**About the data -**

My topic comes under business category – The downloaded dataset is from Kaggle, the data is about Coffee Shop

Source - <https://www.kaggle.com/datasets/viramatv/coffee-shop-data>

There are 8 tables in the data set, such as Orders, Items, Recipes, Ingredients, Inventory, Staff, Shift, Rota

The downloaded data is in xlsx format, and I have imported the excel file into Power-Bi using import option

Before performing data analysis, I have worked on data discrepancies, creating new attributes, measures, transformations that are necessary to obtain clear insights from the data.

**Total Orders, Total Items, Total Sales, Average Order Value – Used Table**

Counted all customer orders to gauge business activity there are overall 414 orders, Summarized the variety and number of items sold is 498 items, the total revenue generated is $2,034, and the average revenue per order is $4.91

A screenshot of a table

Description automatically generated

**Quantity by Category, Sales by Category – Used Pie Chart & Clustered Column chart**

Summarized the item\_category by quantity, there are overall 278 - Hot Drinks, 154 – Cold Drinks and 66 – Snacks sold.

Analyzed revenue generation by item category, Hot Drinks generated $1,085, Cold Drinks generated $582, Snacks generated $366

A screenshot of a graph

Description automatically generated

**Top Selling Items – Used clustered column chart**

Identified the most popular items by Item names and Sum of quantity sold, summarized the total number of items is 24.

A graph of blue bars with white text

Description automatically generated

**Orders by Day & Time, Sales by Day & Time – Used Matrix and created heat map by adding background color**

Examined the sum of orders throughout the day, Analyzed hourly and daily revenue trends. Highest No of orders and Highest revenue generated are recorded on Monday between 7:30 AM to 9:00 AM and 12:00 PM to 1:30 PM.

A screenshot of a calendar

Description automatically generated

**Orders In or Out – Used Line chart**

Differentiated between dine-in and takeout orders day wise. On Monday there are the highest takeout and least dine-in orders, where as on Saturday there are highest dine-in orders recorded.

A graph with numbers and a line

Description automatically generated

**Total Quantity by Ingredient, Total Cost of Ingredients – Used Line and clustered column chart**

Calculate the total usage of each ingredient, Estimated the overall cost of ingredients used. The most used Ingredient is Whole milk, sold nearly 50,000 ml and the overall cost of it is $60

A graph with blue and white bars

Description automatically generated with medium confidence

Determined ing\_per\_unit\_price, calculated Sum of Total\_quantity and Sum of Total\_Recipe\_cost

**A screenshot of a computer

Description automatically generated**

**Cost of each Item by varied Item size – Used Clustered Column Chart**

Determined the cost to produce each item varied by size. Sandwich is the costliest, among item size large and small Hot Chocolate is the costliest.

A graph of different colored bars

Description automatically generated with medium confidence

**Percentage Stock Remaining by Ingredients, List of Ingredients to Re-order –** **Used Line and Clustered column Chart**

Assessed stock levels as a percentage of total capacity. Identified that except Ingredients Panini Bread and Lemons, rest of the ingredients inventory stock is below 0.6% needing replenishment based on inventory levels.

A screen shot of a graph

Description automatically generated

**Hours Worked by Staff Member, Total Hours Worked –** **Used Donut Chart**

Calculated the total hours worked by individual employees, summarized the hours staff worked.

A screenshot of a computer screen

Description automatically generated

**Cost per Staff Member, Total Staff Cost –** **Used Waterfall chart**

Analyzed salary expenses per employee and calculated the total cost on staff salaries

A screenshot of a graph

Description automatically generated

**Sum of Revenue & Costs – Used Pie Chart**

Visualizing the proportions of revenue generated by sales and Individual costs. Among costs, total wage costs has the highest portion and overall revenue holds the highest portion.

A pie chart with different colored circles

Description automatically generated

**Calculated Revenue, Cost and Profit – Used Pie Chart**

Profit = Revenue – Cost, when calculated I have understood that the coffee shop has made a profit of $764.21 from Feb – 12, Monday to Feb – 17, Saturday.

A pie chart with numbers and a few words

Description automatically generated

**Calculated profit per item – Used Clustered Column Chart**

From the below visualizations we can understand that the highest contributor items are different types of coffee a tea. This was achievable by less recipe cost, lower price of the item cost and more number of sales.

A graph of different colored bars

Description automatically generated with medium confidence