

A thick dark brown vertical bar runs down the left side of the page. An orange arrow points from the left towards the title. In the bottom left corner, there are several thin, curved, light gray lines that sweep upwards and to the right.

June 2025

# Coffee Shop Investment Analysis

## Executive Summary

This report presents an analytical overview of sales data from a coffee shop chain in the United States. The primary objective is to identify the most profitable store locations and product categories to support informed investment decisions. Insights are derived through data-driven methods using R programming tools, providing a foundation for strategic business planning.

## Objective

The main goal of this analysis is to determine which coffee shop locations and product types offer the greatest potential for profitability and investment. By leveraging historical sales data, this analysis aims to guide decisions regarding store expansion, product focus, and operational optimization.

## Dataset Overview

The dataset comprises detailed sales transactions from multiple store locations across the U.S. Each record includes:

- **Store:** Store name or unique identifier
- **Product:** Beverage type (e.g., coffee, espresso, tea, etc.)
- **Sales:** Revenue generated per transaction
- **Date / Time:** Timestamp of each sale
- **Units Sold:** Number of items sold

Data analysis was conducted using **R**, primarily utilizing the 'dplyr' package for data manipulation and ggplot2 for visualizations and ChatGPT for documentation assistant.

**Data Source:** [Kaggle - Coffee Sales Dataset](#)

# Key Insights

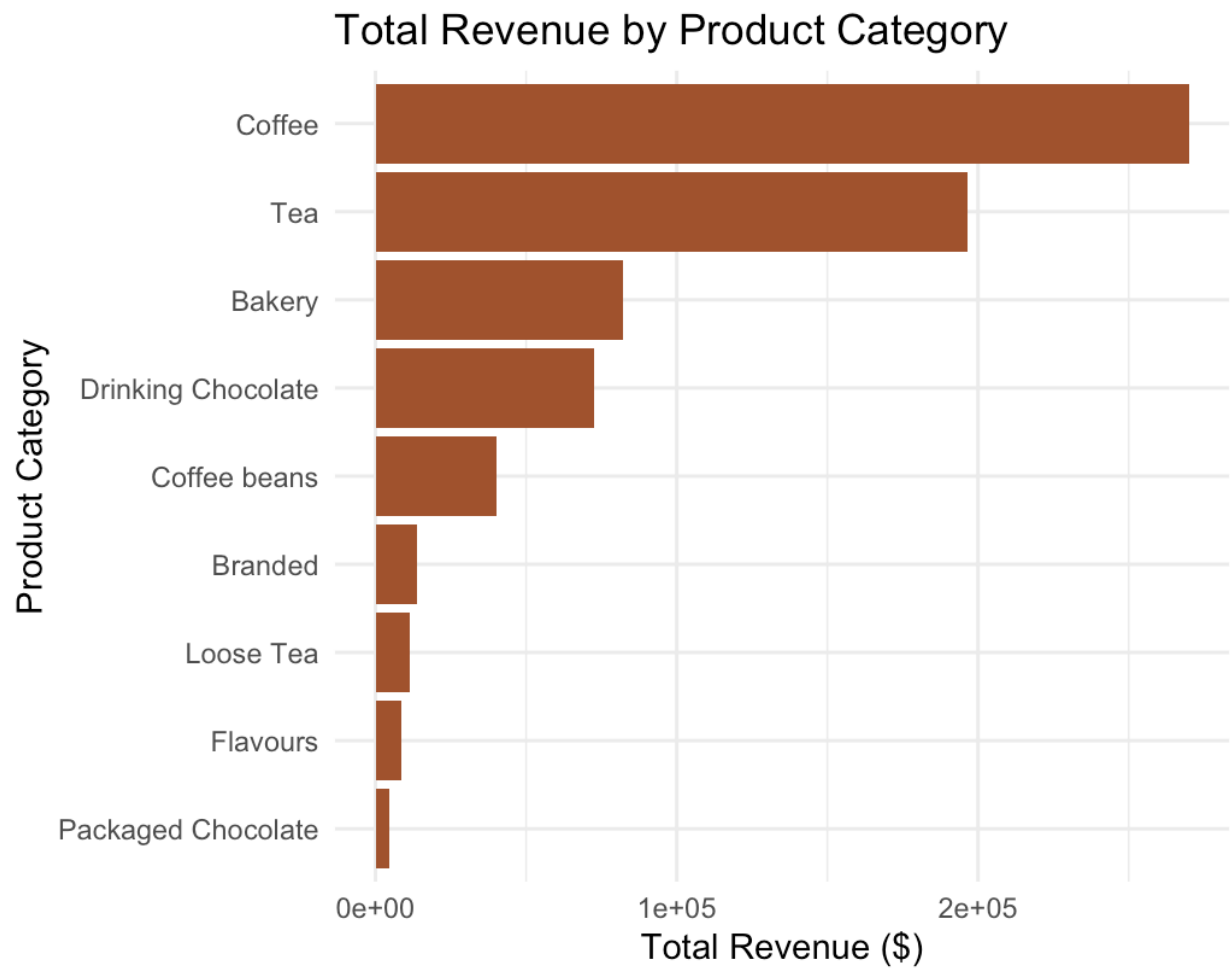
## . Top Performing Store

- The **Hell's Kitchen** location consistently generates the highest monthly revenue across all branches.
- This location demonstrates strong customer demand and operational efficiency, making it an ideal model for replication.



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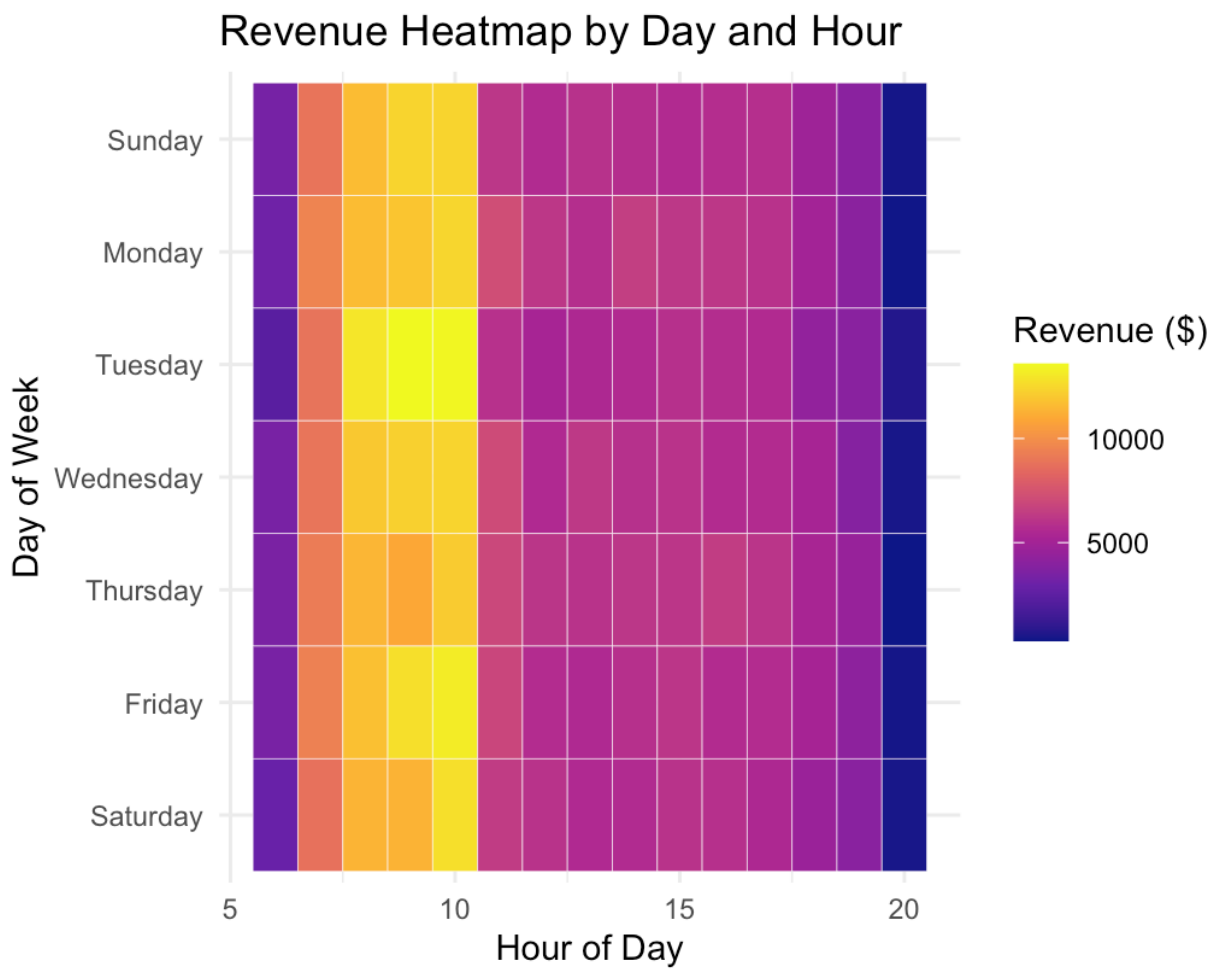
- **Most Profitable Product**
- **Coffee and Tea** are the top-performing products in terms of total revenue.



## Peak Sales Periods

Sales volume peaks during **weekend mornings**, particularly between **7:00 a.m. and 10:00 a.m.**

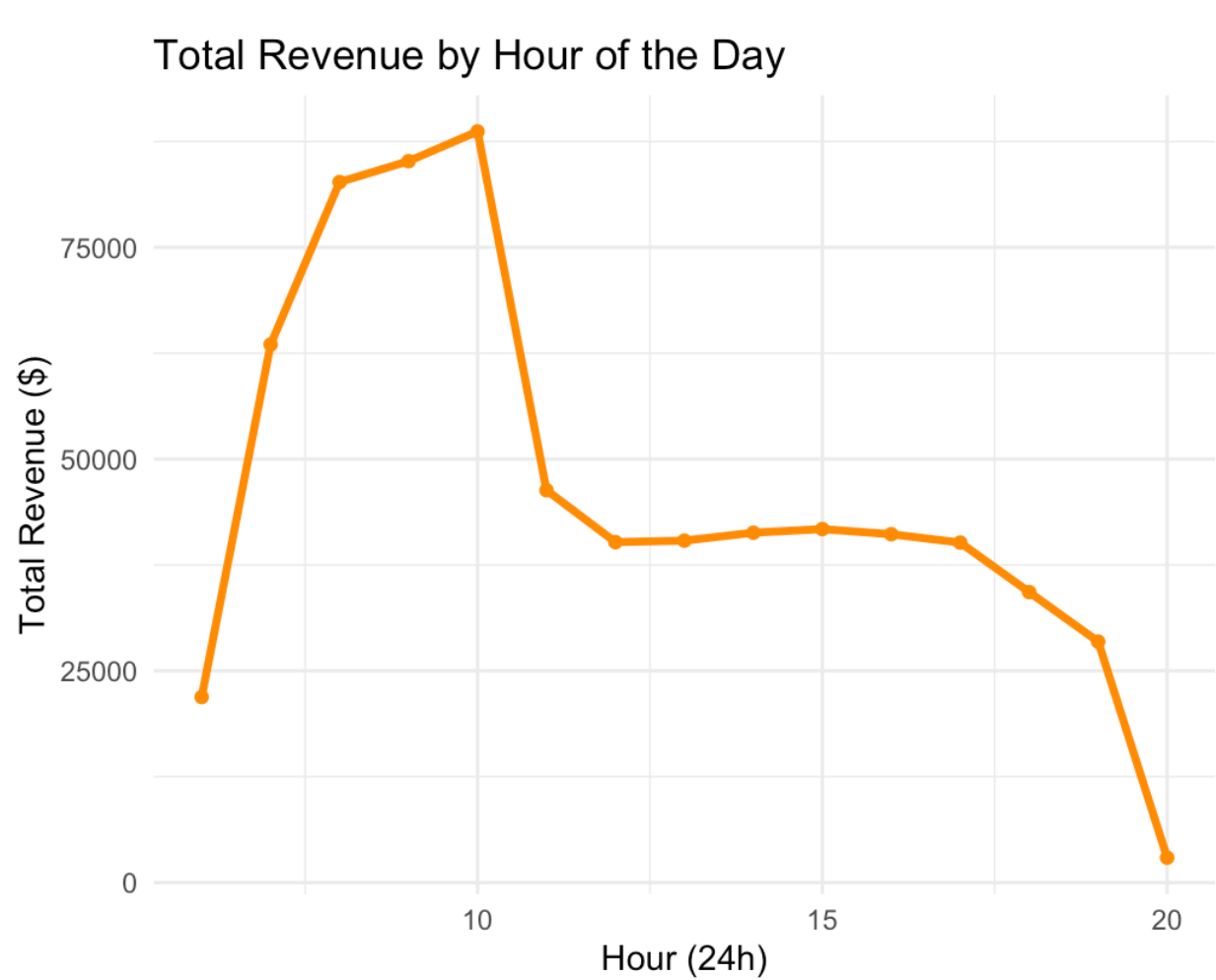
**Implication:** These patterns highlight critical windows for resource allocation and promotional campaigns.



## Revenue by hour

Reveals a clear **morning sales peak between 7:00 a.m. and 10:00 a.m.**

These patterns suggest that **morning hours are the most critical for revenue generation**, and coffee shops should prioritize staffing, inventory preparation, and promotional efforts during this window. Additionally, optimizing service speed and capacity during peak hours could improve customer satisfaction and maximize throughput.



## Conclusion

Based on the data analysis, the following conclusions can be drawn:

- The **Hell's Kitchen** store emerges as the most attractive investment opportunity due to its consistent performance.
- **Coffee** and **Tea** categories should remain the central focus of promotional and sales strategies.
- **Operational resources**—including staffing and inventory—should be optimized to meet demand during peak periods, especially weekend mornings.

These insights offer practical guidance for expanding the business and improving profitability through evidence-based strategies.

## Strategic Recommendations

- **Expansion Strategy:** Consider replicating the Hell's Kitchen store's model in new locations.
- **Product Promotion:** Launch targeted campaigns focused on high-revenue items such as Coffee and Tea.
- **Operational Alignment:** Schedule staffing and supply management to coincide with known peak demand windows.

## Future Considerations

To enhance the scope and accuracy of future analyses, it is recommended to:

- Integrate **cost data** to calculate net profitability
- Include **geographic and demographic** factors for market targeting
- Analyze **seasonal trends** to optimize long-term planning

This report serves as a foundational step in leveraging data analytics for strategic investment in the coffee shop sector.