



Google Data Analytics Capstone Project









# **Table of contents**



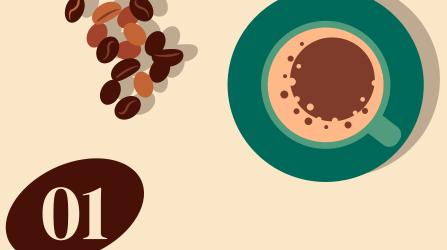
**O2 About the Company** 

03 About Dataset









# **About The Project**

Brew Haven Data Dive









# **Project Background**

- Brew Heaven\*\* is a thriving coffee shop, with the potential for significant growth in the upcoming years.
- I have recently joined the company's analytics teams as an assistant analyst
- My responsible is to examine collected data, looking for valuable insights.
- These insights will be used by the company for their **strategy and planning ahead**.



<sup>\*\*</sup>Brew Heaven is a fictional company

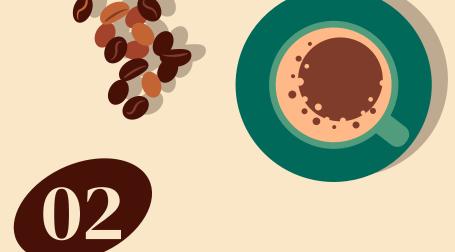
How would you rate the performance of Brew Heaven in April? How can the company use its ability to improve customer satisfaction, and strategies to stay competitive in the coffee industry?

**—Problem Statement** 









# **About The Company**

Brew Haven Data Dive









# **Our company**

Brew Haven was started in 2001 by Mandy Rich, a coffee lover, who turned her passion for coffee to her dream job. Started with its first shop at a cozy corner of a vibrant neighborhood in New York, where it slowly became popular for artisanal beverages and relaxed ambiance, and expended their presence. As a founder, Mandy wanted to have an ambition to bring together quality coffee, a warm atmosphere, and a sense of community.

## **In-service Stores**



In the neighborhood of Hell's Kitchen



32-20 Broadway

In the neighborhood of Astoria



100 Church Street

It is close to Lower
Manhattan



\*\*Assuming rest of the stores are under construction as there is no data for them





# **Product Groups**



### **Beverages**

Main source of business products like coffee, tea etc.

### **Food**

Bakery products like pastry, croissants etc.

#### **Add-ons**

These are different flavor syrups they offer like Vanilla etc.

# Whole

**Bean/Teas** 

Selling different beans, herbal tea etc.

#### Merchandise

Recently started group to promote their products using t-shirts, cups etc.





# **Our Customer Groups**

GenZ

Customers with age less than 25 years

Older Millennials

Customers within age of 25-39.

GenX

Customers within age of 40-54.

Baby Boomers

Customer with age greater than 54.





# 03

# About

# **Dataset**

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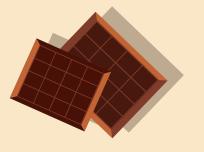


# About Coffee Shop Data

The data is a sample dataset in IBM Cog nos Analytics. It is publicly available on Kaggle\*\*. The data shows similarity to our company data. It contains information about the sales of each product, the outlets, types of product offered by the coffee house. The dataset contains 9 tables, which are 2019 sales data, staff, stores, sales target, customers, dates, generation, products, and pastry inventory.



<sup>\*\*</sup>Source: Coffee Shop Sample Dataset



# **Case Study Phases**







Questions and research that will guide the company analysis



# Prepare & Process

Look for data that is suitable for analysis. Then clean the data for missing values, format etc.

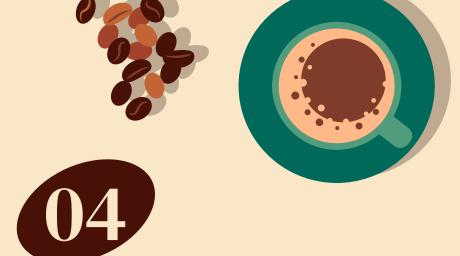
# Analysis & Visualization

Analyze the data using SQL. Then visualize the findings using Tableau

## Conclusion

Wrap the whole analysis with findings, insights and suggestions





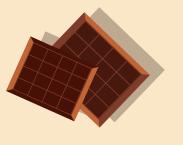
# Findings & Insights

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# **Total Sales in April**

\$233,635

April total sales

34%

647 9th

Avenue

Neighborhood of Hell's Kitchen, NY 33%

32-20

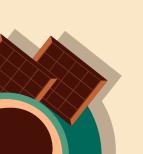
**Broadway** 

Neighborhood of Astoria, Long Island City 33%

100 Church

**Street** 

Close to Lower Manhattan, NY







## **Cafe Stores around New York**



#### 100 Church Street

Total order received was 15,994 and customer visits were 946. It accounted to total sales of \$76,894.

## 32-20 Broadway

Total order received was 16,829 and customer visits were 801. It accounted to total sales of \$77,213.

#### 647 9th Avenue

Total order received was 17,071 and customer visits were 503. It accounted to total sales of \$79,528.

#### **Analysing Sales and Customer Visits at Each Stores**

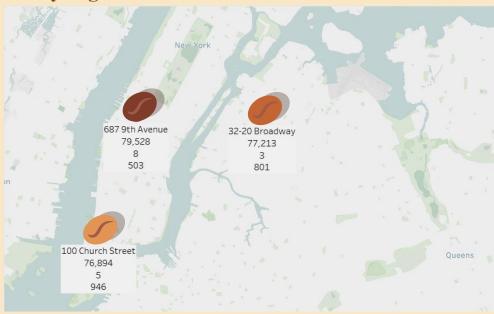
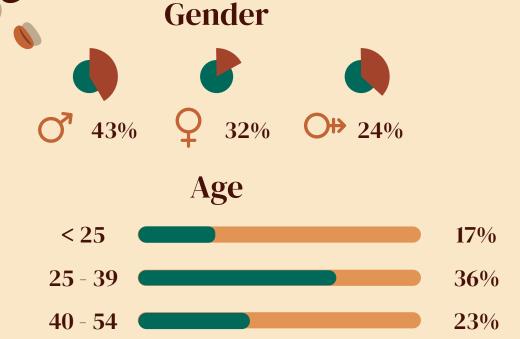


Figure 1: Analysis of store sales, orders and customers

## **Our Customers**

24%



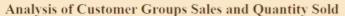
**55**+

- Females has the highest customer visits.
- Age group between 25-39 that is called as 'Older Millennials' customers has the highest customer visits of all.
- The stores falls in corporate location that accounts for company's highest footfall coming from working age group (professionals etc.).



## **Our Customers**





#### Analysis of Customer Groups with respect to their Visits in April 2019

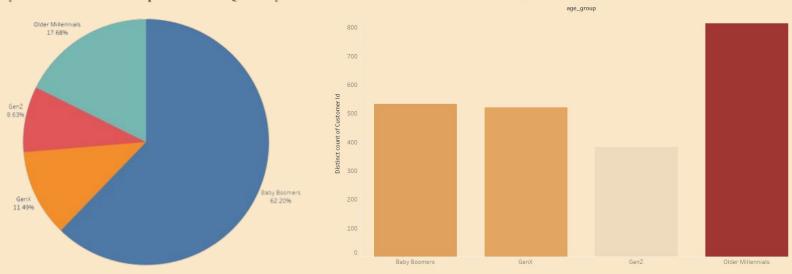


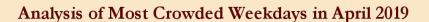
Figure 2: Most products sold group

Figure 3: Most visiting group

'Baby Boomers' turned out to be the group to whom around 62% of total quantity was sold. Whereas in case of customer visits 'Older Millennials' takes the lead accounting to around 36% of total customer visits.







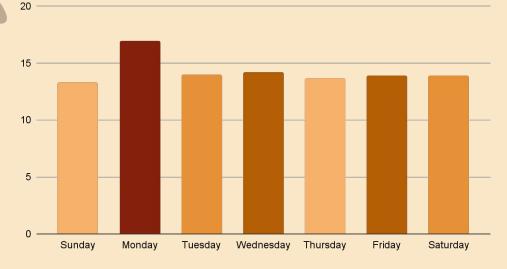


Figure 4: Preferred weekdays of April 2019

- Monday was the most crowded day of the week
- Around 17% of total customer visits in April happened on Monday.
- It is the most preferred day of visits for all the customer groups, the highest sales day for the company.
- Monday is the first day after a long weekend. Who doesn't want to start their week with a cup of coffee!!





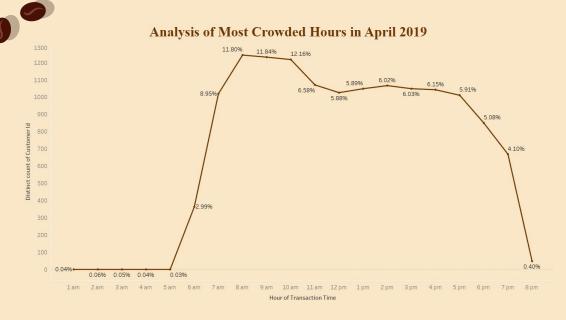


Figure 5: Most crowded hrs in the April

- 8-9am is the most crowded hour of the day.
- Around 11-12% of total customer visits happened during the morning hours of the day.
- It is the most preferred day of visits for all the customer groups, the highest sales hours for the company.
- As the stores are in residential and corporate locality, it's a common stop for early risers, walkers, professional heading to office etc.



# **Top Product Sales**



#### **Analysing Top 10 Products Sold**

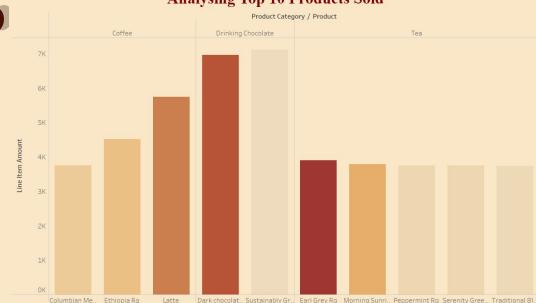


Figure 6: Top 10 most sold products

### Earl Grey Rg

This is the most popular product from Tea category. Preferred choice of 'Baby Boomers' 20% of times.

#### Dark

### **Chocolate Lg**

This is the most popular product from Drinking Chocolate category. Preferred choice of 'GenX' 21% of times. Though its sales is 0.3% less than SGO\*\*.

#### Latte

This is the most popular product from Coffee category. Preferred choice of 'Older Millennials' preferred choice 20% of times. 12%

**15%** 

8%

<sup>\*\*</sup>Sustainably grown organic that more sales, but less quantity sold than Dark Chocolate. The bars colors are based on total quantity sold per product.





#### **Analysing %age Product Sales and Quantity Sold**

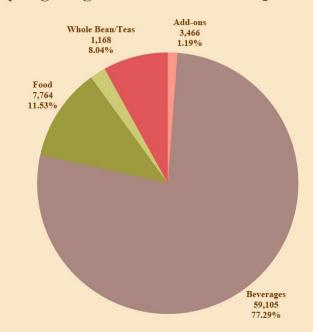


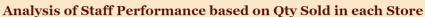
Figure 7: Product sales and quantity sold

- Around 77% of total sales came from Beverages product category.
- We sold **59,105** beverages in April, that is around 82% of total quantity of product sold.
- Main business comes from beverages, so the company has to focus on enhancing the experience of that category continuously.
- Merchandise is one with the lowest sales and quantity sold product.



## **Our Staffs**





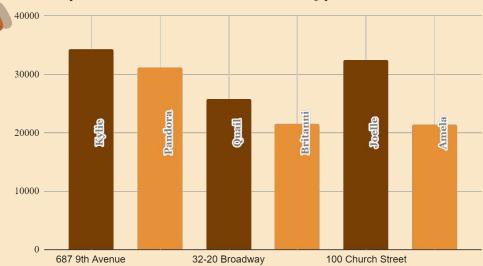


Figure 8: Staff Performance

- At 9th Avenue store, Kylie and Pandora were the star performer, selling between 21-24% of total quantity sold to more than 22% customers.
- At Broadway store, Quail and Britanni were the star performer, selling between 15-18% of total quantity sold to more than 15% customers.
- At Church Street store, Joelie and Amela were the star performer, selling between 20-22% of total quantity sold to more than 20% customers.



# Summary

- The crowded hours, days and customer visits tells that the shops are located somewhere near corporate and residential area.
- 'Baby Boomers' usually buys high cost products or more quantity of products, that means they are either spending alone time or visiting in groups (friends or family).
- That means the stores have a relaxed and comforting environment, as well as attentive and friendly staff.
- The product analysis tells about the choices of different customer groups, 'GenZ' are health-conscious people, 'Older Millennials' love their freshening up tea/coffee, 'Baby Boomers' are explorers whereas 'GenX' are eco-friendly people. These analyses should guide the new product ideas and promotion in upcoming months.







Brew Haven Data Dive









# April Performance

The company accounted for total sales of \$233,635.95 and 272 new customers. Although the number of new customers has dropped by 66% this month, company sales were high due to the repeated visits of their old customers. In total, 2248 customers visited the stores with a maximum of 6-8 order quantities in April 2019. The 100 **Church Street store** had the **highest number** of customer visits, accounting for 42% of total customer (different customers) visits at the stores in the month. Overall all the stores did well for this month with the difference in their sales ranging between 1-2%.



# Recommendations

- Improve the promotion of 2.
- new products. Sell free samples/testers to your frequent customers and ask for their reviews and recommendations.
- 3. Increase staffs at 100 Church Street store, on Mondays and 8-10AM, as they reported the highest footfall. Which is expected to increase based on the analysis. Can have morning and Mondays special offers.
- 2. 'Older Millennials' should be offered work cards/ coupons, which will give them offers on their purchases. As they have the highest footfall.
- 4. Registration of customers, as a large portion of the company's sales come from them. Thus, it is important to keep track of these customer visits and preferences.



# **For more Details**

- Brew Heaven Case Study Document
- Brew Heaven Analysis on BigQuery
- Visualization on Google Sheets
- Visualization on Tableau (Customer, Sales, Product and Staff)
- Coffee Shop Dataset





# Thank You!!



