☕ Coffee Shop Dataset Analysis

Hi, I'm **Madhusudan Mahato**, a passionate **Data Analyst** enthusiast. I have hands-on experience with various tools and technologies such as **SQL**, **Python**, **Power BI**, **Excel**, and more. Currently, I'm diving deep into the world of data analytics, always eager to learn and grow.

Feel free to reach out to me for any questions or collaboration opportunities!

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Looking forward to connecting!

1 ◉ Coffee Shop Dataset Analysis

1.1 ⊙ Project Objectives

The main objective of this project is to analyse retail sales data to gain actionable insights that will enhance the performance of the Coffee Shop.

❓ Questions (KPIs)

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

1.2 ⊞ KPI Analysis

1. How do sales vary by day of the week and hour of the day?

- **Morning Rush (8 AM - 10 AM):**
  Findings - Coffee sales peak during the morning hours, especially between 8 AM and 10 AM, which aligns with people's morning routines.
- This is when most customers grab their coffee to start their day or on the way to work or school. The peak around 10 AM suggests a mid-morning crowd, likely consisting of people taking a break or attending late-start work shifts.

- **Day Preferences (Monday, Thursday, Friday):**
  Findings - Mondays likely see higher traffic as customers look for a caffeine boost to overcome the start-of-the-week sluggishness.
- Thursday and Friday visits may correspond to customers seeking an energy boost to end the workweek or as part of relaxed end-of-week routines.
- The preference for these days indicates that coffee consumption is not only a morning ritual but also influenced by the rhythm of the workweek.

2. Are there any peak times for sales activity?

- **Peak Sales Time (10 AM on Fridays):**
  Findings - Friday mornings around 10 AM mark the highest sales activity, potentially driven by a combination of end-of-week routines and social gatherings.
- Customers might treat themselves to coffee as a way to wrap up their week or gear up for weekend plans.
- This peak time reflects a significant behavioural pattern that businesses can capitalize on by offering special deals or ensuring adequate staffing to handle the rush.

3. What is the total sales revenue for each month?

- **Top Performing Month (June):**
  Findings - June emerges as the highest revenue-generating month, indicating strong customer demand during this period.
- This may be influenced by factors such as summer vacations, increased social activities, or seasonal preferences for coffee products.
- Businesses can capitalize on this trend by offering targeted promotions, summer-themed drinks, or loyalty programs to maintain and boost sales.

- **Other High-Performing Months (May and April):**
  Findings - May and April follow closely, suggesting that late spring and early summer maintain consistent sales momentum.
- This could be attributed to a gradual increase in outdoor activities, rising temperatures encouraging coffee purchases (both hot and cold), or special events like Mother's Day or other seasonal celebrations during these months.

4. How do sales vary across different store locations?

- **Top-Performing Location (Hell's Kitchen):**
  Findings - Hell's Kitchen leads in sales performance, potentially due to its high foot traffic, vibrant community, or proximity to workplaces and popular attractions. Its top ranking suggests a strong customer base and possibly higher demand for coffee in this location.

- **Second Lead (Astoria):**
  Findings - Astoria follows as the second best-performing location, indicating a growing or stable customer base. Astoria's performance could be driven by its residential appeal, a mix of regular customers, and possibly less competition compared to other areas.

- **Overall Consistency Across Stores:**
  Findings - While Hell's Kitchen and Astoria take the lead, all store locations are performing significantly well and show similar trends. This indicates consistent customer satisfaction and demand across locations, showcasing the brand's strength and the appeal of its offerings.

5. What is the average price/order per person? Which products are the bestselling in terms of quantity and revenue?

- **Average Price per Person ($4.69):**
  The average spend is moderate, showing a balance between affordability and perceived value.
- **Average Order Size (1.44):**
  Most customers buy one product with occasional add-ons.

- **Bestselling Product by Quantity (Brewed Chai Tea):**
  Brewed Chai Tea dominates with approximately 26.25k units sold.

- **Top Product by Revenue (Barista Espresso - $91.41k):**
  Barista Espresso generates the most revenue, highlighting its premium pricing.

6. How do sales vary by product category and type?

- **Sales by Product Category (Coffee Products - 39%):**
  Findings - Coffee products dominate the sales distribution, accounting for 39% of total sales.

- This indicates a strong customer preference for coffee as the primary choice, reinforcing its position as the core offering. It also suggests that the coffee category is a significant driver of revenue, making it a focal point for marketing and menu strategy.

- **Top Product Type (Barista Espresso - 22%):**
  Findings - Barista Espresso is the standout product type, contributing 22% to overall sales. As a coffee product, its popularity highlights a demand for premium, barista-crafted beverages.
- Its high share of sales underlines its status as a customer favourite and a critical contributor to revenue.