

Coffee Shop Analysis

This project analyzes coffee shop sales data sourced from Kaggle with the objective of uncovering performance trends across products, time periods, and customer purchasing behavior. The workflow involved data preparation, building interactive dashboards in Excel using pivot tables, and conducting a structured analysis to highlight key insights.

The dataset included transactional details such as product names, sales by time of day, weekdays, and months. After cleaning and organizing the raw data, I created a dashboard to consolidate the information into a clear and interactive format. The dashboard provides multiple perspectives on sales performance, making it easy to identify patterns and areas of interest.

From a product perspective, the analysis showed that Latte generated the highest sales, followed by Americano with Milk and Cappuccino. Espresso and Cortado were among the lowest-selling items. These findings suggest that specialty and milk-based drinks drive the bulk of revenue, while simpler options contribute less.

Time based analysis revealed strong sales across morning, afternoon, and night, with mornings contributing slightly less than later hours. When viewed by weekday, sales peaked on Monday and Tuesday before leveling off midweek. Weekends showed modest declines, pointing to higher weekday demand.

Looking at sales by month, March and October stood out as the strongest performers, while January and April were notably lower. This seasonal pattern indicates potential opportunities for promotions during slower months to balance revenue flow. Hourly sales patterns showed predictable peaks between 9 AM and 11 AM, as well as late afternoon surges around 4 PM to 6 PM, aligning with coffee breaks and end-of-work routines.

The project demonstrates the value of combining data cleaning, pivot tables, and visualization techniques in Excel to build actionable insights. Beyond identifying top selling products and peak times, the dashboard provides a foundation for operational decisions, such as staffing adjustments, inventory planning, and targeted promotions. By translating raw transactional data into an accessible visual format, the analysis highlights how structured data exploration can inform strategy in a real-world retail context.