

# Coffee Shop Sales Analysis

## Objective:

The main objective of this project is to extract actionable insights that will enhance the performance of the Coffee Shop

## Analysis:

### How do sales vary by day of the week and hour of the day?

- The analysis of sales data reveals that sales tend to be higher during the morning hours, specifically between 8 AM and 10 AM, when more products are sold compared to other times of the day. Additionally, weekdays show a trend where Mondays generate the highest sales for the coffee shop. This insight can help optimize staffing, inventory, and promotions to align with peak sales periods.

### What is the total sales revenue for each month?

- The sales revenue for each month is calculated by summing up the total bill amounts for all transactions made during that specific month. The total sales revenue for January is **\$81,677.74**.
- In February, the sales revenue is **\$76,145.19**, which is slightly lower than January's sales, suggesting either fewer customers or lower sales per transaction during this month.
- March saw an increase in sales, reaching **\$98,834.68**. This could reflect a rise in customer traffic, higher sales volume, or promotions that boosted sales.
- The sales revenue in April grew significantly to **\$118,941.08**. This may indicate seasonal factors, such as an increase in demand, special events, or effective marketing strategies.
- May experienced a further increase, with a total of **\$156,727.76** in sales. This suggests a strong sales performance, possibly due to events like holidays, favorable weather, or successful promotions.

### How do sales vary across different store locations?

- The analysis of sales across different store locations reveals the following:
- **Hell's Kitchen** generated the highest revenue, with **\$236,511.17** from **50,735 transactions**.
- **Astoria** followed closely, with **\$232,243.91** in revenue from **50,599 transactions**.
- **Lower Manhattan** had the lowest revenue, totaling **\$230,057.25** from **47,782 transactions**.
- Overall, the combined total revenue from all three locations is **\$698,812.33**, generated from **149,116 transactions**. Hell's Kitchen outperformed the other locations in terms of revenue, while Lower Manhattan contributed the least. These insights can help in optimizing operations, marketing, and resource allocation across the different locations.

### What is the average price/order per person?

- The average price per order and per person is as follows:
- The **average bill per person** is **\$4.69**, indicating that, on average, each customer spends \$4.69 during their visit.
- The **average number of orders per person** is **1.44**, meaning that, on average, each customer places just over one order during their visit.
- These figures provide a clear picture of customer spending behavior, helping to inform pricing strategies and customer engagement initiatives for the coffee shop.

### How do sales vary by product category and type?

- The analysis of sales by product category and type shows the following:
- **Sales by Product Category:**
- **Coffee** is the top-performing category with a total sales of **\$269,952.45**.
- **Bakery** follows with **\$82,315.64** in sales.
- **Drinking Chocolate** contributes **\$72,416.00** in revenue.
- **Coffee Beans** generates **\$40,085.25**.
- **Branded** products account for **\$13,607.00** in sales.
- **Flavours** contribute **\$8,408.80**.

- **Sales by Product Type:**
- **Barista Espresso** is the leading product type, generating **\$91,406.20** in sales.
- **Brewed Chai Tea** brings in **\$77,081.95** in revenue.
- **Hot Chocolate** has a sales total of **\$72,416.00**.
- **Gourmet Brewed Coffee** contributes **\$70,034.60**.
- **Brewed Black Tea** generates **\$47,932.00** in sales.
- **Loose Tea** brings in **\$11,213.60**.
- **Packaged Chocolate** accounts for **\$4,407.64**.
- **Tea** (a general category) totals **\$196,405.95** in sales.
- **Grand Total:**
- The overall sales revenue for all product categories and types is **\$698,812.33**.
- **Summary:**
- **Coffee** (both as a category and product type) generates the highest revenue, followed by **Bakery** and **Drinking Chocolate**.
- The most popular product types are **Barista Espresso** and **Brewed Chai Tea**, with **Hot Chocolate** also showing strong performance.
- Categories such as **Branded** and **Flavours** have comparatively lower sales.
- These insights offer a clear view of which product categories and types are performing best, helping the business focus on the most profitable offerings while optimizing inventory and marketing strategies.