

Balaji Fast Food Sales Analysis

Presented By:
Sheba Elisabeth Zacharia





Project Objective

The purpose of this project is to analyze the sales data of Balaji Fast Food in order to gain insights into sales trends, customer behavior, popular items, and profit drivers. The goal is to help the restaurant improve business decisions and increase profitability.

Problem Statement

Balaji Fast Food lacks clear insights into which items are selling best, when peak sales occur, and how customers prefer to pay. This makes it difficult to optimize inventory, staff allocation, and marketing efforts.

Tools & Technologies Used

- Python (libraries: pandas, matplotlib, seaborn)



Data Source

The dataset contains sales records for Balaji Fast Food, with columns including:

- Order ID
- Date of Transaction
- Item Type (Aalopuri, Vadapav, Sugarcane Juice, Frankie, Sandwich, Panipuri, Cold Coffee)
- Quantity Sold
- Payment Mode (Cash/Card/Online)
- Sales Amount
- Profit

Data Cleaning & Preprocessing

- Removed null or inconsistent values
- Corrected data types (e.g., date columns to datetime format)
- Handled outliers in profit and sales amount columns
- Ensured consistency in item type and payment mode values

Data Analysis Process

- Analyzed total and daily sales trends to detect peak business periods
- Identified top 10 selling items by quantity and profit
- Analyzed profit distribution by item type
- Examined customer payment preferences
- Studied correlation between sales amount and profit



Visualization

- Line chart showing daily sales trend
- Bar chart comparing item-wise total sales and profit
- Pie chart showing payment mode distribution
- Boxplot to analyze profit distribution across item types



Key Insights & Findings

- Sales peak on weekends and public holidays
- Aalopuri and Vadapav are the top-selling items contributing to 50% of total sales
- Most customers prefer digital payments (Card and Online) over Cash
- Profit per item varies significantly; some items like Cold Coffee have higher profit margins
- There are occasional extreme outliers in profit that need further investigation

Conclusion & Recommendations

- Focus marketing efforts and stock preparation on weekends and holidays
- Promote popular items more, while reviewing less profitable items
- Encourage customers to use digital payments to streamline operations
- Investigate items with high-profit outliers for consistency or possible errors
- Future work: Implement a real-time dashboard to monitor sales trends live



Thank You