Sales Dashboard Project

Problem Statement

The company had a large sales dataset with details like transactions, brands, units sold, payment methods, customer demographics, and ratings. But in its raw form, the data was not easy to analyze or interpret.

The goal of this project was to take the raw sales data, clean and transform it, and then build an interactive Power BI dashboard that could answer important business questions such as:

- Which brands and models are selling the most?
- What age groups are buying more smartphones?
- Which payment methods are most commonly used?
- How do customer ratings reflect overall satisfaction?

What I Did

1. Extracted the raw data from Excel.
2. Cleaned and transformed the data in Power Query (handled data types, normalized categories like ratings, removed inconsistencies).
3. Loaded the cleaned data into Power BI.
4. Designed an interactive dashboard with filters, KPIs, and visuals to help understand the sales performance.

Key Insights from the Dashboard

- **Brand Performance**: Apple generated the highest revenue per unit but had fewer overall transactions compared to mid-range brands like Samsung, Vivo, and Oppo. These mid-range brands had strong sales volumes, especially among younger customers.
- **Customer Age Groups**: The 20–35 age group turned out to be the biggest buyers. Young customers (18–25) preferred **cash and UPI**, while older customers leaned more towards **credit cards**.
- **Payment Methods**: UPI and Cash were the most popular modes of payment, but credit cards were linked to higher ticket-size purchases.
- **City-wise Sales**: Delhi and Mumbai contributed the most to total sales, while smaller cities had fewer transactions but showed growth potential.
- **Customer Ratings**: Most customers gave positive feedback (4–5 stars). Lower ratings were mostly linked to budget smartphones, hinting at performance issues or unmet expectations.

Challenges & Issues

- Some fields like rating status (“Good”, “Average”) were inconsistent and needed cleaning.
- The dataset only had monthly/quarterly data, so we couldn’t explore very fine-grained trends like daily or weekly patterns.
- Customer names were included in the dataset, which can raise privacy concerns if not anonymized.

What I Learned

- How to manage the complete ETL (Extract, Transform, Load) process end-to-end.
- Hands-on experience in data cleaning, especially handling missing or inconsistent values.
- Building KPIs and interactive dashboards in Power BI using slicers, filters, and relationships between tables.
- The importance of interpreting data beyond visuals – actually telling a story with insights,

  How raw data, when cleaned and visualized, can turn into meaningful business decisions.