

# Coffee Shop Sales Analysis Report

## 1.Intoduction:-

This report presents a comprehensive analysis of sales transactions for **Maven Roasters**, a fictional coffee shop chain operating across three prominent locations in New York City: Astoria, Hell's Kitchen, and Lower Manhattan. The goal of this analysis is to uncover business insights using transactional data that includes product-level details, timestamps, sales amounts, and customer footfall. The analysis has been visualized through a dynamic and interactive dashboard built in **Microsoft Power BI**, offering business stakeholders an intuitive way to explore trends and performance metrics.

The data used for this report covers several months of sales activity, enabling us to identify trends over time, seasonal patterns, product preferences, and customer behaviors. The dashboard visualizations offer clarity on sales distribution by product category, sales performance across different store locations, revenue contributions, preferred order sizes, and foot traffic variations throughout the week and day.

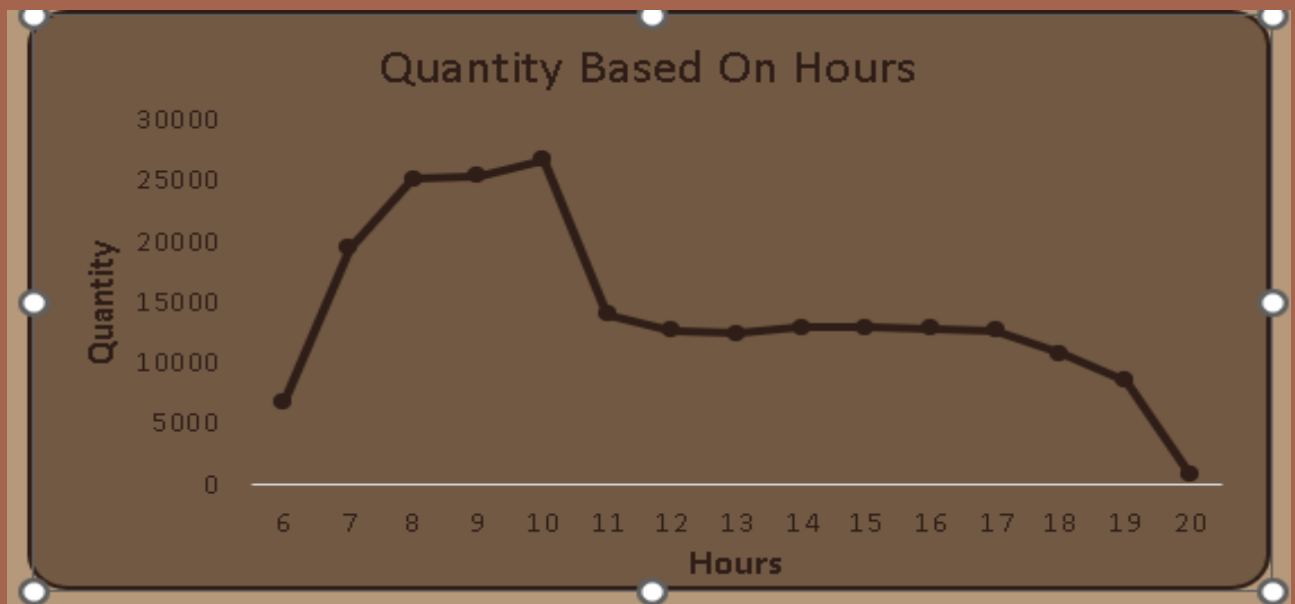
This analytical review will answer key business questions such as:

- How have sales evolved over time?
- Which days of the week experience the highest customer engagement and why?
- Which products are most and least popular, and which categories contribute the most to overall revenue?

By examining these dimensions, this report aims to empower decision-makers with data-backed recommendations for improving operations, optimizing inventory, enhancing marketing strategies, and ultimately increasing profitability. The insights derived from this report can be leveraged by store managers, marketing teams, and executive leadership to refine sales strategies, tailor customer experiences, and boost overall business efficiency.

In the sections that follow, we will delve into specific visualizations from the dashboard, interpret the data patterns, and provide practical business conclusions. Through this analysis, Maven Roasters can better understand its customer base, identify growth opportunities, and stay competitive in a bustling urban coffee market.

## 2. Sales Trend Over Time:-



Understanding sales distribution across different hours of the day provides valuable insight into **customer behavior**, **staffing requirements**, and **operational efficiency**. The "Quantity Based on Sales" line chart in the dashboard reveals clear patterns in hourly sales activity throughout the day.

The data shows that **sales begin to rise sharply from 6 AM**, reaching their **peak between 8 AM and 11 AM**. This morning window accounts for the **highest volume of orders**, indicating a strong breakfast and morning coffee demand. This aligns with typical customer routines—many individuals seek coffee and snacks on their way to work, during early meetings, or as part of their morning rituals.

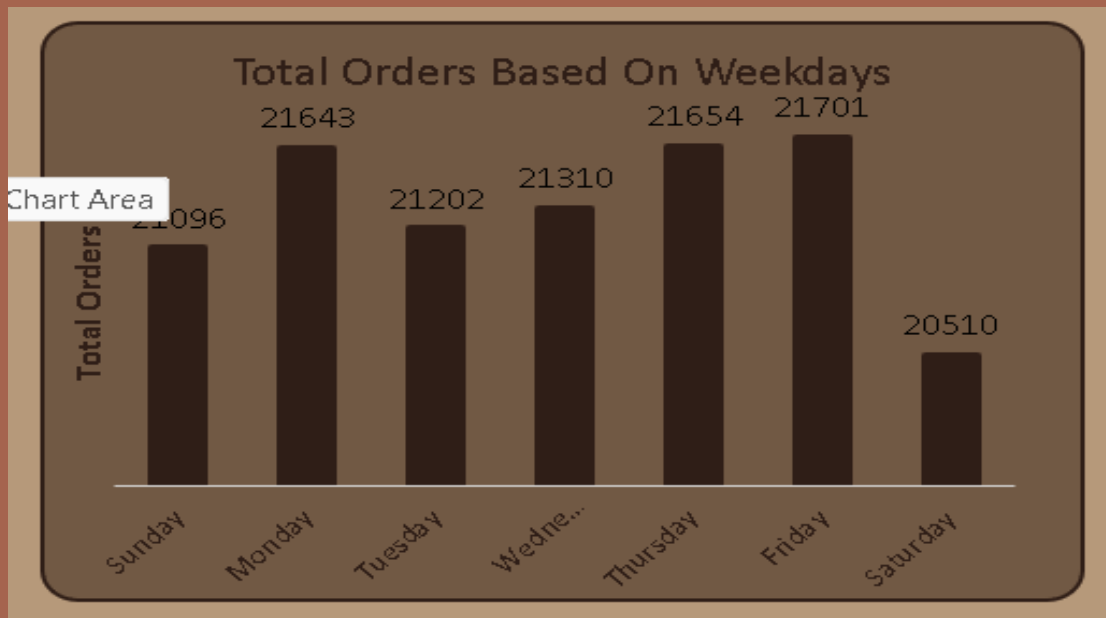
After 11 AM, sales quantity declines significantly and stabilizes at a lower level throughout the afternoon and evening. While there is still steady demand during mid-day and early evening hours, it does not match the intensity of the morning rush.

This hourly trend highlights several key business implications:

- **Morning hours (especially 8 AM–11 AM)** are critical for revenue generation and require optimal staffing, quick service turnaround, and well-stocked inventory.
- **Promotions or loyalty programs** targeted at morning commuters could further drive sales during peak hours.
- Opportunities exist to **boost mid-day and evening sales** by introducing lunch combos, dessert pairings, or happy-hour style beverage offers.

In conclusion, the hourly sales trend underscores the importance of the **morning rush** in driving daily revenue and provides a basis for time-specific operational planning and marketing strategies.

### 3. Busiest Days of the Week



Analyzing daily sales distribution allows businesses to understand **weekly footfall cycles**, enabling smarter staffing, inventory planning, and targeted marketing. For Maven Roasters, the “**Total Orders Based on Weekdays**” chart reveals distinct patterns in customer activity throughout the week.

The data indicates that **Thursday and Friday are the busiest days**, with each registering over **21,700+ orders**, the highest across the week. This trend suggests increased customer activity as the weekend approaches, likely influenced by:

- Increased social interactions (e.g., coffee with colleagues or friends)
- End-of-week workplace routines
- Higher willingness to spend on indulgent items like premium drinks or bakery products

**Wednesday also sees healthy traffic**, potentially as a mid-week break for customers. On the other hand, **Sunday and Monday** tend to be the slowest days, with fewer transactions recorded. This could be due to:

- Reduced commuting or office attendance on these days
- Lower urgency for early-morning caffeine among the customer base

These insights carry important operational implications:

- **Staffing and resource allocation** should be maximized on Thursdays and Fridays to handle high demand.
- Promotional campaigns or product launches can be timed for late-week days to reach more customers.
- **Incentives or discounts on low-traffic days** (like Mondays) can help balance the weekly distribution and increase overall revenue.

In summary, understanding the busiest days empowers Maven Roasters to fine-tune its operations and marketing efforts to align with natural customer behavior, ensuring both efficiency and customer satisfaction.

#### 4.Top Product Sales & Revenue



The bar chart titled "**Top 5 Categories Based on Orders**" highlights the most popular individual coffee product categories at Maven Roasters, measured by total revenue generated. These categories reflect customer preferences and demand patterns across the three store locations.

 **1. Ethiopia – \$42,304.10**

Ethiopia stands out as the **most popular product category**, generating the highest revenue among the top five. Known for its rich flavor profile and premium origin, this suggests that customers are willing to pay more for quality and specialty coffee options.

## 2. Sustainably Grown Organic – \$39,065.10

This category performs exceptionally well, indicating strong customer interest in ethically sourced and environmentally friendly products. The trend shows rising awareness and preference for sustainable choices.

## 3. Jamaican Coffee River – \$38,781.20

A niche but high-performing option, Jamaican Coffee River ranks third, suggesting that unique and exotic flavors resonate with a segment of loyal or adventurous customers.

## 4. Brazilian – \$37,746.50

A classic and globally recognized coffee type, Brazilian coffee continues to perform consistently. Its balanced flavor and affordability make it a staple choice for a wide customer base.

## 5. Latte – \$36,369.80

Though slightly behind the others in revenue, the Latte remains a **go-to beverage** for many. It appeals to both traditional and younger demographics and is often consumed as a sit-down or casual beverage.

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## Strategic Recommendations

- **Highlight Ethiopia and Sustainable offerings** as premium options to boost high-margin sales.
  - Consider bundling popular items like **Latte and Brazilian** coffee with bakery products during morning or lunch hours.
  - Promote **Jamaican Coffee River** through storytelling and brand experience to attract connoisseurs or new customers.
  - Use this data to **optimize inventory and pricing**, ensuring that the top 5 categories are always available and strategically featured in the menu or promotions.
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## Summary

These top 5 product categories offer a mix of **premium quality, sustainability, and classic appeal**, forming a strong foundation for both day-to-day sales and long-term customer loyalty. Understanding and leveraging these preferences will help Maven Roasters refine its product focus and drive continued growth.