Maven Roasters - Coffee Shop Sales

Project Overview

In this data analysis project, I set out to examine the sales performance of Maven Roasters, a fictitious coffee shop chain with multiple locations in New York City. The goal of this analysis was to uncover insights into Maven Roasters' sales performance, trends, and product performance to help inform business strategy and decision-making.

The key questions addressed in this analysis include:

- 1. How have Maven Roasters' sales trended over time?
- 2. Which days of the week tend to be the busiest, and what factors may be driving those trends?
- 3. Which products sold most and least often, and which products drive the most revenue for the business?

By examining this data, the analysis was able to identify patterns, trends, and insights that can help Maven Roasters optimize its operations, marketing, and product offerings to better meet the needs of its customers and drive continued growth and success.

Data Source

Transaction reports from fictitious coffee shop in New York City downloaded from Maven Analytics (<u>Maven Analytics</u>).

Findings

The datasets consist of 11 Columns and 149,116 Rows. The datasets transactions (149,116 transactions) span over 6 months from 1st January 2023 to 30th June 2023.

There are six categories of products namely Bakery, Branded, Coffee, Coffee Beans, Drinking Chocolates, Flavours, Loose Tea, Packaged Chocolate, and Tea.

Process

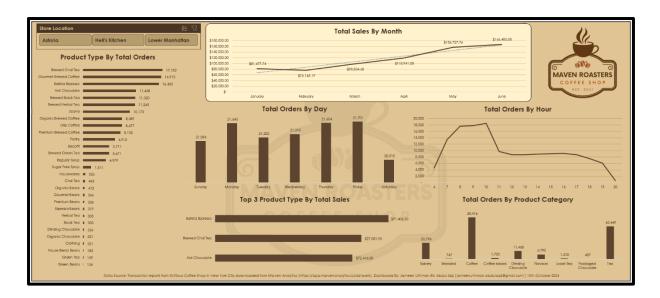
I added columns to the dataset using basic calculations and formulas for Total Sales (Revenue), Month, Day of Week and Hour of Day and formatted columns appropriately.

I created six Pivot Tables and then visualized the data with six Pivot Charts. I have created a Slicer to choose different Store Locations.

Sum of Total Sale:			Count of transaction_id	Row Labels	™ Sum o	f Total Sales	Row Labels	Count of transaction_id
\$ 81,	677.74		4,594	Hot Chocolate	\$	72,416.00	Green Beans	134
\$ 76,	145.19	7	13,428	Brewed Chai Te	a \$	77,081.95	Green Tea	159
\$ 98,	334.68	8	17,654	Barista Espress	o \$	91,406.20	House Blend Beans	183
\$ 118,	941.08	9	17,764	Grand Total	\$	240,904.15	Clothing	221
\$ 156,	727.76	10	18,545				Organic Chocolate	221
\$ 166,	185.88	11	9,766	Row Labels	▼ Count	of transaction_id	Drinking Chocolate	266
\$ 698,	312.33	12	8,708	Bakery		22,796	Black Tea	303
		13	8,714	Branded		747	Herbal Tea	305
Row Labels Count of transaction_id		14 8,933		Coffee 58,416		Espresso Beans	319	
	1,096	15	8,979	Coffee beans		1,753	Premium Beans	336
	1,643	16	9,093	Drinking Choco	lat	11,468	Gourmet Beans	366
	1,202	17	8,745	Flavours		6,790	Organic Beans	415
	1,310	18	7,498	Loose Tea		1,210	Chai Tea	443
:	1,654	19	6,092	Packaged Choc	:oli	487	Housewares	526
:	1,701	20	603	Tea		45,449	Sugar Free Syrup	1,811
y 20,510		Grand Total	149,116	Grand Total 149,116		149,116	Regular Syrup	4,979
1	9,116						Brewed Green Tea	5,671
							Biscotti	5,711
Store Location \$			×= \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				Pastry	6,912
							Premium Brewed Coffe	e 8,135
Hell's	(itchen	Lower Ma	nhattan				Drip Coffee	8,477
							Organic Brewed Coffee	8,489
							Scone	10,173
							Brewed Herbal Tea	11,245
							Brewed Black Tea	11,350
							Hot Chocolate	11,468
							Barista Espresso	16,403
							Gourmet Brewed Coffee	16,912
							Brewed Chai Tea	17,183
	\$ 81,4 \$ 76,6 \$ 98,4 \$ 1156,5 \$ 166,5 \$ 698,4 Count of transacti	Count of transaction_id 21,096 21,643 21,202 21,310 21,654 21,701 20,510 149,116	\$ 81,677.74 6 \$ 76,145.19 7 \$ 98,834.68 8 \$ 118,941.08 9 \$ 156,727.76 10 \$ 166,485.88 11 \$ 698,812.33 12 Count of transaction_id 14 21,096 15 21,643 16 21,202 17 21,310 18 21,654 19 21,701 20 20,510 Grand Total	\$ 81,677.74 6 4,594 \$ 76,145.19 7 13,428 \$ 98,834.68 8 17,654 \$ 118,941.08 9 17,764 \$ 156,727.76 10 18,545 \$ 166,485.88 11 9,766 \$ 698,812.33 12 8,708 Count of transaction_id	\$ 81,677.74 6 4,594 Hot Chocolate \$ 76,145.19 7 13,428 Brewed Chai Te \$ 98,834.68 8 17,654 Barista Espress \$ 118,941.08 9 17,764 Grand Total \$ 156,727.76 10 18,545 \$ 166,485.88 11 9,766 Row Labels \$ 698,812.33 12 8,708 Bakery 13 8,714 Branded Count of transaction id 14 8,933 Coffee 21,096 15 8,979 Coffee beans 21,643 16 9,093 Drinking Choco 21,202 17 8,745 Flavours 21,310 18 7,498 Loose Tea 21,654 19 6,092 Packaged Choc 21,701 20 603 Tea 20,510 Grand Total 149,116 Grand Total	\$ 81,677.74 6 4,594 Hot Chocolate \$ 76,145.19 7 13,428 Brewed Chai Tea \$ 98,834.68 8 17,654 Barista Espresso \$ 118,941.08 9 17,764 Grand Total \$ 156,727.76 10 18,545 \$ 166,485.88 11 9,766 Row Labels Count of transaction id 14 8,933 Coffee 21,096 15 8,979 Coffee beans 21,096 15 8,979 Coffee beans 21,202 17 8,745 Flavours 21,310 18 7,498 Loose Tea 21,654 19 6,092 Packaged Chocols 221,701 20 603 Tea 20,510 Grand Total 149,116 Grand Total	\$ 81,677.74 6 4,594 Hot Chocolate \$ 72,416.00 \$ 76,145.19 7 13,428 Brewed Chai Tea \$ 77,081.95 \$ 98,834.68 8 17,654 Barista Espresso \$ 91,406.20 \$ 118,941.08 9 17,764 Grand Total \$ 240,904.15 \$ 156,727.76 10 18,545 \$ 166,485.88 11 9,766 Row Labels V Count of transaction_id \$ 698,812.33 12 8,708 Bakery 22,796 Bakery 22,796	\$ 81,677.74 6 4,594 Hot Chocolate \$ 72,416.00 Green Beans 76,145.19 7 13,428 Brewed Chai Tea \$ 77,081.95 Green Tea \$ 98,834.68 8 17,654 Barista Espresso \$ 91,406.20 House Blend Beans \$ 118,941.08 9 17,764 Grand Total \$ 240,904.15 Clothing \$ 156,727.76 10 18,545 Grand Total \$ 240,904.15 Clothing \$ 166,485.88 11 9,766 Row Labels V Count of transaction_id Drinking Chocolate \$ 698,812.33 12 8,708 Bakery 22,796 Black Tea \$ 8,714 Branded 747 Herbal Tea \$ 21,096 15 8,979 Coffee beans 1,753 Premium Beans 21,643 16 9,093 Drinking Chocolat 11,468 Gourmet Beans 21,202 17 8,745 Flavours 6,790 Organic Beans 21,310 18 7,498 Loose Tea 1,210 Chai Tea 21,654 19 6,092 Packaged Chocol: 487 Housewares 21,701 20 603 Tea 45,449 Sugar Free Syrup 20,510 Grand Total 149,116 Grand Total Brewed Green Tea Biscotti Pastry Premium Brewed Coffee Crand Total Brewed Green Tea Brewed Black Tea Hot Chocolate \$ Brewed Coffee \$ Comment Strewed Coffee \$



I have designed an interactive dashboard, and then identified insights and recommendations for the coffee shop. I also created a Maven Roasters logo for this project.



Insights

Revenue

Total revenue each month from 1st January 2023 to 30th June 2023 shows an upward trend into the Spring and Summer months across all locations with a drop in February 2023.

All three location contribute equally on average to the total revenue with store located at Hell's Kitchen emerge the most generated revenue across all the store locations.

Busiest Day / Time

Overall, Monday, Thursday and Friday emerge as the busiest days of week.

Lower Manhattan experiences peak business on Mondays whereas Astoria experiences peak business on Mondays and Thursdays. However, Hell's Kitchen is popular on Tuesdays and Fridays.

Saturdays seems to be the least popular across all stores.

Sales tend to peak during 8 am to 10 am across all stores. Astoria has a higher sales rate throughout the day compared to other stores.

Lower Manhattan experiences a decline in sales after 6 pm while Hell's Kitchen shows a significant drop in sales after 7 pm.

Most Popular Product

The top three most popular products are Brewed Chai Tea, Gourmet Brewed Coffee, and Barista Espresso. Barista Espresso stand out as highest revenue generator followed by Brewed Chai Tea and Hot Chocolate.

Coffee and Tea are the most popular selling categories across all stores.

Recommendations

Target any promotional during January and February to boost revenue during these winter months a special flavoured Hot Chocolate.

Running weekend promotions at both Astoria and Lower Manhattan would increase revenue with special promotions on Saturdays across all stores.

Allocate more staff and recourses on Mondays, Thursdays, and Fridays to manage the increased demand particularly during morning rush hours, 8am to 10 am.

Considering declines in sales especially at Lower Manhattan and Hell's Kitchen, should evaluate the feasibility of adjusting the closing times to optimise the resources utilization.

Implementing special promotions or new flavour variations for Barista Espresso, Brewed Chai Tea, and Hot Chocolate to further boost the revenue.