

COFFEE SHOP SALES DASHBOARD

OBJECTIVE

The goal of this project is to create a dashboard of sales data for coffee stores to identify patterns, trends and opportunities for the business.

TOOL

Google sheet.

SKILLS

- Data Transformation and Analysis.
- Filtering, Sorting and Functions.
- Pivot Tables and Charts.
- Data Visualization and Dashboard creation.

DATASET

The comprehensive dataset includes coffee shop sales information such as transaction_id, transaction_date, transaction_time, quantity of transaction as transaction_qty, store_id, store_location, product_id, unit_price, product_category, product_type, product_detail. Here is the data from Jan – Jun 2023.

Here is the snippet of dataset.

	A	B	C	D	E	F	G	H	I	J	K
1	transaction_id	transaction_date	transaction_time	transaction_qty	store_id	store_location	product_id	unit_price	product_category	product_type	product_detail
2	1	1/1/2023	7:06:11	2	5	Lower Manhattan	32	3	Coffee	Gourmet brewed coffee	Ethiopia Rg
3	2	1/1/2023	7:08:56	2	5	Lower Manhattan	57	3.1	Tea	Brewed Chai tea	Spicy Eye Opener Chai Lg
4	3	1/1/2023	7:14:04	2	5	Lower Manhattan	59	4.5	Drinking Chocolate	Hot chocolate	Dark chocolate Lg
5	4	1/1/2023	7:20:24	1	5	Lower Manhattan	22	2	Coffee	Drip coffee	Our Old Time Diner Blend Sm
6	5	1/1/2023	7:22:41	2	5	Lower Manhattan	57	3.1	Tea	Brewed Chai tea	Spicy Eye Opener Chai Lg
7	6	1/1/2023	7:22:41	1	5	Lower Manhattan	77	3	Bakery	Scone	Oatmeal Scone
8	7	1/1/2023	7:25:49	1	5	Lower Manhattan	22	2	Coffee	Drip coffee	Our Old Time Diner Blend Sm
9	8	1/1/2023	7:33:34	2	5	Lower Manhattan	28	2	Coffee	Gourmet brewed coffee	Columbian Medium Roast Sm
10	9	1/1/2023	7:39:13	1	5	Lower Manhattan	39	4.25	Coffee	Barista Espresso	Latte Rg
11	10	1/1/2023	7:39:34	2	5	Lower Manhattan	58	3.5	Drinking Chocolate	Hot chocolate	Dark chocolate Rg
12	11	1/1/2023	7:43:05	1	5	Lower Manhattan	56	2.55	Tea	Brewed Chai tea	Spicy Eye Opener Chai Rg
13	12	1/1/2023	7:44:35	2	5	Lower Manhattan	33	3.5	Coffee	Gourmet brewed coffee	Ethiopia Lg
14	13	1/1/2023	7:45:51	1	5	Lower Manhattan	51	3	Tea	Brewed Black tea	Earl Grey Lg
15	14	1/1/2023	7:48:19	1	5	Lower Manhattan	57	3.1	Tea	Brewed Chai tea	Spicy Eye Opener Chai Lg
16	15	1/1/2023	7:52:36	2	5	Lower Manhattan	87	3	Coffee	Barista Espresso	Ouro Brasileiro shot
17	16	1/1/2023	7:59:58	2	5	Lower Manhattan	47	3	Tea	Brewed Green tea	Serenity Green Tea Lg
18	17	1/1/2023	7:59:58	1	5	Lower Manhattan	79	3.75	Bakery	Scone	Jumbo Savory Scone
19	18	1/1/2023	8:00:18	1	8	Hell's Kitchen	42	2.5	Tea	Brewed herbal tea	Lemon Grass Rg
20	19	1/1/2023	8:00:39	2	8	Hell's Kitchen	59	4.5	Drinking Chocolate	Hot chocolate	Dark chocolate Lg
21	20	1/1/2023	8:11:45	1	8	Hell's Kitchen	61	4.75	Drinking Chocolate	Hot chocolate	Sustainably Grown Organic Lg
22	21	1/1/2023	8:17:27	2	8	Hell's Kitchen	33	3.5	Coffee	Gourmet brewed coffee	Ethiopia Lg
23	22	1/1/2023	8:24:26	2	5	Lower Manhattan	56	2.55	Tea	Brewed Chai tea	Spicy Eye Opener Chai Rg
24	23	1/1/2023	8:24:26	1	5	Lower Manhattan	69	3.25	Bakery	Biscotti	Hazelnut Biscotti
25	24	1/1/2023	8:29:38	1	8	Hell's Kitchen	56	2.55	Tea	Brewed Chai tea	Spicy Eye Opener Chai Rg
26	25	1/1/2023	8:31:23	1	8	Hell's Kitchen	40	3.75	Coffee	Barista Espresso	Cappuccino
27	26	1/1/2023	8:33:08	1	5	Lower Manhattan	43	3	Tea	Brewed herbal tea	Lemon Grass Lg
28	27	1/1/2023	8:33:08	1	5	Lower Manhattan	76	3.5	Bakery	Biscotti	Chocolate Chip Biscotti
29	28	1/1/2023	8:35:03	2	5	Lower Manhattan	45	3	Tea	Brewed herbal tea	Peppermint Lg

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149102	149441	6/30/2023	19:46:28	1	8 Hell's Kitchen	27	3.5 Coffee	Organic brewed coffee	Brazilian Lg
149103	149442	6/30/2023	19:46:28	1	8 Hell's Kitchen	75	3.5 Bakery	Pastry	Croissant
149104	149443	6/30/2023	19:46:43	2	3 Astoria	50	2.5 Tea	Brewed Black tea	Earl Grey Rg
149105	149444	6/30/2023	19:51:59	2	3 Astoria	26	3 Coffee	Organic brewed coffee	Brazilian Rg
149106	149445	6/30/2023	19:52:28	2	3 Astoria	34	2.45 Coffee	Premium brewed coffee	Jamaican Coffee River Sm
149107	149446	6/30/2023	19:53:46	1	3 Astoria	24	3 Coffee	Drip coffee	Our Old Time Diner Blend Lg
149108	149447	6/30/2023	19:56:45	1	8 Hell's Kitchen	33	3.5 Coffee	Gourmet brewed coffee	Ethiopia Lg
149109	149448	6/30/2023	19:57:49	2	3 Astoria	54	2.5 Tea	Brewed Chai tea	Morning Sunrise Chai Rg
149110	149449	6/30/2023	19:57:49	1	3 Astoria	70	3.25 Bakery	Scone	Cranberry Scone
149111	149450	6/30/2023	20:08:38	2	8 Hell's Kitchen	55	4 Tea	Brewed Chai tea	Morning Sunrise Chai Lg
149112	149451	6/30/2023	20:16:31	2	5 Lower Manhattan	42	2.5 Tea	Brewed herbal tea	Lemon Grass Rg
149113	149452	6/30/2023	20:18:41	2	8 Hell's Kitchen	44	2.5 Tea	Brewed herbal tea	Peppermint Rg
149114	149453	6/30/2023	20:25:10	2	8 Hell's Kitchen	49	3 Tea	Brewed Black tea	English Breakfast Lg
149115	149454	6/30/2023	20:31:34	1	8 Hell's Kitchen	45	3 Tea	Brewed herbal tea	Peppermint Lg
149116	149455	6/30/2023	20:57:19	1	8 Hell's Kitchen	40	3.75 Coffee	Barista Espresso	Cappuccino
149117	149456	6/30/2023	20:57:19	2	8 Hell's Kitchen	64	0.8 Flavours	Regular syrup	Hazelnut syrup

PROCESS

1.Prepare the data for analysis

- Added a new column to calculate revenue, price * quantity.
- Added a new column to calculate Month and Day of week based on the transaction date.
- Added a new column to extract Hour from the transaction time.

Below is the snippet after completing these steps.

Revenue	Month	Day of week	Hour
\$6.00	January	Sun	7
\$6.20	January	Sun	7
\$9.00	January	Sun	7
\$2.00	January	Sun	7
\$6.20	January	Sun	7
\$3.00	January	Sun	7
\$2.00	January	Sun	7
\$4.00	January	Sun	7
\$4.25	January	Sun	7
\$7.00	January	Sun	7
\$2.55	January	Sun	7
\$7.00	January	Sun	7
\$3.00	January	Sun	7
\$3.10	January	Sun	7
\$6.00	January	Sun	7
\$6.00	January	Sun	7
\$3.75	January	Sun	7
\$2.50	January	Sun	8

2.Explore data with Pivot tables.

- Inserted a Pivot table to show revenue by month.
- Added Pivot tables to show number of transactions by product category, sorted descending by transaction.
- Inserted a Pivot table to show number of transactions by day of week and by hour of day.

Below is the snippet of pivot tables

<i>Day of week</i>	COUNT of transaction_id
Fri	21,701.00
Mon	21,643.00
Sat	20,510.00
Sun	21,096.00
Thu	21,654.00
Tue	21,202.00
Wed	21,310.00
Grand Total	149,116.00

Tab: number of transactions by day of week

<i>product_category</i>	COUNT of transaction_id
Coffee	58416
Tea	45449
Bakery	22796
Drinking Chocolate	11468
Flavours	6790
Coffee beans	1753
Loose Tea	1210
Branded	747
Packaged Chocolate	487
Grand Total	149116

Tab: number of transactions by product category

<i>Hour</i>	COUNT of transaction_id
6	4,594.00
7	13,428.00
8	17,654.00
9	17,764.00
10	18,545.00
11	9,766.00
12	8,708.00
13	8,714.00
14	8,933.00
15	8,979.00
16	9,093.00
17	8,745.00
18	7,498.00
19	6,092.00

20	603.00
Grand Total	149,116.00

Tab: number of transactions by hour of day

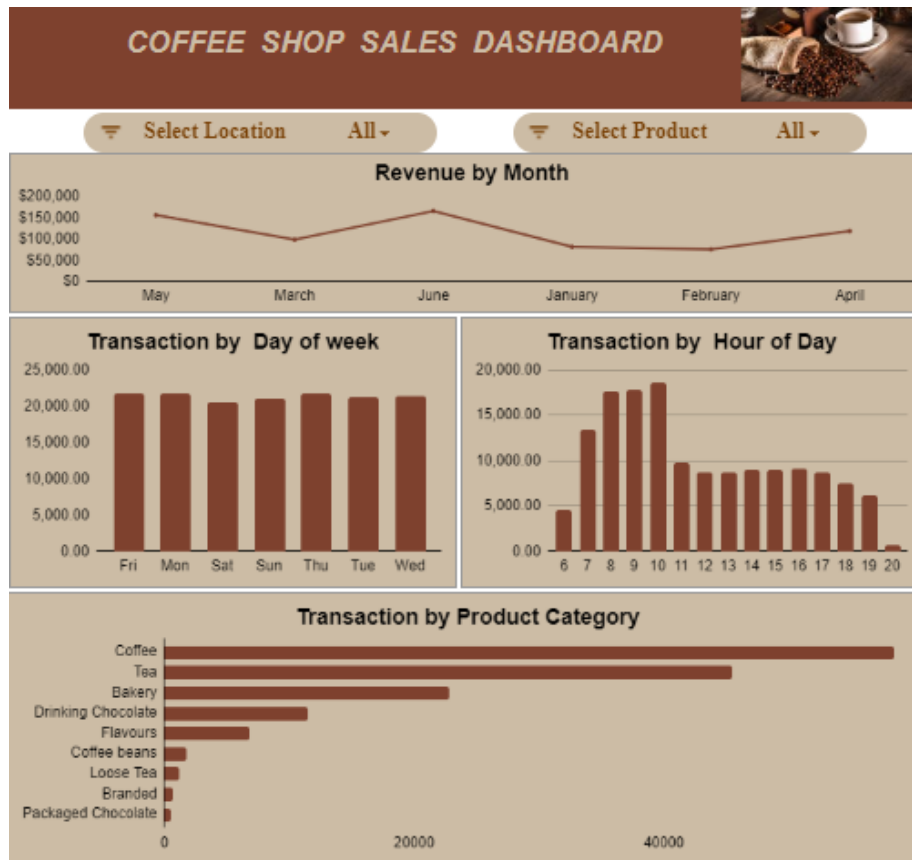
<i>Month</i>	SUM of Revenue
April	\$118,940
February	\$76,145
January	\$81,678
June	\$166,469
March	\$98,857
May	\$156,723
Grand Total	\$698,812

Tab: Revenue by month

3. Build dashboard

- Added charts to show revenue by month as a line chart, transaction by day of week and hour of day as column chart and transaction by product category as a bar chart.
- For user friendly and interactive experience 2 "Slicers" were added.

Below is a snippet of the final dashboard in Google Sheet.



INSIGHTS

- Coffee is the most selling product in all cities.
- In Astoria and Lower Manhattan, most transactions happen from 7 to 10 in the morning, while in Hell's Kitchen, it is from 8 to 10.
- In Lower Manhattan, towards the evening around 7- 8 sales is very less.

CONCLUSION

Thank you for your interest and time to explore **COFFEE SHOP SALES DASHBOARD**

project. Feel free to give your valuable suggestions and feedback, connect with me on:

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