



The main objective of this project is to analyze retail sales data to gain actionable insights that will enhance the performance of coffee sales



#### **Raw Data:**

- Click here to access the dataset.
- This dataset contains detailed records of coffee sales from a vending machine.
- The vending machine is the work of a dataset author who is committed to providing an open dataset to the community.
- It is intended to analyze purchasing patterns, sales trends, and customer preferences related to coffee products.

#### **Data Collection Period:**

• The dataset spans from March 2024 to the Present time, capturing daily transaction data. And new information continues to be added.



## **Data Manipulation and ETL:**

- Converted text format to datetime format and currency format.
- Cleaning data to remove duplicates, missing values, and outliers for accurate analysis.

#### Tasks:

- Time Series Exploratory Data Analysis
- Next day/week/month sales
- Specific customer purchases

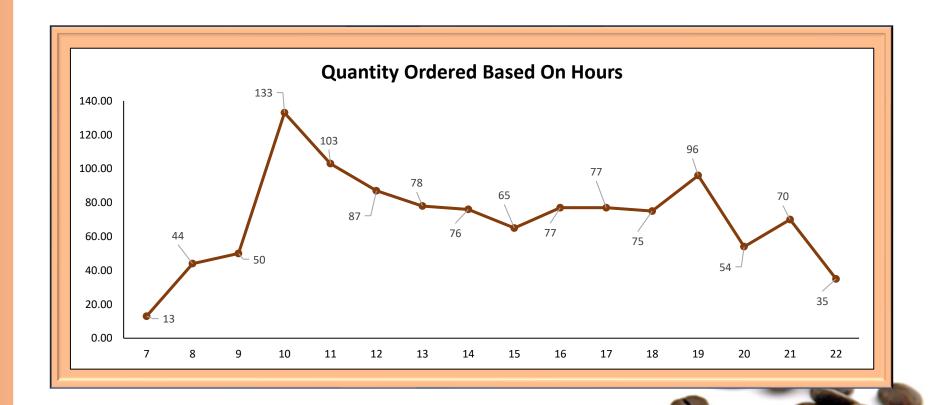
### **Technologies used:**

MS Excel



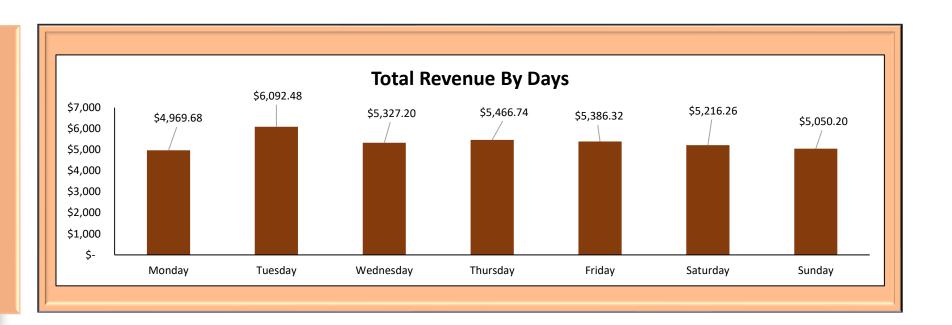
## **Quantity Ordered Based On Hours**

| Row Labels  | Count of Quantity Ordered |
|-------------|---------------------------|
| 7           | 13.00                     |
| 8           | 44.00                     |
| 9           | 50.00                     |
| 10          | 133.00                    |
| 11          | 103.00                    |
| 12          | 87.00                     |
| 13          | 78.00                     |
| 14          | 76.00                     |
| 15          | 65.00                     |
| 16          | 77.00                     |
| 17          | 77.00                     |
| 18          | 75.00                     |
| 19          | 96.00                     |
| 20          | 54.00                     |
| 21          | 70.00                     |
| 22          | 35.00                     |
| Grand Total | 1133.00                   |



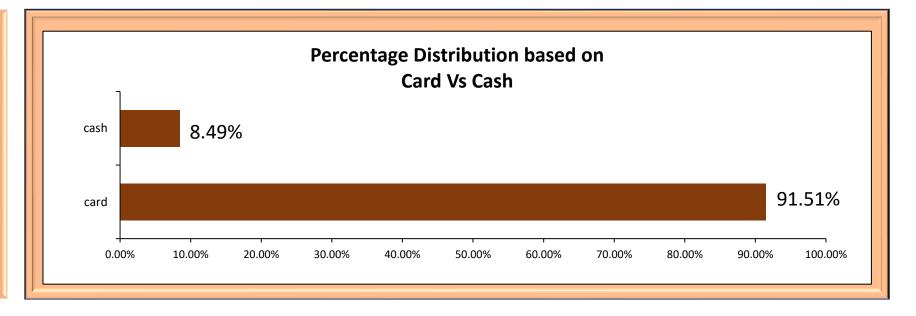
#### **Total Revenue By Days**

| Row Labels         | Sui | m of Total Bill |
|--------------------|-----|-----------------|
| Monday             | \$  | 4,969.68        |
| Tuesday            | \$  | 6,092.48        |
| Wednesday          | \$  | 5,327.20        |
| Thursday           | \$  | 5,466.74        |
| Friday             | \$  | 5,386.32        |
| Saturday           | \$  | 5,216.26        |
| Sunday             | \$  | 5,050.20        |
| <b>Grand Total</b> | \$  | 37,508.88       |



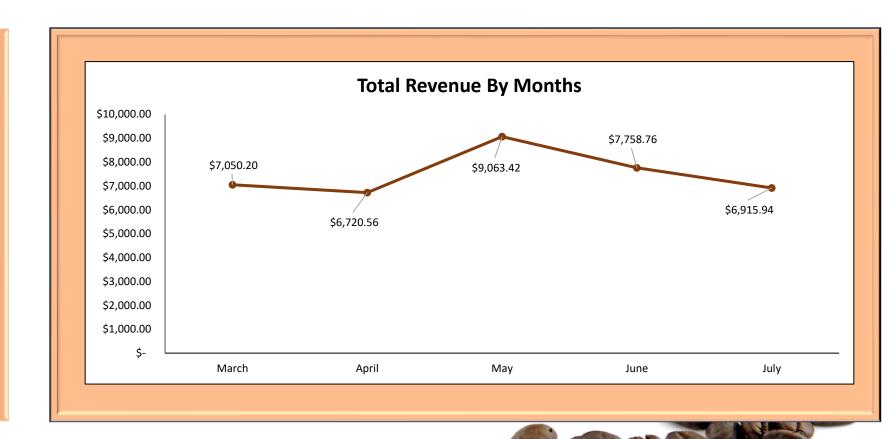
# Percentage Distribution based on Card Vs Cash

| Row Labels | Percentage of money |
|------------|---------------------|
| card       | 91.51%              |
| cash       | 8.49%               |



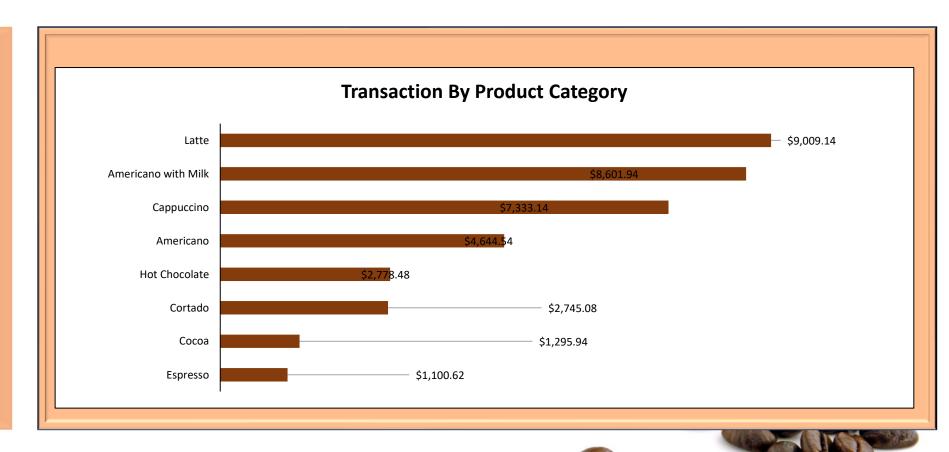
# **Total Revenue By Months**

| Row Labels  | Sun | Sum of Total Bill |  |  |
|-------------|-----|-------------------|--|--|
|             |     |                   |  |  |
| March       | \$  | 7,050.20          |  |  |
|             |     |                   |  |  |
| April       | \$  | 6,720.56          |  |  |
|             |     |                   |  |  |
| May         | \$  | 9,063.42          |  |  |
|             |     |                   |  |  |
| June        | \$  | 7,758.76          |  |  |
|             |     |                   |  |  |
| July        | \$  | 6,915.94          |  |  |
| <u>,</u>    |     |                   |  |  |
| Grand Total | \$  | 37,508.88         |  |  |



## **Transaction By Product Category**

| Row Labels     | Sum of Total Bill |           |
|----------------|-------------------|-----------|
| Americano      | \$                | 4,644.54  |
|                |                   |           |
| Americano with |                   | 0.004.04  |
| Milk           | \$                | 8,601.94  |
| Cappuccino     | \$                | 7,333.14  |
| Cocoa          | \$                | 1,295.94  |
| Cortado        | \$                | 2,745.08  |
| Espresso       | \$                | 1,100.62  |
| Hot Chocolate  | \$                | 2,778.48  |
| Latte          | \$                | 9,009.14  |
| Grand Total    | \$                | 37,508.88 |



## **Coffee Sales 2024 Dashboard**

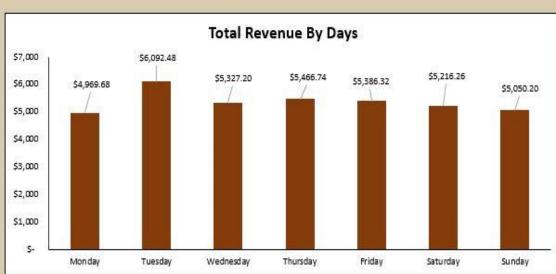
\$37,508.88 Revenue

1133
Total Transaction

\$33.11

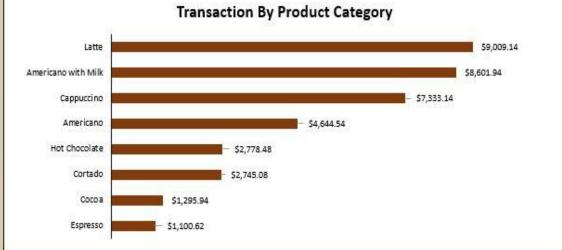
Avg Bill / Person

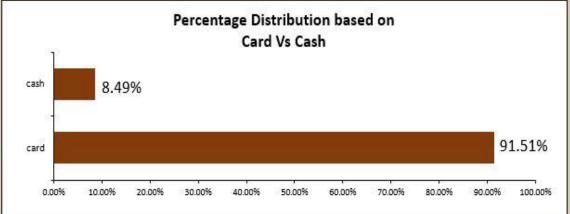












# **Sample Insights:**

- 1. The peak period, when the largest sales are reported, is between 10 am and 12 pm.
- 2. The month of May records the biggest sales i.e., \$9063.42.
- 3. The top five products are Latte, Americano with Milk, Cappuccino, Americano, and Hot chocolate.
- 4. Average Bill Per Person is \$33.11

