

Coffee Sales Dashboard

Project Overview

The Coffee Sales Dashboard is a Power BI–based data visualization project designed to analyze sales data from a coffee shop. The primary objective is to uncover performance patterns, customer preferences, and key business trends. The dashboard transforms raw sales data into actionable insights through interactive visuals, enabling data-driven decisions to enhance operational efficiency and profitability.

Tools and Technologies

- Microsoft Power BI – for visualization and dashboard creation
- Microsoft Excel – for data cleaning and preprocessing

Key Responsibilities

- Performed data cleaning and transformation to ensure accuracy, consistency, and completeness.
- Created calculated columns for time-based analysis, including hour, weekday, and month trends.
- Designed an interactive dashboard with slicers, filters, and dynamic visuals.
- Developed performance metrics such as total sales, product demand, and payment distribution.
- Applied professional design principles for better readability and data storytelling.

Workflow Steps

1. Data Loading: Imported the raw CSV dataset into Power BI.
2. Data Cleaning: Removed duplicates, handled null values, and standardized field names.
3. Data Transformation: Created calculated columns for Time of Day, Month Sort, and Weekday Sort.
4. Data Modeling: Ensured correct data types (Date, Text, Numeric) and established relationships.
5. Visualization: Built bar charts, line charts, and donut charts to represent key metrics.
6. Formatting: Added slicers, filters, and titles for a user-friendly experience.
7. Dashboard Design: Organized visuals neatly with KPIs, charts, and descriptive labels.
8. Insight Generation: Interpreted patterns and highlighted actionable business insights.

Key Insights

- Peak Sales Hours: Morning hours and weekends record the highest sales volumes.
- Top Products: Latte and Cappuccino emerge as the most popular beverages.
- Payment Trends: Card and digital payments dominate overall transactions.
- Seasonal Patterns: Monthly sales show noticeable variation influenced by seasonal trends.

Conclusion

This project enhanced my expertise in data cleaning, visualization, and analytical storytelling using Power BI. It demonstrates the ability to transform raw data into valuable business intelligence through well-designed dashboards and clear insight communication.