

2. Project Goal (Refined)

The project aimed to analyze café sales data to uncover actionable insights that improve revenue, efficiency, and customer experience. Specifically, it focused on:

- Identifying top-selling items and their contribution to revenue.**
- Detecting sales patterns across days, weeks, and months to guide promotions and seasonal planning.**
- Understanding peak hours to optimize staffing and operations.**
- Exploring location performance differences for targeted decision-making.**

The ultimate goal was not just to clean and visualize data, but to generate insights that directly inform pricing strategy, inventory planning, and marketing efforts.

7. Deliverables (Refined)

At the end of the project, the following deliverables were produced:

- 1. Cleaned, Analysis-Ready Dataset**
 - Corrected missing values, standardized formats, normalized categories.**
 - Computed reliable revenue metrics (total_spent).**
- 2. Exploratory Data Visualizations**
 - Revenue trends over time (monthly/weekly).**

- **Top items and categories by revenue share.**
- **Heatmaps of demand by weekday/hour.**
- **Correlation analysis of sales drivers.**

3. Business Insights Report

- **Summarized key findings into clear, actionable recommendations.**
- **Linked data patterns (e.g., peak hours, seasonality) to business actions like promotions, staffing, and stock management.**

4. Structured Project Documentation (this report)

- **Provides a transparent project trail from raw data to insights.**
- **Designed for stakeholders and hiring managers to evaluate problem-solving, technical, and analytical skills.**