

## Executive Summary

The following report outlines a series of data-backed strategic recommendations using data inference techniques from the Python Polars package. This report makes a number of key findings including a need to apply Jaffle's Brooklyn store's success to the Philadelphia store, increasing margins on food products and implementing customer retention programs. Please see the appendix for all figures.

From September 2016 to August 2017, the Jaffle Shop attracted \$6.604 million in revenue. Jaffle's Philadelphia stores raked in 65% of sales with \$4,321,557, while New York made \$2,282,262. During the captured time period, a steady incline in sales can be observed, with the final month of August 2017 recording the highest sales at \$930,323 (see fig.1). In terms of a weekly breakdown across both shops, Wednesday is typically the store's busiest day, accumulating \$1,083,457 in sales, yet Tuesday, Thursday, and Friday sales follow closely (fig.2).

In terms of product performance, beverages (\$3,983,620) sold more than Jaffle-listed products (\$2,288,090), suggesting a customer preference for stocked beverages over sandwiches (see fig.3). A possible explanation is that the average price for beverages is \$5.60, while the average price for sandwiches is \$11.99. In terms of which store has the highest revenue per day since opening, New York is the top performer with \$2,386 per day, despite its later opening (see fig.4). It is worth noting that when adjusted for tax, Brooklyn is faced with a lower tax rate of four percent, while Philadelphia faces a tax rate of six percent.

In terms of customer behavior, average purchase values are around \$10.45 (see fig. 5), with a base of 920 customers who regularly frequent the shop by making more than one purchase. To increase this number, Jaffle may wish to consider a rewards program to boost customer loyalty. Fortunately, the top 10 customers each spent between \$2,371 and \$2,626 during the year.

With regard to profitability, the "Nutella Phone Who Dis" had the greatest profit margin at 89%, followed by "For Richer or Purover" at 88%, and "Tangeroo" in third with 86%. According to the data, profit margins ranged anywhere from 89% to 65% across all products sold. Furthermore, in terms of profitability between stores it remains relatively even with Philadelphia and Brooklyn posting margins of 79%. To understand what is driving profitability a scatter plot mapping order size vs. profitability can be considered. Referring to figure 6 one can see that the concentration of higher gross margins can be made in the \$2 to \$6 range perhaps suggesting that the store should lean into maximising its beverage sales.

## Recommendations.

Team Blue One consultants recommend a couple of different strategies to increase market share. Firstly, it can be observed that the Brooklyn store has higher revenue per day since opening compared to the Philadelphia store. Blue One consultants would henceforth recommend that Jaffle consider investigating the operational strategies, marketing efforts, or customer demographics of the Brooklyn store that might be contributing to its higher revenue per day, and consider implementing these approaches in the Philadelphia store. See Figure 7 and 7.1 to observe the difference in revenues between the stores and projected revenue of the Philadelphia store.

The second recommendation is that Jaffle's beverages contribute significantly more to total revenue than Jaffle's food, despite the lower average product price. Leaning into this observed difference, Jaffle should seek to understand what's driving it in terms of sales volume and the popularity of individual beverage products. Possible reasons may include varied marketing, seasonality, or customer preferences. Once understood, Jaffle should aim to apply these insights to its food products and/or introduce new high-margin Jaffle products to balance revenue contribution across its two product categories. See Figure 8 for total revenue comparison between products.

The final recommendation is that while a significant number of customers are repeat customers, only a small group contributes a large portion of the total revenue. This concentration suggests that Jaffle should consider developing customer retention strategies to encourage repeat business, for example, loyalty programs, exclusive offers, or personalized communications. By understanding the needs and preferences of its top revenue-contributing customers, Jaffle can apply these insights across its wider customer base. See figure 9 to understand comparison of top 10 customers and figure 10 to see the Cumulative Revenue Contribution by Top 50% Customers.

## Appendix

\*Please note that all prices are given without appropriate decimal point i.e \$1200 equals \$12.00

Figure 1

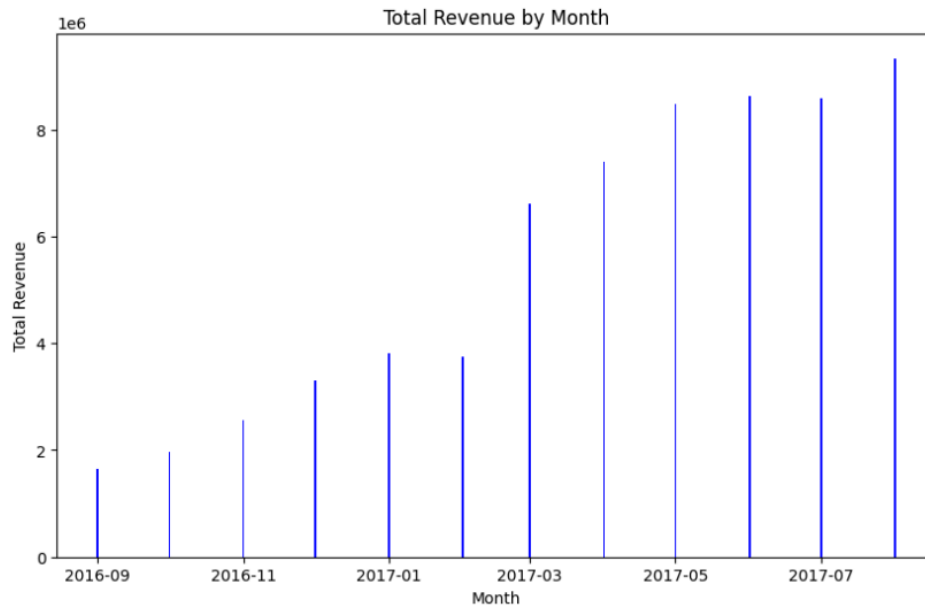


Figure 2

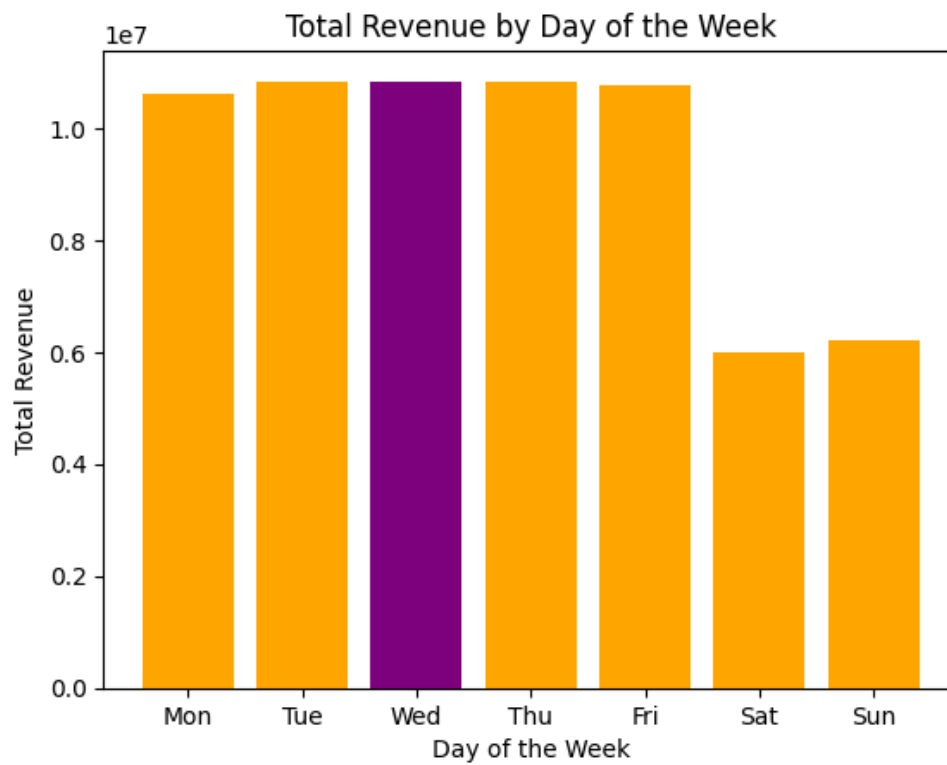


Figure 3.

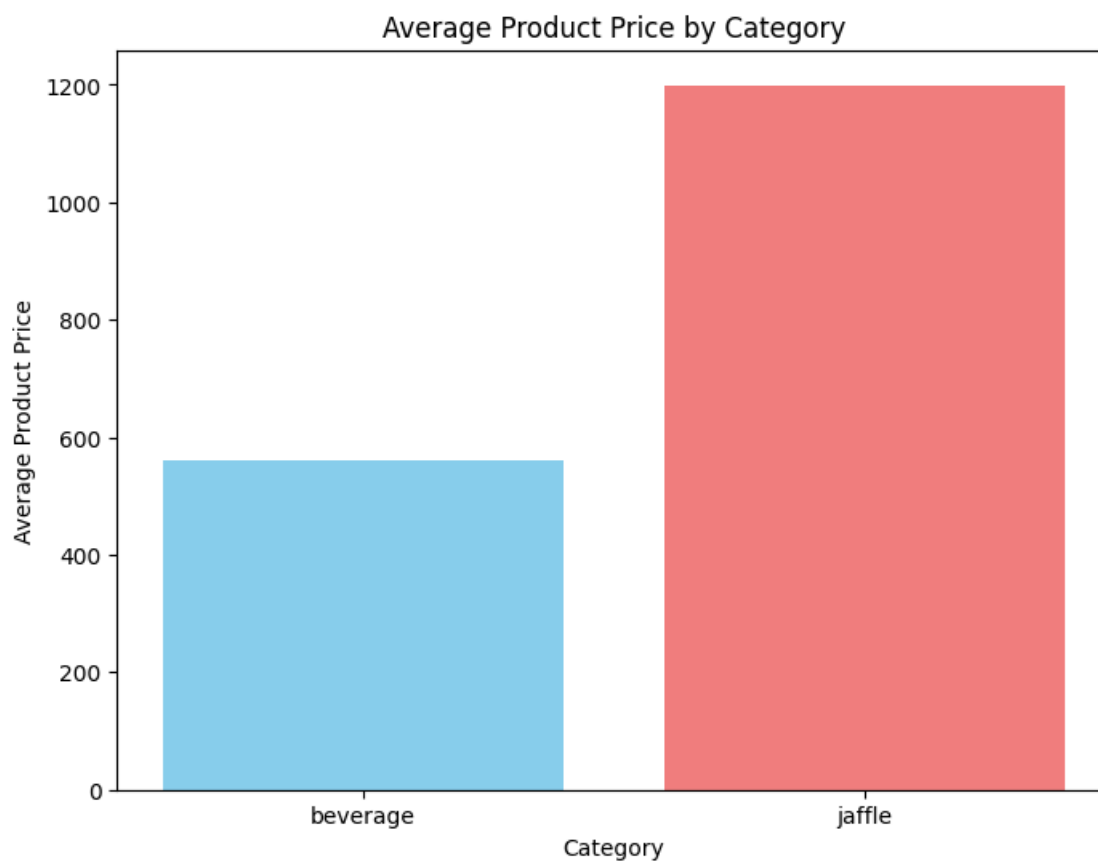


Figure 4

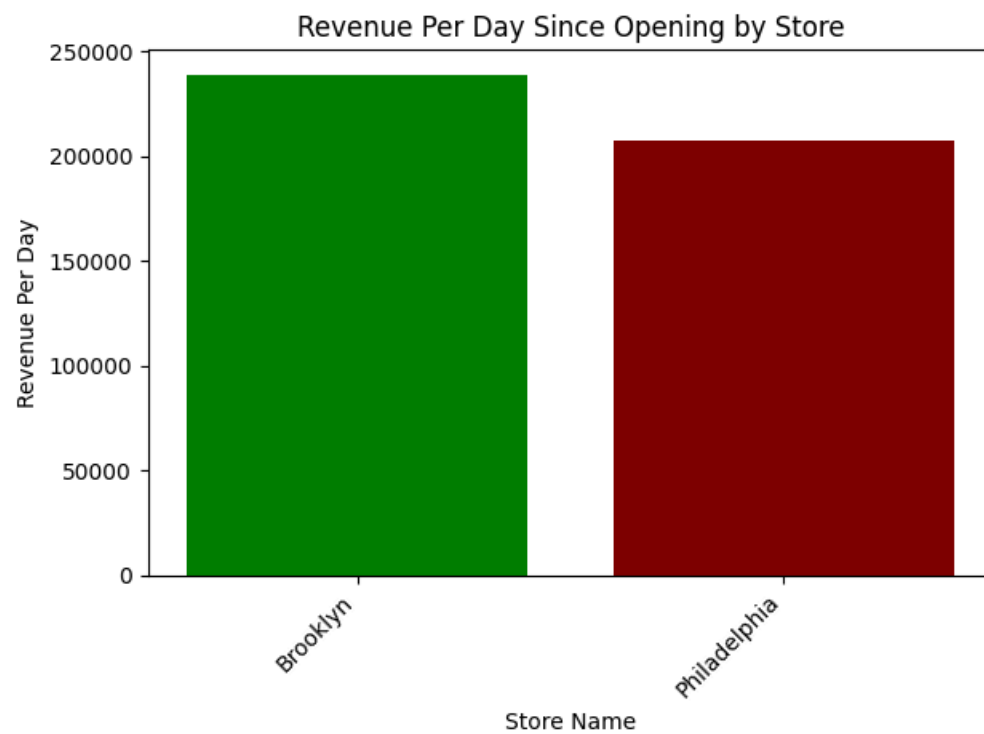


Figure 5

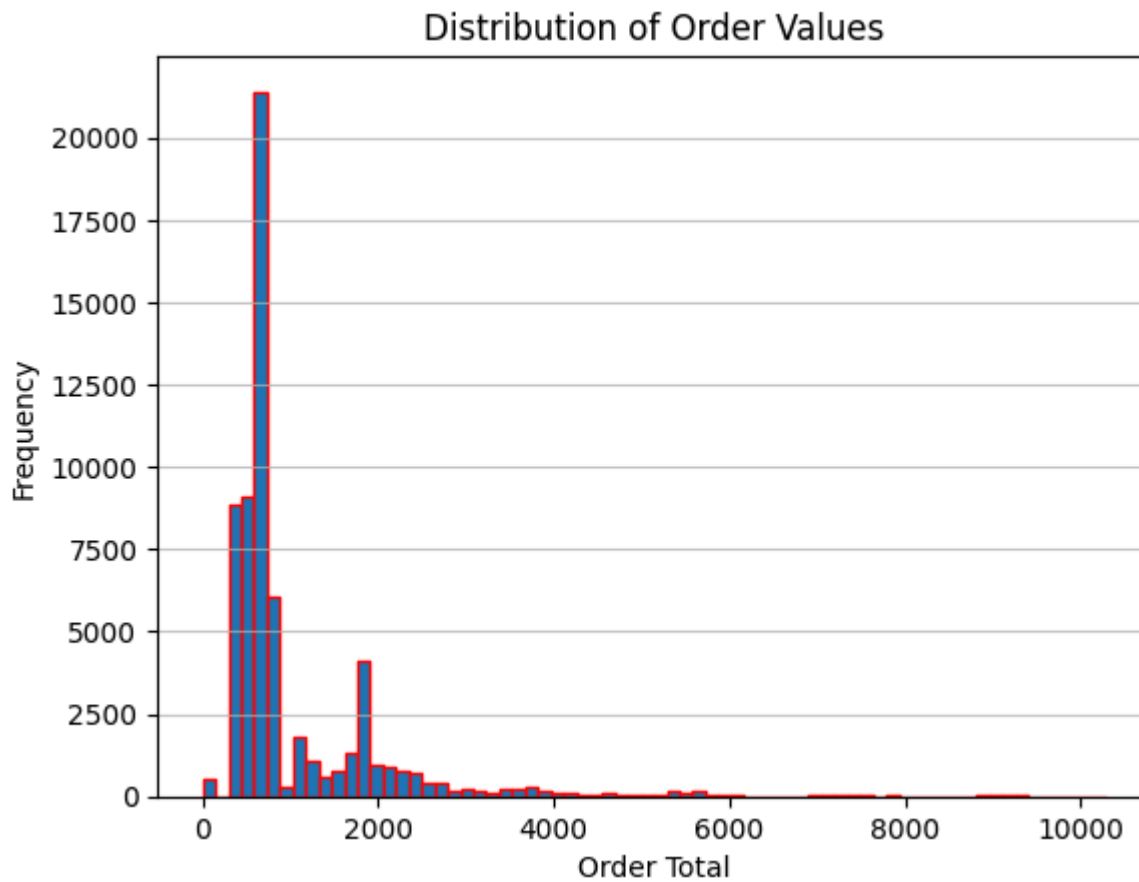


Figure 6

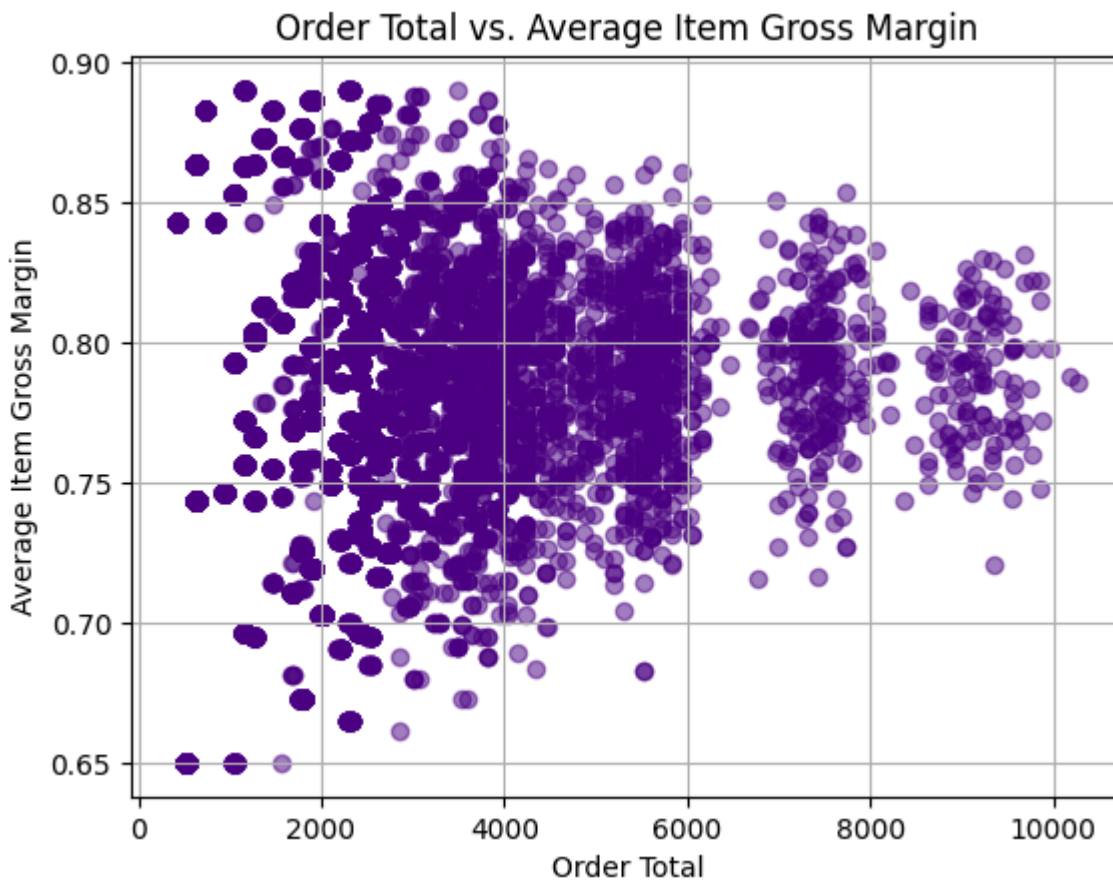


Figure 7

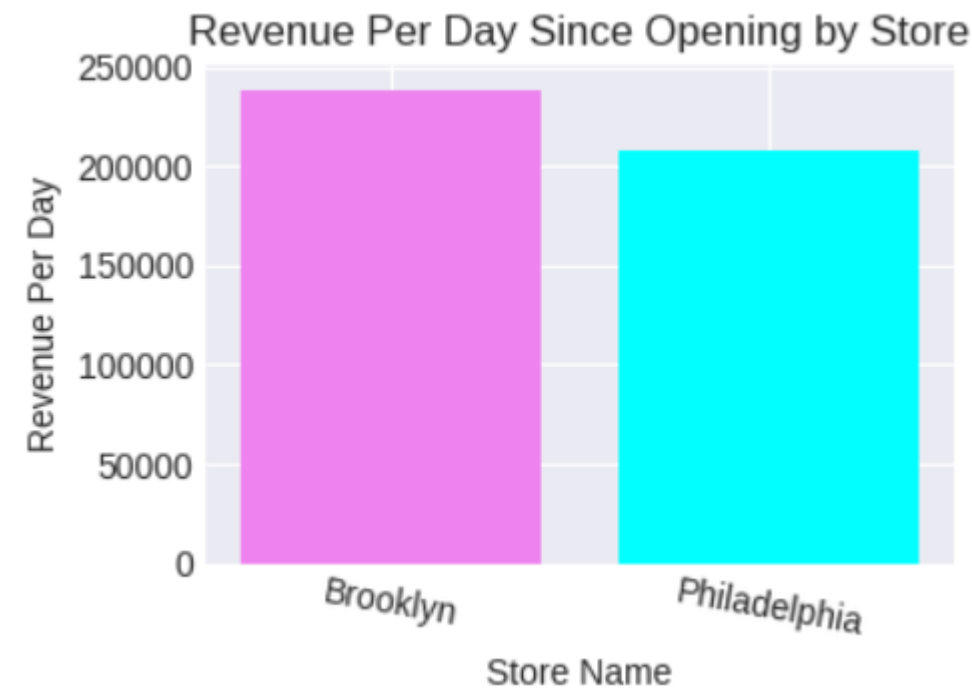


Fig 7.1

Estimated number of days to reach the target total revenue (49,648,658): 208.06 days

Current Philadelphia daily revenue: 207,708.92

Target Philadelphia daily revenue: 238,628.59

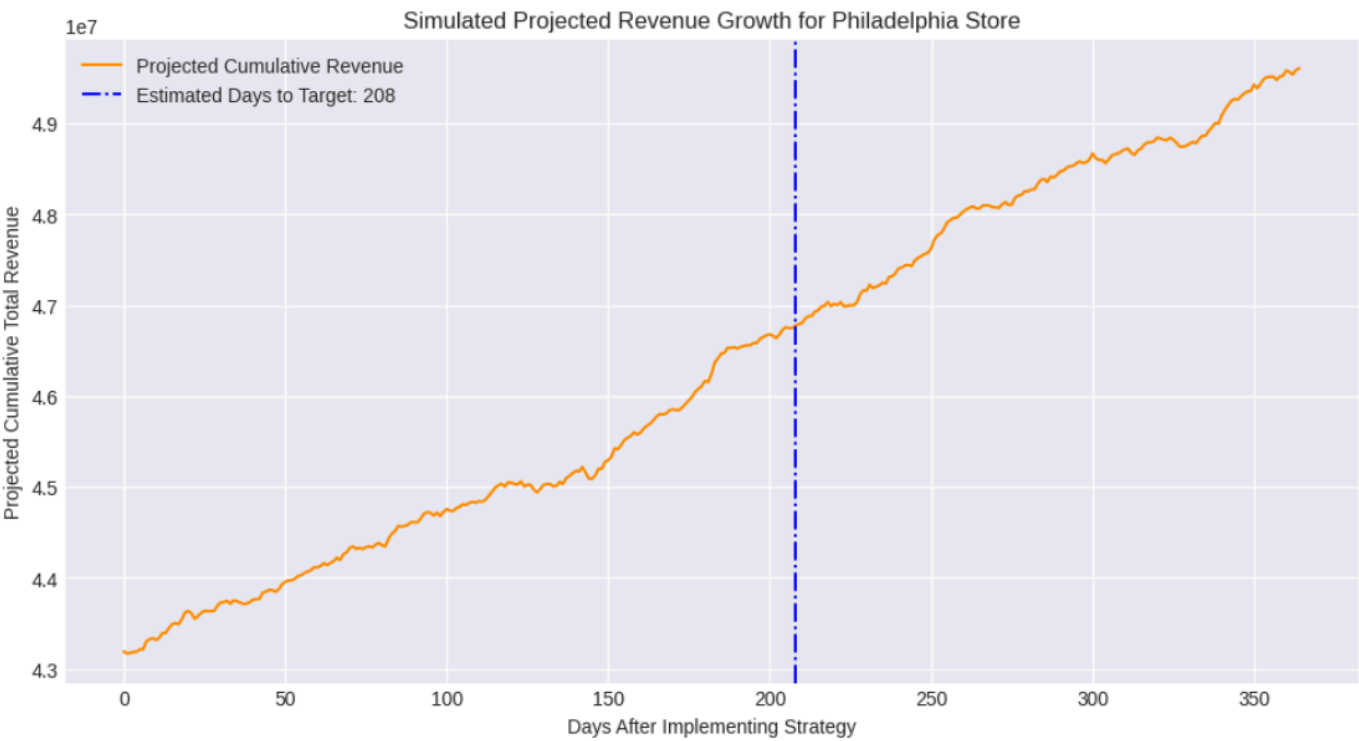


Figure 8

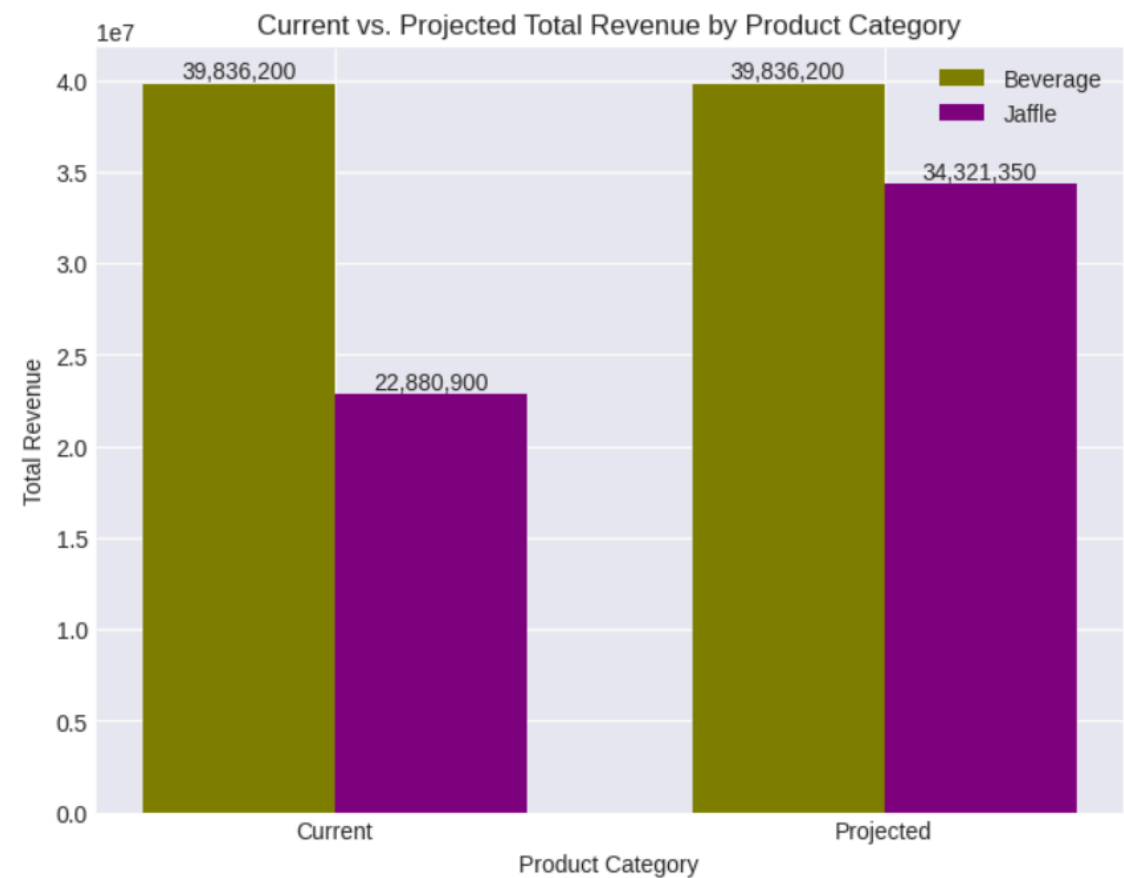


Figure 9

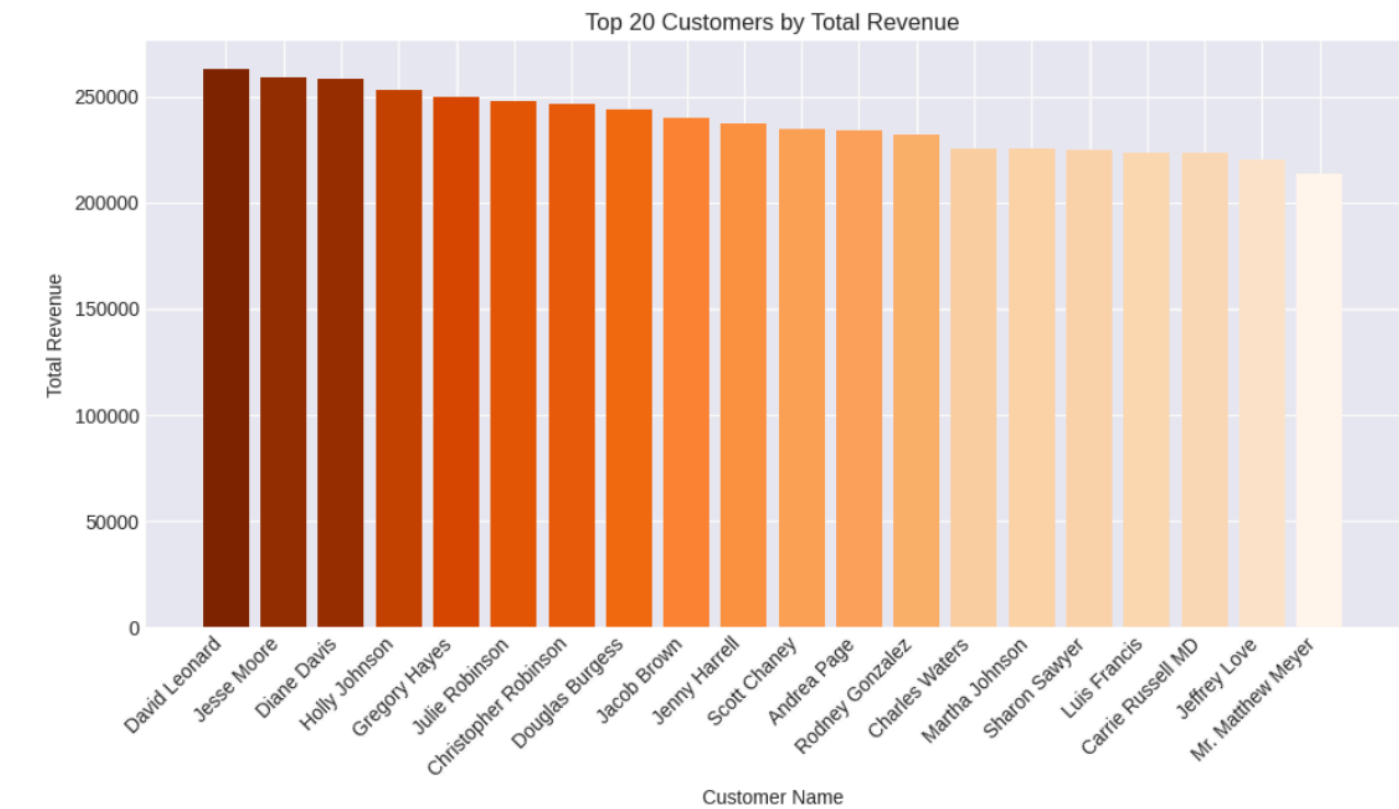


Figure 10

