DMart Sales & Operational Intelligence Dashboard

Objective

Leverage Power BI to analyze DMart's historical transaction data and derive actionable business insights regarding sales, customer behavior, pricing patterns, and operational performance

Problem Statement

D-Mart, a leading retail chain, wants to upgrade its decision-making with data-driven insights. The goal is to:

- Analyze customer purchase patterns.
- Understand sales trends and product performance.
- Explore operational metrics such as shipping and payment status.
- Build a Power BI dashboard to drive strategic business decisions.

Dataset Overview

Click here for the dataset

The dataset comprises 25,000+ retail transactions with the following attributes:

- Customer Demographics: Age, Gender
- Product Info: Category, Brand Type, Pricing
- Sales Timeline: Order Date, Delivery Date
- Marketing: Clicks, Time on Website

• Operational Data: Payment Mode, Order Status, Shipping Mode

Key Business Questions

Sales & Revenue Trends

- 1. How do monthly and yearly sales figures compare?
- 2. What is the contribution of product types (Branded, Local, Imported) to total revenue?

Customer Demographics & Behavior

- 1. What is the distribution of customers by age and gender?
- 2. How does time on the website or number of clicks affect purchase behavior?

Product & Pricing Insights

- 1. Which products generate the most revenue or get the highest discounts?
- 2. Are discounted products leading to better ratings and repeat purchases?

Operational Performance

- 1. What shipping modes are most common? How efficient are they?
- 2. What's the order cancellation rate and probable causes?

Payment and Order Status

- 1. What's the breakdown of payment modes (COD, Online)?
- 2. Are certain product types more likely to result in pending or cancelled orders?

Suggested Visualizations

- 1. Sales Trend Charts Monthly & Yearly Line Charts
- 2. Customer Demographics Donut Charts or Bar Graphs
- 3. **Product Category Heatmaps** Sales vs Discount
- 4. **Geographical Maps** State-wise Sales Distribution
- 5. Funnel Charts Ad Engagement to Purchase
- 6. KPI Cards Revenue, Orders, AOV, Cancellations

Project Guidelines

Power BI Techniques

- Use DAX for calculated columns and measures.
- Create reusable calculated fields for aggregations.

Dashboard Structure

- Combine multiple charts to form a cohesive dashboard.
- Ensure interactive filters (slicers) for regions, dates, and categories.

Presentation

Present a short report or video summarizing:

- Key findings
- Graph insights
- Data-backed business suggestions