

E-Commerce Sales Analytics Dashboard (Power BI)

Project Overview

This project presents an end-to-end E-commerce Sales Analytics Dashboard built using Power BI. The dashboard analyzes sales performance, customer behavior, and product trends to generate actionable business insights for decision-making. The project demonstrates real-world analytics skills including KPI design, customer segmentation, product performance analysis, and interactive dashboarding.

Dataset

Amazon-style E-commerce Sales Dataset (CSV) containing order-level transaction data including order details, customer information, product categories, sales, quantity, revenue metrics, and date and location attributes.

Tools & Technologies

- Power BI Desktop
- DAX (Data Analysis Expressions)
- Excel / CSV Data Source

Key KPIs

- Total Sales
- Total Orders
- Average Order Value (AOV)
- Total Customers
- Product Quantity Sold

Dashboard Pages

- 1. Sales Overview:** Monthly revenue trends, sales by category and location, interactive slicers, and high-level performance monitoring.
- 2. Customer Segmentation:** RFM-based customer segmentation, revenue contribution analysis, and identification of high-value and at-risk customers.
- 3. Product Performance:** Top products by revenue, quantity vs revenue analysis, category-wise performance, and slow-moving product identification.

Business Insights

- Revenue is concentrated among a smaller segment of high-value customers (Pareto effect).
- Sales performance varies across categories, locations, and time periods.
- High sales volume does not always translate into high revenue, highlighting margin differences.
- Slow-moving products present inventory and pricing optimization opportunities.

Outcome

The dashboard enables stakeholders to monitor sales health, identify profitable customers and products, optimize inventory and marketing strategies, and make data-driven business decisions.

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