TRENDS & KEY INSIGHTS FROM MAVEN ROASTERS

Alondra Espinoza

AGENDA

- Introduction
- The Project
- Data Description
- Data Cleaning & Preparation
- Dataset and EDA
- Dashboard Overview
- Key Insights and Recommendations
- Concerns and Resolutions

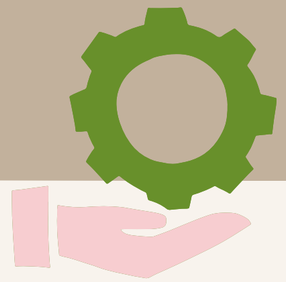
INTRODUCTION

Alondra Espinoza

Business Data Analytics
International Business Studies

DATA DESCRIPTION

Kaggle Dataset:
Coffee Shop Sales
Data from Maven Analytics website



Records: **149116**
Columns: **11**

transaction_id, transaction_date, transaction_time, transaction_qty, store_id, store_location, product_id, unit_price, product_category, product_type, product_detail

DATA CLEANING & PREPARATION

1. Open dataset on Excel, and create table

2. Add total sales column, day of the week column, reformat unit price and time

3. Upload to Tableau, and create graphs using time, total sales, and product.

THE PROJECT

I chose this data to analyze coffee products in relation to date and product type. As someone aspiring to own a café, this project provides valuable insights into how I could manage my own business data. It also allows me to apply the skills from my degree, making the work both relevant and meaningful to my career goals.

Transaction records for Maven Roasters, a fictitious coffee shop operating out of three NYC locations. Dataset includes the transaction date, timestamp and location, along with product-level details.

Questions to keep in mind:

How have sales trended over time?
Which days of the week tend to be busiest, and why do you think that's the case?
Which products are sold most and least often? Which drive the most revenue for the business?

DATASET AND EDA

transaction_id	transaction_date	transaction_time	transaction_qty	store_id	store_location	product_id	unit_price	product_category	product_type	product_detail	total_sales
1	1/1/23	7:06 AM	2	5	Lower Manhattan	32	$ 3.00	Coffee	Gourmet brewed coffee	Ethiopia Rg	$ 6.00
2	1/1/23	7:08 AM	2	5	Lower Manhattan	57	$ 3.10	Tea	Brewed Chai tea	Spicy Eye Opener Chai Lg	$ 6.20
3	1/1/23	7:14 AM	2	5	Lower Manhattan	59	$ 4.50	Drinking Chocolate	Hot chocolate	Dark chocolate Lg	$ 9.00
4	1/1/23	7:20 AM	1	5	Lower Manhattan	22	$ 2.00	Coffee	Drip coffee	Our Old Time Diner Blend Sm	$ 2.00
5	1/1/23	7:22 AM	2	5	Lower Manhattan	57	$ 3.10	Tea	Brewed Chai tea	Spicy Eye Opener Chai Lg	$ 6.20
6	1/1/23	7:22 AM	1	5	Lower Manhattan	77	$ 3.00	Bakery	Scone	Oatmeal Scone	$ 3.00
7	1/1/23	7:25 AM	1	5	Lower Manhattan	22	$ 2.00	Coffee	Drip coffee	Our Old Time Diner Blend Sm	$ 2.00
8	1/1/23	7:33 AM	2	5	Lower Manhattan	28	$ 2.00	Coffee	Gourmet brewed coffee	Columbian Medium Roast Sm	$ 4.00
9	1/1/23	7:39 AM	1	5	Lower Manhattan	39	$ 4.25	Coffee	Barista Espresso	Latte Rg	$ 4.25
10	1/1/23	7:39 AM	2	5	Lower Manhattan	58	$ 3.50	Drinking Chocolate	Hot chocolate	Dark chocolate Rg	$ 7.00
11	1/1/23	7:43 AM	1	5	Lower Manhattan	56	$ 2.55	Tea	Brewed Chai tea	Spicy Eye Opener Chai Rg	$ 2.55
12	1/1/23	7:44 AM	2	5	Lower Manhattan	33	$ 3.50	Coffee	Gourmet brewed coffee	Ethiopia Lg	$ 7.00
13	1/1/23	7:45 AM	1	5	Lower Manhattan	51	$ 3.00	Tea	Brewed Black tea	Earl Grey Lg	$ 3.00
14	1/1/23	7:48 AM	1	5	Lower Manhattan	57	$ 3.10	Tea	Brewed Chai tea	Spicy Eye Opener Chai Lg	$ 3.10
15	1/1/23	7:52 AM	2	5	Lower Manhattan	87	$ 3.00	Coffee	Barista Espresso	Ouro Brasileiro shot	$ 6.00
16	1/1/23	7:59 AM	2	5	Lower Manhattan	47	$ 3.00	Tea	Brewed Green tea	Serenity Green Tea Lg	$ 6.00
17	1/1/23	7:59 AM	1	5	Lower Manhattan	79	$ 3.75	Bakery	Scone	Jumbo Savory Scone	$ 3.75
18	1/1/23	8:00 AM	1	8	Hell's Kitchen	42	$ 2.50	Tea	Brewed herbal tea	Lemon Grass Rg	$ 2.50
19	1/1/23	8:00 AM	2	8	Hell's Kitchen	59	$ 4.50	Drinking Chocolate	Hot chocolate	Dark chocolate Lg	$ 9.00
20	1/1/23	8:11 AM	1	8	Hell's Kitchen	61	$ 4.75	Drinking Chocolate	Hot chocolate	Sustainably Grown Organic Lg	$ 4.75
21	1/1/23	8:17 AM	2	8	Hell's Kitchen	33	$ 3.50	Coffee	Gourmet brewed coffee	Ethiopia Lg	$ 7.00
22	1/1/23	8:24 AM	2	5	Lower Manhattan	56	$ 2.55	Tea	Brewed Chai tea	Spicy Eye Opener Chai Rg	$ 5.10
23	1/1/23	8:24 AM	1	5	Lower Manhattan	69	$ 3.25	Bakery	Biscotti	Hazelnut Biscotti	$ 3.25
24	1/1/23	8:29 AM	1	8	Hell's Kitchen	56	$ 2.55	Tea	Brewed Chai tea	Spicy Eye Opener Chai Rg	$ 2.55
25	1/1/23	8:31 AM	1	8	Hell's Kitchen	40	$ 3.75	Coffee	Barista Espresso	Cappuccino	$ 3.75
26	1/1/23	8:33 AM	1	5	Lower Manhattan	43	$ 3.00	Tea	Brewed herbal tea	Lemon Grass Lg	$ 3.00
27	1/1/23	8:33 AM	1	5	Lower Manhattan	76	$ 3.50	Bakery	Biscotti	Chocolate Chip Biscotti	$ 3.50
28	1/1/23	8:35 AM	2	5	Lower Manhattan	45	$ 3.00	Tea	Brewed herbal tea	Peppermint Lg	$ 6.00
29	1/1/23	8:35 AM	1	5	Lower Manhattan	71	$ 3.75	Bakery	Pastry	Chocolate Croissant	$ 3.75
30	1/1/23	8:41 AM	2	8	Hell's Kitchen	40	$ 3.75	Coffee	Barista Espresso	Cappuccino	$ 7.50
31	1/1/23	8:52 AM	1	8	Hell's Kitchen	38	$ 3.75	Coffee	Barista Espresso	Latte	$ 3.75
32	1/1/23	8:52 AM	1	5	Lower Manhattan	26	$ 3.00	Coffee	Organic brewed coffee	Brazilian Rg	$ 3.00
33	1/1/23	8:54 AM	2	5	Lower Manhattan	27	$ 3.50	Coffee	Organic brewed coffee	Brazilian Lg	$ 7.00
34	1/1/23	8:56 AM	2	5	Lower Manhattan	29	$ 2.50	Coffee	Gourmet brewed coffee	Columbian Medium Roast Rg	$ 5.00
35	1/1/23	8:57 AM	1	8	Hell's Kitchen	54	$ 2.50	Tea	Brewed Chai tea	Morning Sunrise Chai Rg	$ 2.50
36	1/1/23	8:58 AM	1	5	Lower Manhattan	26	$ 3.00	Coffee	Organic brewed coffee	Brazilian Rg	$ 3.00
37	1/1/23	9:00 AM	1	5	Lower Manhattan	55	$ 4.00	Tea	Brewed Chai tea	Morning Sunrise Chai Lg	$ 4.00
38	1/1/23	9:00 AM	2	8	Hell's Kitchen	40	$ 3.75	Coffee	Barista Espresso	Cappuccino	$ 7.50
39	1/1/23	9:07 AM	1	8	Hell's Kitchen	45	$ 3.00	Tea	Brewed herbal tea	Peppermint Lg	$ 3.00

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Top 10 Product Types
product_type
Barista Espresso          91406.20
Brewed Chai tea           77081.95
Hot chocolate             72416.00
Gourmet brewed coffee     70034.60
Brewed Black tea          47932.00
Brewed herbal tea         47539.50
Premium brewed coffee     38781.15
Organic brewed coffee     37746.50
Scone                     36866.12
Drip coffee               31984.00
Name: total_sales, dtype: float64
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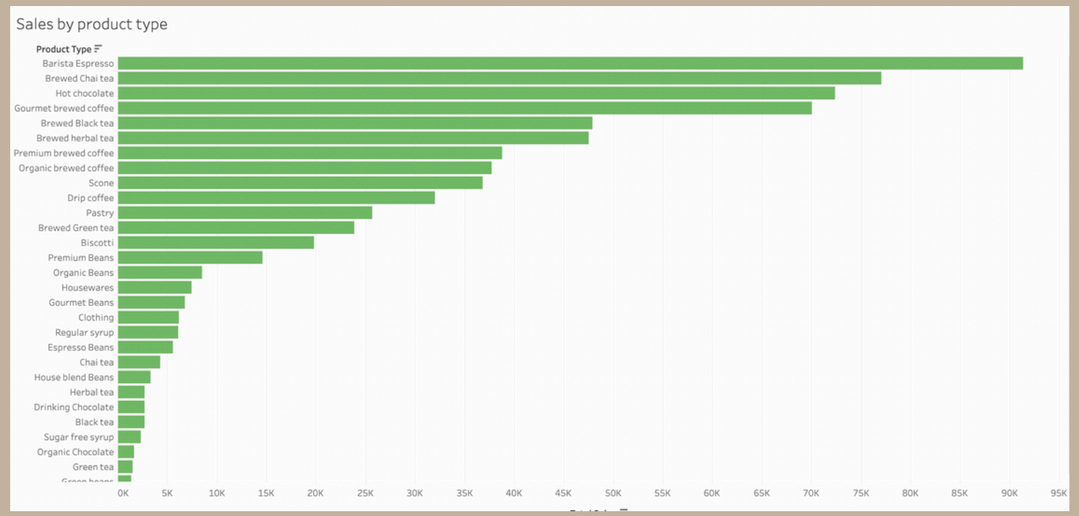

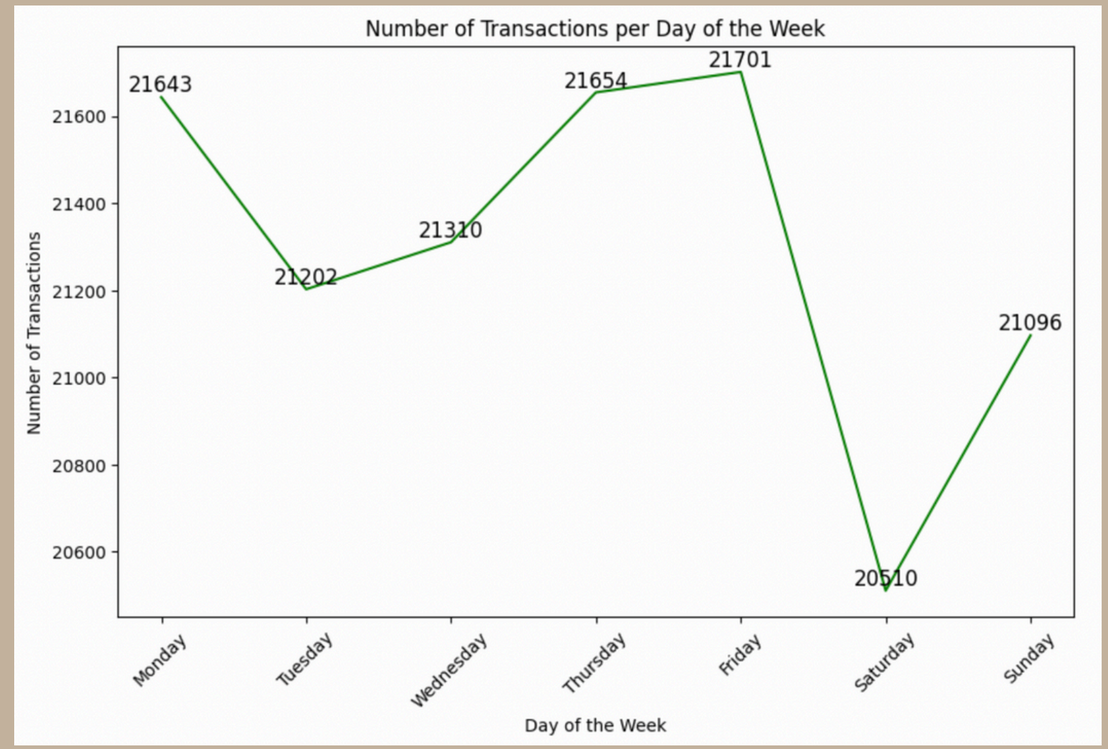

Top Locations

Store Location	
Astoria	232,244
Hell's Kitchen	236,511
Lower Manhattan	230,057

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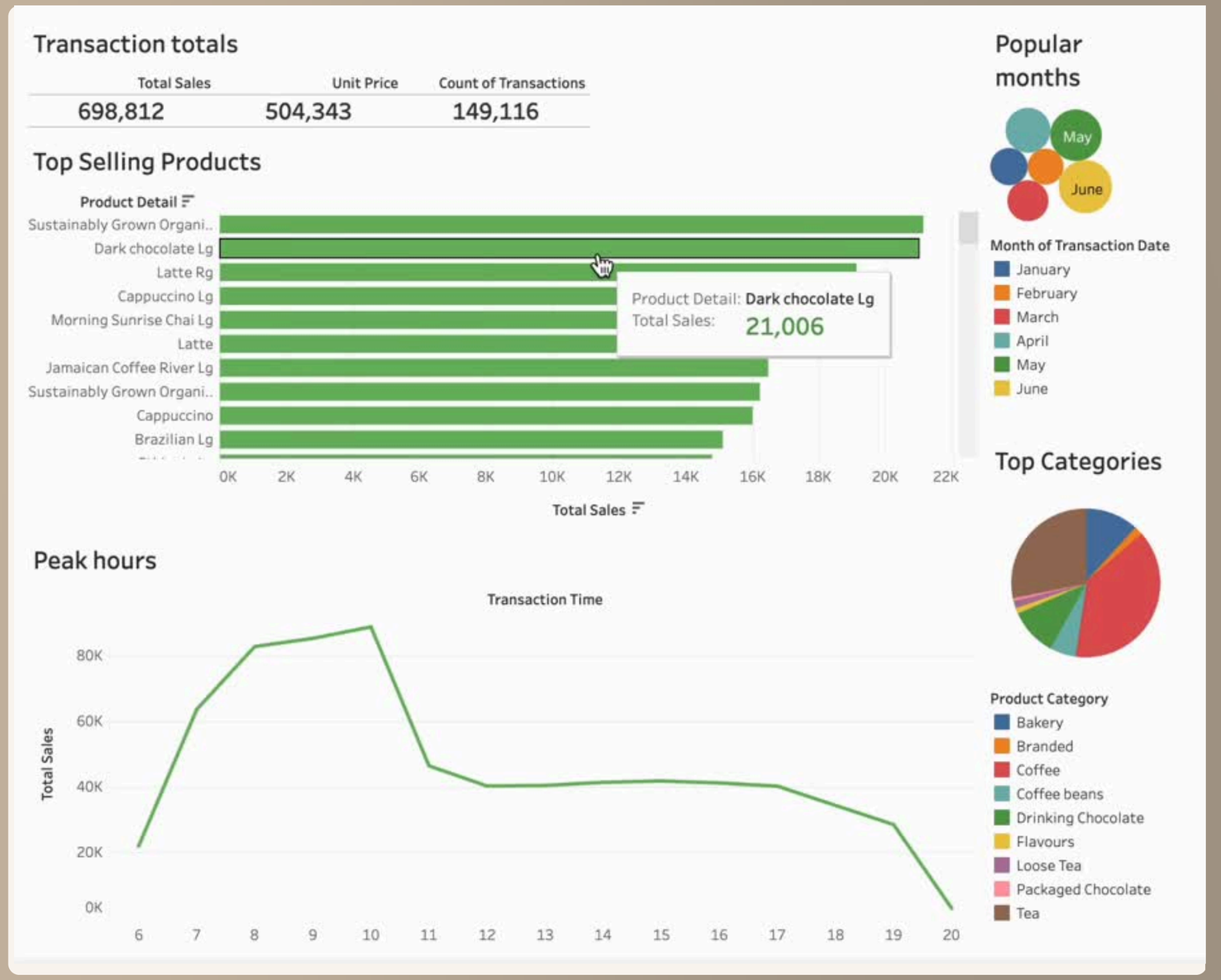
least sold Product Types
product_type
Espresso Beans          5560.25
Chai tea                4301.25
House blend Beans       3294.00
Herbal tea              2729.75
Drinking Chocolate      2728.04
Black tea               2711.85
Sugar free syrup        2324.00
Organic Chocolate       1679.60
Green tea               1470.75
Green beans             1340.00
Name: total_sales, dtype: float64
```

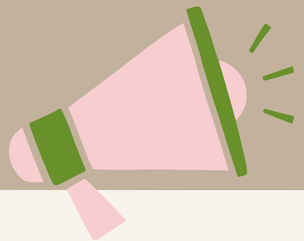
DASHBOARD OVERVIEW



KEY INSIGHTS AND RECOMMENDATIONS

Sales have steadily **increased** over time, likely due to warmer weather encouraging more people to go out and the business gaining attention. This growth suggests that seasonal shifts and increasing popularity are driving more **foot traffic** to the coffee shop.

Loyalty Programs: Introduce or promote loyalty programs to encourage repeat visits as the business continues to grow in popularity.



Weekdays, are busier than weekends, likely because people are grabbing coffee on their way to work. On weekends, sales tend to dip as people stay indoors. Weekdays seeing more consistent foot traffic from **office workers** and business meetings.

Store Expansion or New Locations: If feasible, explore the potential for expanding to new locations or increasing store capacity to meet the rising demand.

The top-selling items are Barista Espresso, Brewed Chai Tea, and similar drinks. This proves the **coffee and tea category** are driving the most revenue. In contrast, **packaged products** like Espresso Beans, have lower sales, indicating customers prefer **ready-to-drink options** over packaged goods.

Enhanced Marketing Strategies: Increase visibility through local advertising or social media campaigns that highlight the shop's popularity and seasonal offerings.

THANK YOU

RESOURCES

Fonts:
Open Sans
Lato

Google Colab:
https://colab.research.google.com/drive/1dTgMiHXLr0PVxV5kacDZE0xdYb7u76SI

Kaggle dataset:
https://www.kaggle.com/datasets/ahmedabbas757/coffee-sales