Revised: 12/20/2023



#### Introduction:

XYZ Latte is a local coffee Shop based in New York. They have three different locations: Astoria, Hell's Kitchen, and Lower Manhattan. To have a better understanding of the purchasing behavior and identification of trends, the sales transactions from all three locations were collected, cleaned, and transformed. The goal was to generate key business insights for business operations using data visualizations.

Data Source: Maven Analytics

Link: https://mavenanalytics.io/data-playground?pageSize=10

## **Skills Used:**

# 1. Data cleaning and preparation using EXCEL.

- Studied the data for duplication, Missing values, errors, and outliers, if any.
- Studied all the fields of the data set, noted the variable types, and tried to identify relations between fields, if any.
- Added new calculated columns in the raw data set. For example, Revenue was generated by
  multiplying the 'units sold' field with the 'unit price' field. Similarly, date and time-based functions
  were used to extract months, days, and hours.

• Use of **text** function to convert numerical data type to text.

### 2. Data Exploration using Excel Pivot tables.

 Added pivot tables to summarize major data values in a compact tabular format. For instance, summarized revenue by months, identified the top 10 selling products, determined the peak hours and days for sales, etc.

### 3. Data Visualization

- Used charts like Column charts, Bar charts, Line charts, and dual-axis charts.
- Implemented slicers to enhance dashboard interactivity.

#### **Summary:**

Key takeaways for January to June 2023:

- There has been a growth in terms of revenue. June emerged as the most profitable month with a revenue of \$166,486 and 35352 orders.
- Coffee stands out as the most popular product category with 58416 orders, packaged chocolate is the least sold product category with only 487 orders.
- Across all the three locations, 10 am morning is the busiest hour of the business with an
  average of 6128 orders. However, 7 pm to 8 pm is the least busy time, especially in Hell's and
  Lower Manhattan locations.
- The most ordered product type is Brewed Chai tea, but it ranks in the third position in terms of revenue. The maximum revenue generated is \$91,406, by the third most ordered product type 'Barista Espresso'.