

Analysis of Coffee Shop Sales Data:

1.How do sales vary by day of the week and hour of the day? Are there any peak times for sales activity?

Ans:1.Hourly Sales Variation: The "Quantity Ordered Based on Hours" graph shows that sales peak around 8 AM to 10 AM, with a significant drop-off after 11 AM and a gradual decline throughout the afternoon.

2.Daily Sales Variation: The "Order on Weekdays" bar graph indicates that sales are relatively consistent across all weekdays (Sunday-Saturday).

2.What is the total sales revenue?

Ans:The total sales revenue is \$6,98,812.33 (six hundred ninety-eight thousand eight hundred twelve and thirty-three cents).

3.How do sales vary across different store locations?

Ans:The "Footfall and Sales over various Store Locations" graph shows that Hell's Kitchen has the highest sales (\$2,36,511.17), followed by Astoria (\$2,32,243.91) and Lower Manhattan (\$2,30,057.25). Footfall is also highest in Hell's Kitchen (50735), followed by Astoria (50599) and Lower Manhattan (47782).

4.What is the average price/order per person?

Ans:The average bill per person is \$4.69, and the average order per person is 1.44.

5.Which products are the best-selling in terms of quantity and revenue?

Ans:The "Top 5 Products Based on Sales" graph indicates that Barista Espresso is the top-selling product in terms of revenue (\$91,406.20), followed by Brewed Chai tea (\$77,081.95), Hot chocolate (\$72,416.00), Gourmet brewed coffee (\$70,034.60) and Brewed Black tea (\$47,932.00).

6.What is the total footfall?

Ans:The total footfall is 149116.

7.How are the sales distributed across product categories?

Ans:Based on the "Categories % Distribution Based on Sales" pie chart: Coffee accounts for 39% of sales, Bakery for 28%, Coffee beans for 12%, Drinking Chocolate for 10%, Branded for 6%, and Flavors, Loose Tea, Packaged Chocolate, and Tea each represent 1% of sales.

8.What is the distribution of order sizes?

Ans:According to the "% Size Distribution Based on Orders" pie chart: Regular and Not Defined sizes each account for 30% of orders, Large sizes account for 31%, and Small sizes account for 9%.

Recommendations Based on Analysis:

1. Optimize for Peak Hours: Since the peak sales hours are between 8 AM and 10 AM, ensure adequate staffing and product availability during these times. Consider running promotions or offering discounts during off-peak hours to attract more customers.

2. Location-Based Strategies: Focus on strategies to maximize sales in Lower Manhattan since it has the lowest sales despite having a comparable footfall to Astoria. Investigate why sales are lower despite similar foot traffic (e.g., pricing, menu preferences)

3. Product Mix: Given that coffee is the highest revenue generator, ensure a diverse and appealing coffee menu. Also, consider strategies to boost the sales of other categories such as bakery items and tea.

4. Order Size Optimization: Explore why "Not Defined" order sizes are so high; ensure accurate order categorization. Given the popularity of "Large" and "Regular" sizes, evaluate the pricing strategy for these sizes to maximize revenue. Consider upselling strategies to encourage customers to choose larger sizes.

5. Product Promotion: Given the popularity of Barista Espresso, Brewed Chai tea and Hot chocolate consider bundle offers or loyalty programs centered around these.