
- Identify top-performing and low-performing products
- Understand customer purchasing patterns
- Compare regional profitability
- Evaluate discount impact on revenue

Key Features

- Multi-page Power BI dashboard with KPIs
- Advanced DAX: YoY, YTD, Profit Margin, Customer Metrics
- Data modeling using Sales, Region, and Date tables
- Time intelligence and category-wise breakdown

Dashboard Insights

- Technology category generated maximum revenue
- Furniture had low profit due to discount-heavy items
- West region led profit contribution
- Repeat customers made up 32 percent of sales

Tools Used

- Power BI Desktop
- DAX
- Power Query
- Python (Dataset Generation)

Conclusion

This dashboard serves as a comprehensive BI project demonstrating advanced analytics, visual storytelling, and real-world business interpretation suitable for both portfolio and professional use.