





Dataset Description

• The data is taken from the website Kaggle.com. The coffee shop data consists of 1,49,116 rows and 11 columns. The dataset is as follows:

transaction_id tran	saction_date 🔻 trai	nsaction_time store	ic v store_location v	product_id 7 t	ransaction_qty 🔻 unit_p	orice product_cat	egory roduct_type	▼ product_detail	▼ Size ▼ T	otal_bill Month Name	▼ Day Name ▼	Hour ▼ Day_of_	week Month_numbe
114301	01-06-23	11:33:29 AM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Thursday	11	4
115405	02-06-23	11:18:24 AM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Friday	11	5
115478	02-06-23	12:02:45 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Friday	12	5
116288	02-06-23	7:39:47 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Friday	19	5
116714	03-06-23	12:24:57 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Saturday	12	6
116739	03-06-23	12:44:17 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Saturday	12	6
116853	03-06-23	1:58:14 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Saturday	13	6
117389	03-06-23	6:57:29 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Saturday	18	6
118056	04-06-23	2:31:43 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Sunday	14	0
118281	04-06-23	4:30:33 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Sunday	16	0
118428	04-06-23	5:53:30 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Sunday	17	0
118913	05-06-23	12:01:03 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Monday	12	1
119196	05-06-23	2:19:59 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Monday	14	1
119240	05-06-23	2:42:16 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Monday	14	1
119351	05-06-23	3:51:35 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Monday	15	1
119444	05-06-23	4:52:40 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Monday	16	1
119692	05-06-23	7:51:09 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Monday	19	1
121279	07-06-23	10:16:40 AM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Wednesday	10	3
121416	07-06-23	10:59:19 AM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Wednesday	10	3
121493	07-06-23	12:01:18 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Wednesday	12	3
121656	07-06-23	3:05:47 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Wednesday	15	3
121709	07-06-23	4:17:25 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Wednesday	16	3
121876	07-06-23	7:56:37 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Wednesday	19	3
122518	08-06-23	11:09:47 AM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Thursday	11	4
122622	08-06-23	12:09:57 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Thursday	12	4
122818	08-06-23	3:00:40 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Thursday	15	4
122954	08-06-23	4:58:47 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Thursday	16	4
123152	08-06-23	7:54:56 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Thursday	19	4
123465	09-06-23	8:39:35 AM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Friday	8	5
123499	09-06-23	8:55:36 AM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Friday	8	5
123540	09-06-23	9:10:06 AM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Friday	9	5
123603	09-06-23	9:32:40 AM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Friday	9	5
123972	09-06-23	12:04:39 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Friday	12	5
125324	10-06-23	2:03:46 PM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Saturday	14	6
126049	11-06-23	9:10:48 AM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Sunday	9	0
126086	11-06-23	9:26:48 AM	3 Astoria	45	1	3 Tea	Brewed herbal tea	Peppermint	Large	3 June	Sunday	9	0

- transaction_id = transaction ID's of customers.
- transaction_date = date when the transaction was done.
- transaction_time = the time when the transaction was done
 - store_id = unique ID of the store.
- store_location = location where the store is present (Astoria, Hell's Kitchen, Manhattan).
 - product_id = unique ID of the product.
 - transaction_qty = quantity of the products ordered.
 - unit_price = price of single quantity of the product.
- product_category = category of the product (Bakery, Coffee, Drinking chocolate, ...)
- product_type = type of the product (Brewed Coffee, Brewed Herbal Tea, Black Tea, ...)
- product_detail = list of products (Cappuccino, Caramel Syrup, Chocolate Croissant, ...)



Data Cleaning

- The data had some missing values in rows and columns. So, we removed them.
- Values were not in proper format. So converted the values in their proper format.
- The dataset had some unwanted spaces in them.
 So removed it using "TRIM" function.
 - Separated the size from the "product_detail" column using "text to column" and "find & replace" functions.



- Calculated column "Total_bill" using "transaction_qty" and "unit_price" column.
 - Extracted "Month_name", "Day_name", "Day_of_week", "Month_number" using "transaction_date" column.
 - Extracted "Hour" using "transaction_time" column.
 - Done this using different "Power Query Editor" functions.
- Used Pivot Tables to calculate KPI's on the dashboard.

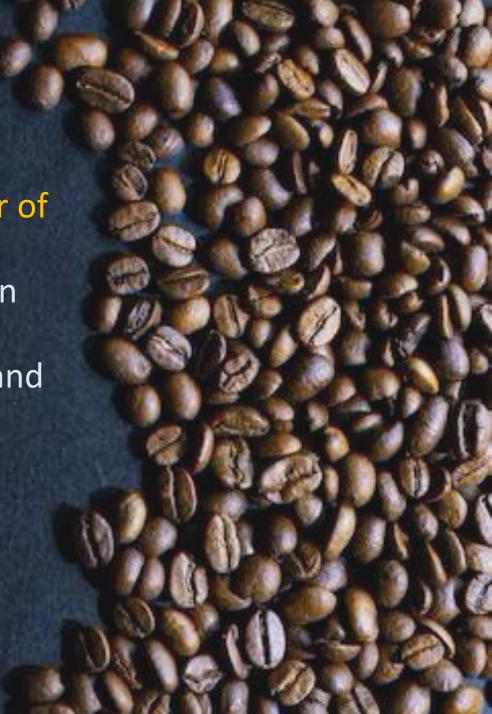
Recommended Analysis

- How do sales vary by day of the week and hour of the day?
- Are there any peak times for sales activity?
- What is the total sales revenue for each month?
- How do sales vary across different store locations?
- What is the average price/order per person?
- Which products are the bestselling in terms of quantity and revenue?
- How do sales vary by product category and type?



Data Analysis

- How do sales vary by day of the week and hour of the day?
- So, sales are high during morning time between 7am to 10am.
- Sales are little bit moderate during afternoon and evening time.
- Are there any peak times for sales activity?
- Yes. The sales are usually high in the morning period between 7am 10 am.





Sales revenue for each month is as follows:

January – \$ 81,677.14

February – \$ 76,145.19

March - \$ 98,834.68

April – \$ 1,18,941.08

May - \$ 1,56,4727.76

June – \$ 1,66,485.88



- How do sales vary across different store locations?
- "Hell's Kitchen" with store_id: 8 contributes (\$ 2,36,511.17) maximum sales to the coffee shop.
- "Astoria" with store_id: 3 is contributes
 (\$ 2,32,243.91) second maximum sales to the
 coffee shop.
- "Lower Manhattan: with store_id: 5 contributes (\$ 2,30,057.25) least sales to the coffee shop.



What is the average price/order per person?

- The average price per person is \$ 4.69.
- The average order per person is 1.4.

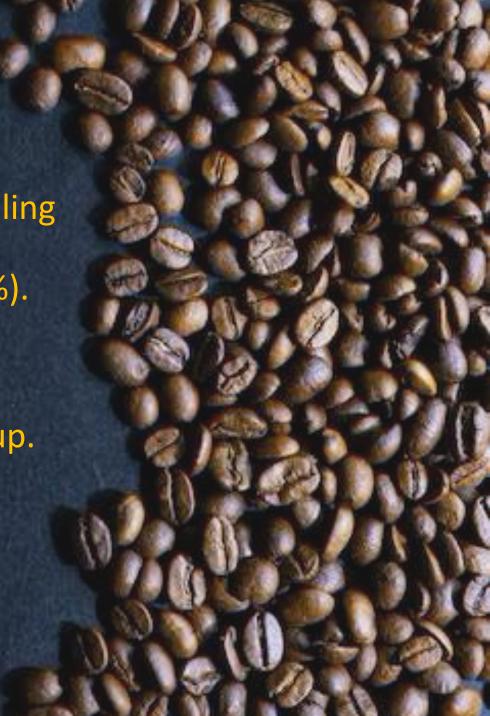


- Which products are the bestselling in terms of quantity and revenue?
- The top 5 best selling products are as follows:
- 1) Barista Espresso generating highest revenue (\$ 91,406.20)
- 2) Brewed Chai Tea (\$ 77,081.95)
- 3) Hot Chocolate (\$ 72,416.00)
- 4) Gourmet Brewed Coffee (\$ 70,034.60)
- 5) Brewed Black Tea (\$ 47,932.00)



Conclusion:

- We can observe that "Coffee" is the highest selling product which contributes for around (39%) of sales followed by "Tea" which contributes (28%).
- Least sold products are "Packaged Chocolate", "Loose Tea" & "Flavors".
- Around (31%) people order in "Regular" size cup.
- The total footfall of the shop i.e the number of customers visited the store are 1,49,116.



Dashboard:

Coffee Shop Sales



\$698,812.33 **Total Sales**

149116 Total Footfall

4.69 Avg Bill Per Person

1.4 Avg. Order Per Person





