**Maven Roasters Coffee Shop Sales Analysis**

**Objective**

The objective of this report is to analyse the sales trends, busiest days of the week, and product performance for Maven Roasters, a fictitious coffee shop operating out of three locations in New York City. The analysis aims to provide actionable insights that Maven Roasters can use to optimize business operations and maximize revenue.

**Tools Used**

The analysis and visualization in this report were performed using **Microsoft Excel.**

**Data Overview**

The dataset used for this analysis includes transaction records containing the following information:

* **transaction\_id**: Unique sequential ID representing an individual transaction.
* **transaction date**: Date of the transaction (MM/DD/YY).
* **transaction time**: Timestamp of the transaction (HH:MM:SS).
* **transaction\_qty**: Quantity of items sold.
* **store\_id**: Unique ID of the coffee shop where the transaction took place.
* **store\_location**: Location of the coffee shop where the transaction took place.
* **product\_id**: Unique ID of the product sold.
* **unit\_price**: Retail price of the product sold.
* **product\_category**: Description of the product category.
* **product\_type**: Description of the product type.
* **product\_detail**: Description of the product detail.

**Recommended Analysis**

* How have Maven Roasters sales trended over time?
* Which days of the week tend to be busiest, and why do you think that's the case?
* Which products are sold most and least often? Which drive the most revenue for the business?

**Key Performance Indicators (KPIs)**

* **Sales**: $6,98,812.33
* **Footfall**: 149116
* **Average Bill**: $4.69
* **Average Order**: 1.44

**Key Insights**

* **Sales Trends**: Sales tend to peak during the hours of 7 am to 10 am, indicating a strong breakfast and morning rush.
* **Busiest Days**: Mondays, Thursdays, and Fridays emerge as the busiest days overall.
* **Top Five Products**: The top five products driving revenue are Brewed Chai Tea, Espresso, Gourmet Brewed Coffee, Brewed Black Tea, and Hot Chocolate. Espresso stands out as the highest revenue generator.
* **Product Categories**: Coffee and tea emerge as the top-performing product categories, while packaged chocolate ranks as the lowest-performing category, suggesting potential areas for improvement or diversification.
* **Location Performance**: All three locations contribute equally on average to the total revenue, indicating a balanced performance across Lower Manhattan, Astoria, and Hell's Kitchen.

**Recommendations**

1. Allocate staff and resources on Mondays, Thursdays, and Fridays to manage the increased demand, particularly during peak hours of 7 am to 10 am. Since the peak sales hours are in the morning, consider optimizing marketing efforts and promotions during this time to maximize revenue.
2. Considering the sales decline trends, evaluate the feasibility of adjusting closing times to optimize resource utilization.
3. Capitalize on the popularity of Brewed Chai Tea, Espresso, and Gourmet Brewed Coffee by implementing promotions or special offers to boost sales further. While packaged chocolate currently ranks lowest, explore ways to enhance the chocolate offerings to potentially increase sales in this category.
4. Optimize inventory management, ensuring that the most popular products are well-stocked during peak hours and days.

**Conclusion**

The analysis of Maven Roasters' sales data provides valuable insights into sales trends, busiest days of the week, and product performance. Understanding these patterns can inform strategic decisions regarding inventory management, marketing initiatives, and operational planning to optimize business performance.