

Key Insights and Recommendations

Dataset: Coffee chain company sales data

1. The key insights on the performance of the coffee chain company gained from the dataset.

Figure 1.1 reveals that from January 2012 to December 2012, the coffee chain company's actual profit was lower than the budgeted profit, indicating that the business's performance throughout 2012 was not profitable as expected. However, the company was overperformed from January 2013 to the end of 2013, with the actual profit gained was mostly higher than their budgeted profit. Overall, this company is still growing gradually.

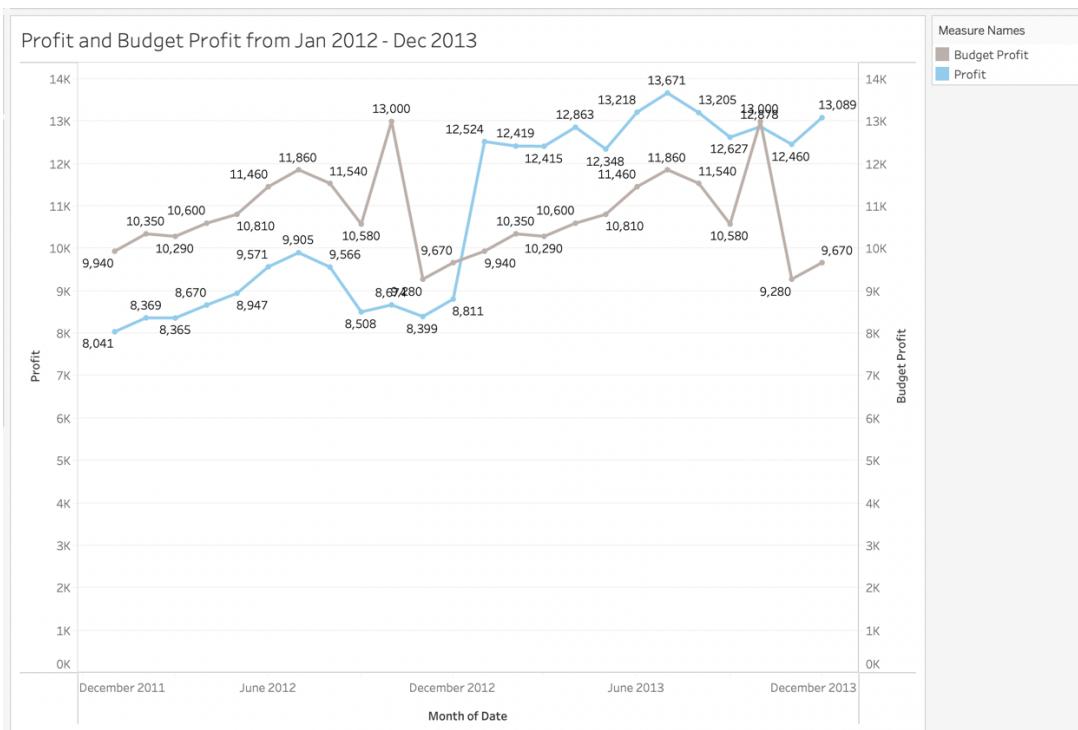


Figure 1.1: Total Profit vs Budget Profit of the coffee chain company from January 2012 to December 2013, indicating the overall performance over two years.

In addition, Figure 1.2 displays that the four markets had a relatively even distribution of sales according to the regions' acreage. However, the West market had high sales concentration in several postcodes. Also, the sales in the South market were distributed in scattered postcodes.

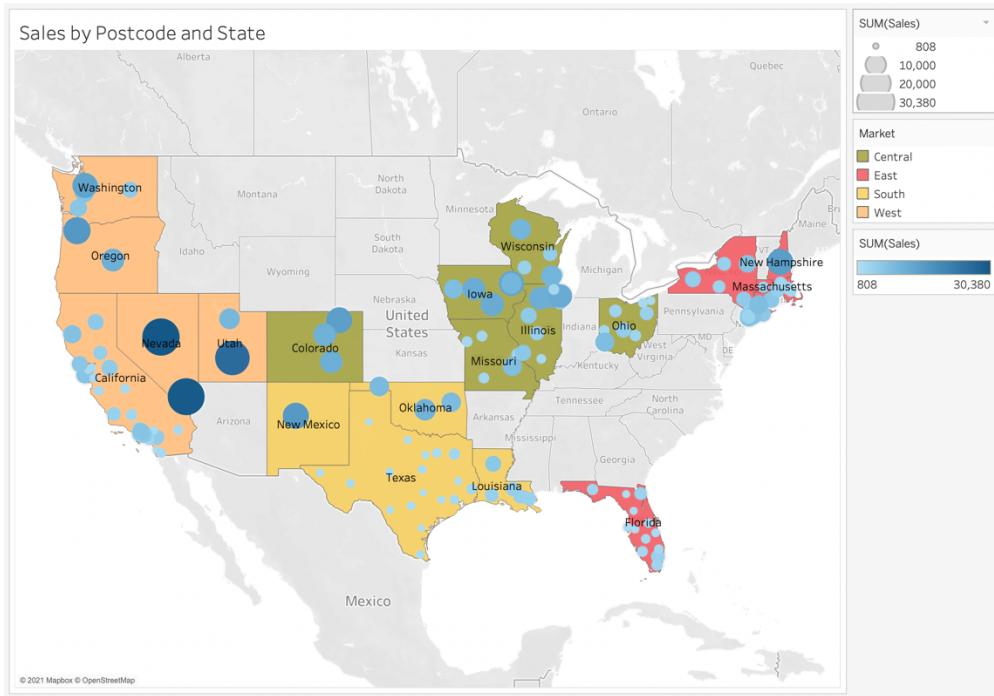


Figure 1.2: Sales were distributed over the four market.

Furthermore, referring to Figure 1.3, the sales per month of the coffee chain company did not experience much fluctuation during the year. However, there was a moderate increase in sales in July and August. This would demonstrate customers' buying patterns during the year, recommending the business to apply appropriate marketing strategies to upsell the products.

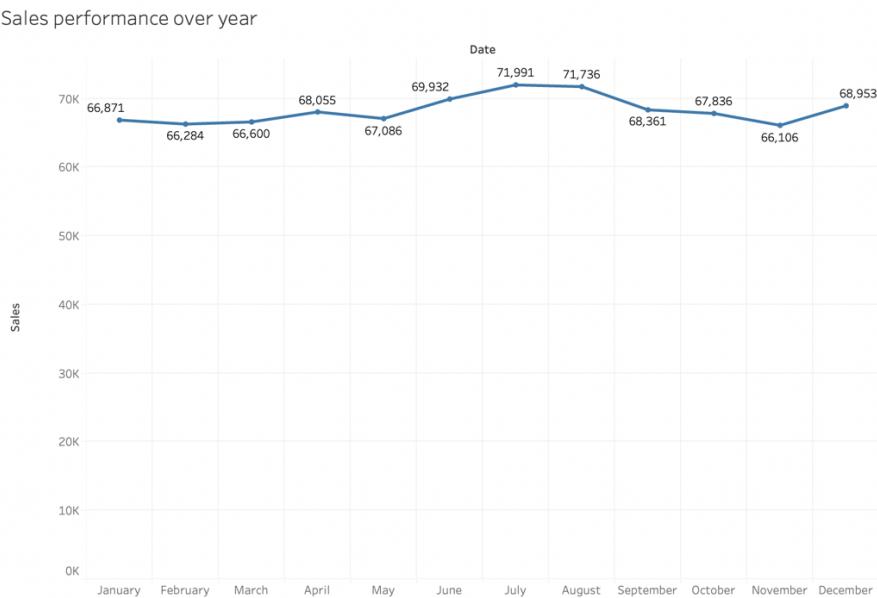


Figure 1.3: The coffee chain company's performance through sales in months.

Moreover, Figure 1.4 specifies that Colombian Coffee (\$128,311), Lemon Herbal Tea (\$95,926) and Caffe Mocha Espresso (\$84,904) had the highest sales. However, some products having

more sales did not have accordingly higher profitability, such as Caffe Mocha Espresso and Green Tea. Concurrently, these products also had considerably more Total Expense than the other products ranked closest to it. This high Total Expense can explain the low profitability of the products with high sales.

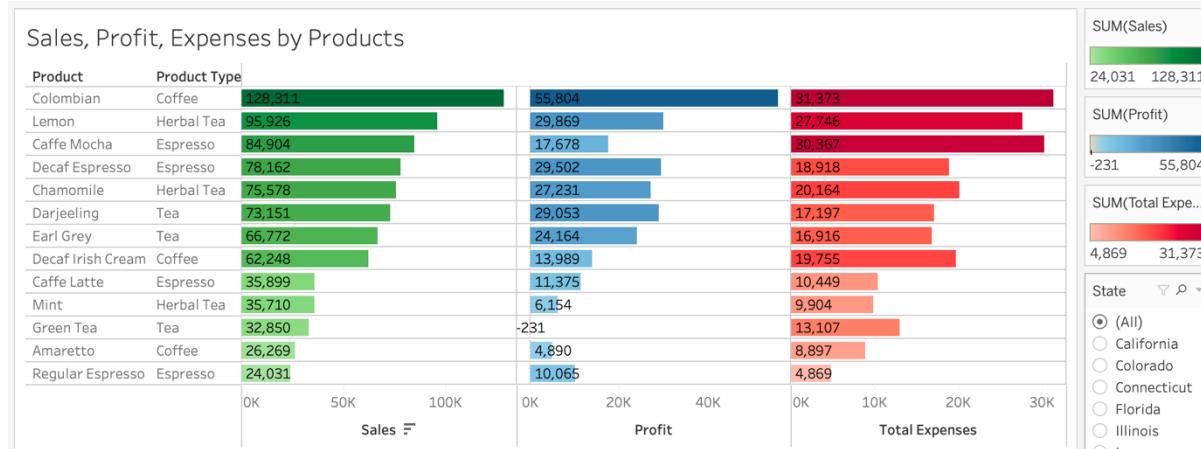


Figure 1.4: Total Sales, Profit, and Expense for each product from January 2012 to December 2013, sorting in total Sales descending order.

2. Functional & dynamic dashboard enables self-service business users with the capabilities to:

- A. Explore the profit vs sales of each market, states, and post-codes.**
- B. Explore the marketing investment, profitability and sales of a particular product(s).**
- C. Conduct 'what-if' scenarios to improve overall profitability of the company.**

Figure 2 shows the Tableau dashboard, which helps the users gain information about total profit and sales for each postcode (through scattered plot), market or state (through the bar chart). Users using the scatter plot can also explore the correlation between profit and sales of each market or state. Besides, the bar chart displays the total investment in marketing with associate sales and profit of each product. Also, a lines graph illustrates a 'what-if' scenario, assisting the users to figure out how the profit changes if increasing or reducing products supplied. Ultimately, the filter feature helps the users explore each state and market through both three graphs in the dashboard.

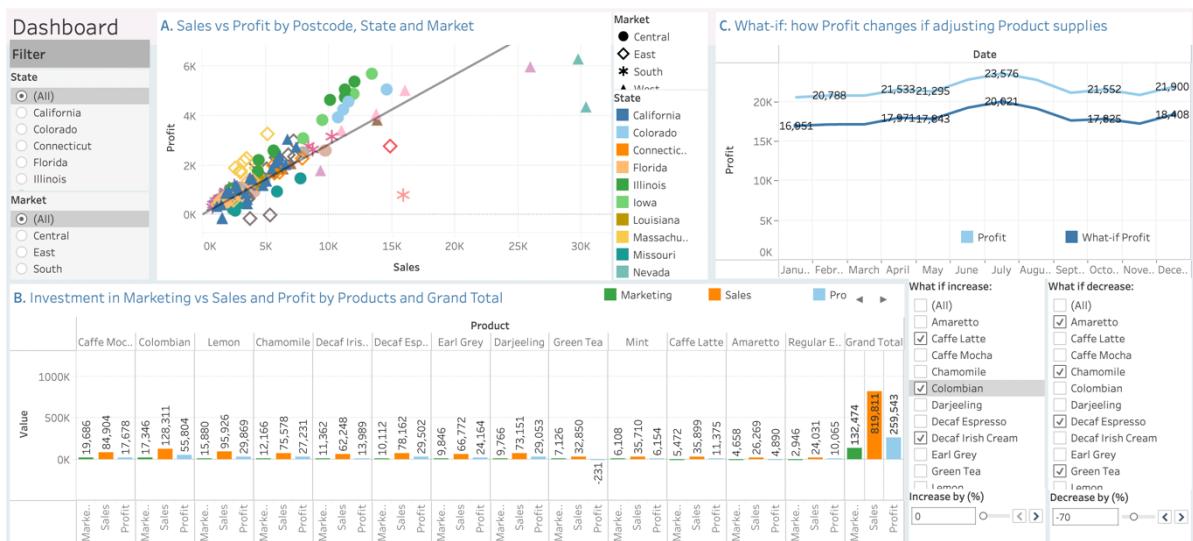


Figure 2: The functional and dynamic dashboard

3. Recommendations to the senior management of the coffee chain company

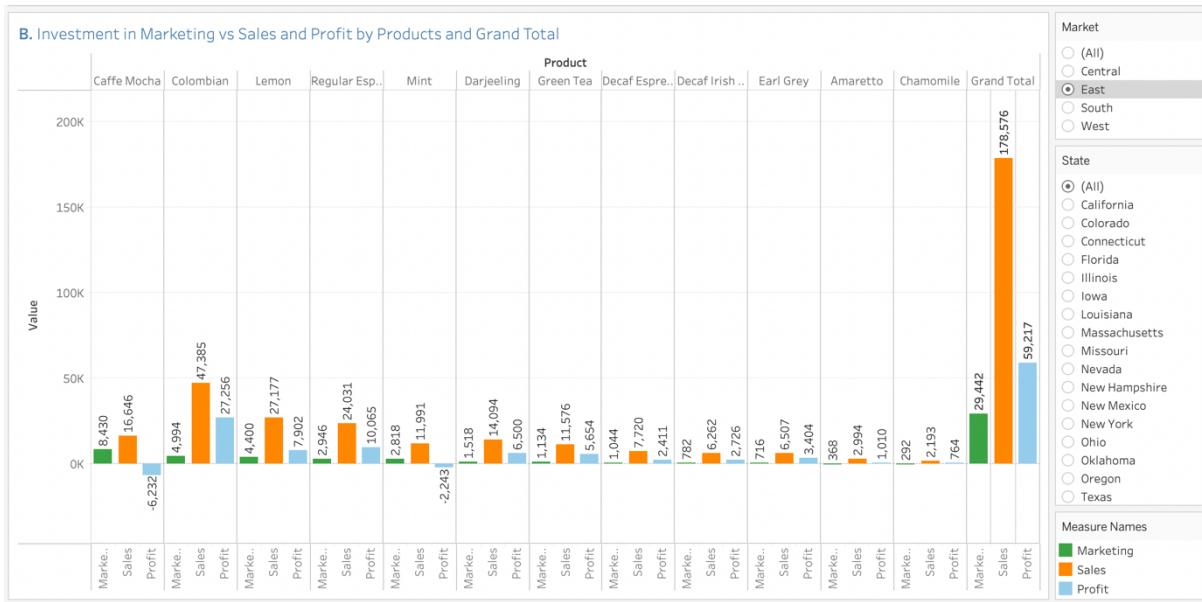


Figure 3.1: Investment in marketing, sales and profit of the products from January 2012 to December 2013 in the East market.

Firstly, Figure 3.1 illustrates that Caffe Mocha had the highest total investment in marketing in the East market. However, this product's total sales and profit were lower than some products having less marketing investment. Meanwhile, the East market had negative profits from this product, especially in New York, with a profit loss of \$6,354 (refer to Figure 3.2). Although the business already spent a lot in marketing for Caffe Mocha, this product remained unfavourable and unprofitable in this market, suggesting the manager discontinue this product from the East market.

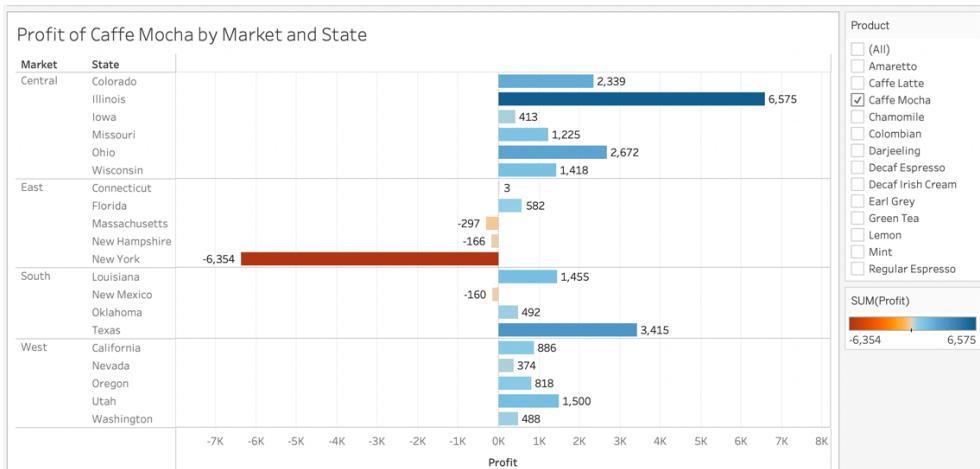


Figure 3.2: Profitability of Caffe Mocha per Market and State from January 2012 to December 2013.

Secondly, Figure 3.3 depicts the unusual performance of the Nevada state market. Despite the significant sales, the Nevada market's profit was still lower than the other markets, which had fewer sales. This negative performance might be due to the severe loss in the Green Tea product (\$10,980) (refer to Figure 3.4).

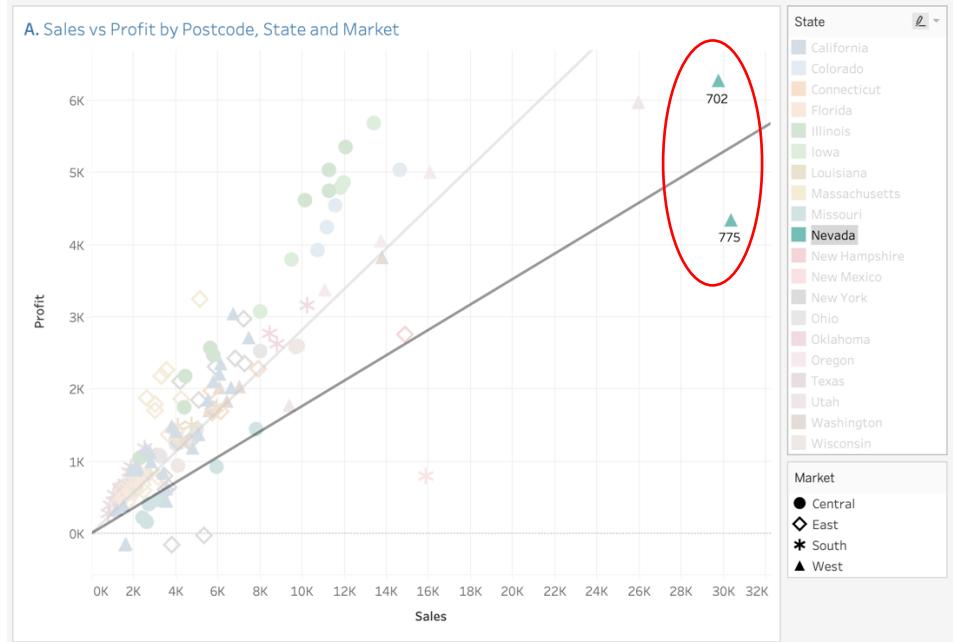


Figure 3.3: Sales vs Profit of each Postcode, with the postcodes in Nevada state highlighted.

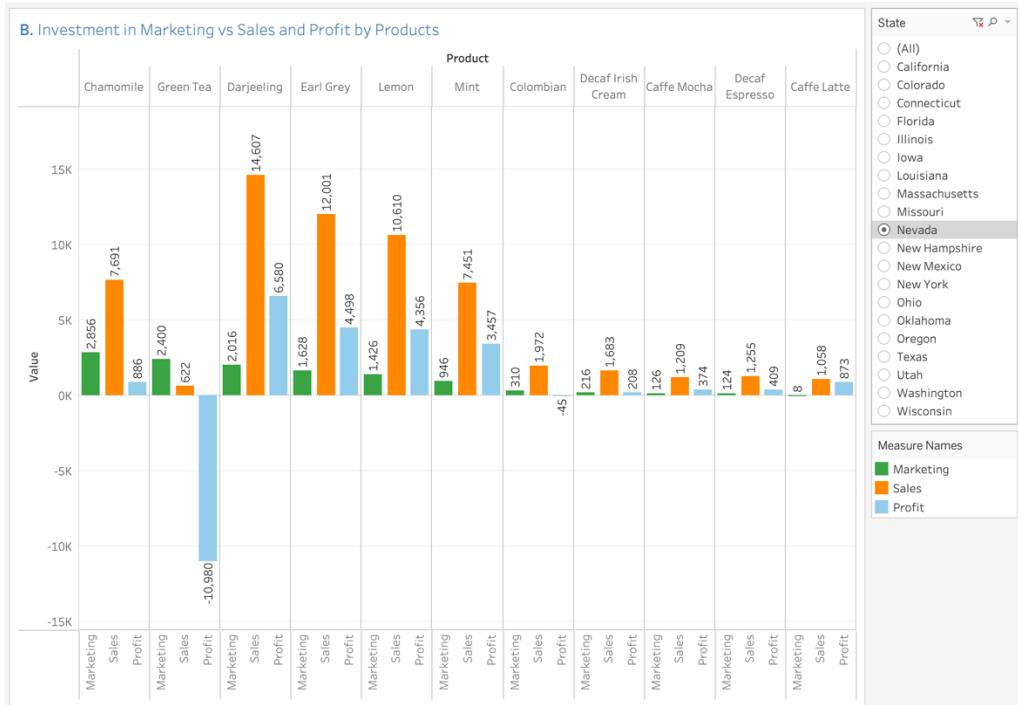


Figure 3.4: Significant loss in profit of Green Tea in the Nevada.

Therefore, the coffee chain company should stop the Green Tea product distribution in Nevada because stopping supplying this product would significantly boost profit for this market, as shown in Figure 3.5.

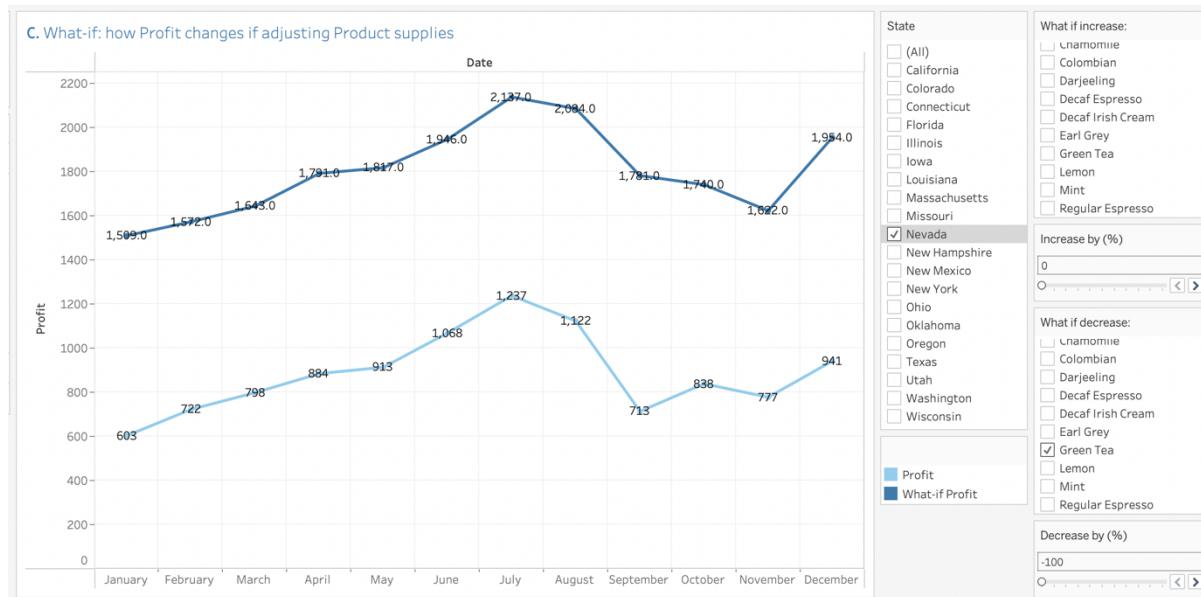


Figure 3.5: The predicted profit compared to actual profit if discontinuing Green Tea product in Nevada.

Lastly, Figure 3.6 shows that Colombian was the most favourable and profitable product in the Massachusetts state. However, the inventory for this product in the state was negative (shown in Figure 3.7). As the Colombian product's profit accounted for the majority of profit generated in Massachusetts, the manager must maintain the availability of the stocks as it would considerably affect the increase in sales and profitability of this state.

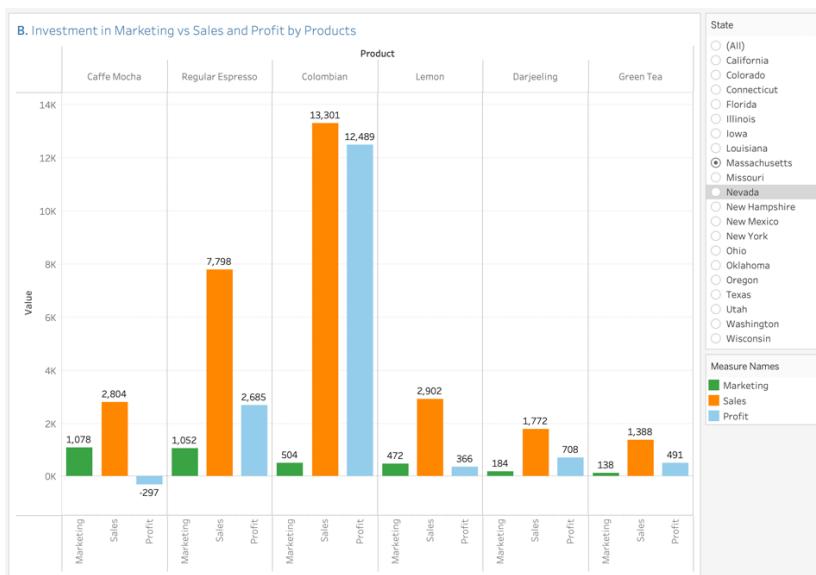


Figure 3.6: Investment in marketing, sales and profit per product in Massachusetts state.

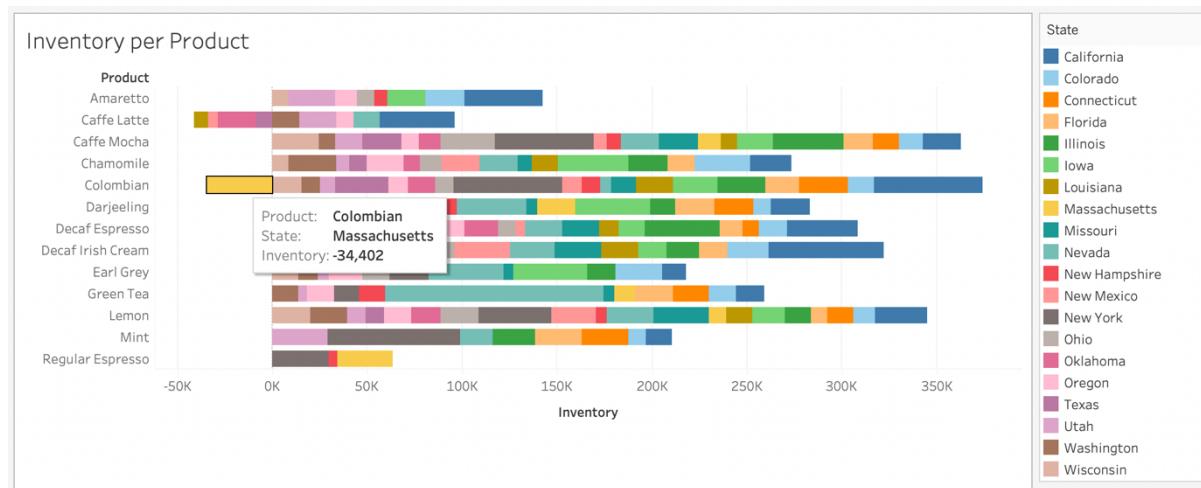


Figure 3.7: The inventory by product, according to states.