**Power BI Analysis:**

Temporal Analysis:

1. What are the seasonal sales trends of Coca-Cola products, and how can we adjust our promotions to align with peak sales periods?
2. From the line plot Sum of Unit sold by Month, we can observe peak sales occur during the months of July and December. Whereas low peak sales happen during the months of April and October. So, the companies should concentrate more on the how to increase the sales during these months. During the low peak sales, Fanta beverage has low average sales while coca cola has more average sales.
3. During Q1, total sales declined while for quarter Q2 sales followed an increasing trend and reached peak sales in quarter Q3. Again, average total sales declined Q3, 2022 and sales increased in Q4. So, there are seasonal sales trends. Hence the company should focus on improving marketing strategies during Q1 and Q3.
4. Regional Performance: Which regions demonstrate the highest and lowest sales performance for Coca-Cola products, and what strategies can be implemented to improve sales in underperforming regions?
5. The West region contributes to most sales with coca cola sales of a total of $0.46 Million. While the lowest sales are in the Midwest region with a total of $0.34 Million. 'Coca-Cola', with 16.7% of records; 'Sprite', with 16.7% of records; and 'Fanta', with 16.7% of records, among others, most affect the distribution.
6. Walmart has the most sales in northeast, southeast, and Midwest region. Costco has the most sales in the South region. The CVS has a major proportion of sales from the west region.
7. Product Line Analysis: Which individual product lines contribute the most to Coca-Cola’s revenue, and how can we optimize the performance of lower-performing product lines?
8. Coca cola company produces the different products under the same brand(KO) such as Coca-Cola, Fanta, Sprite, Diet Coke, Dasani Water etc. Out of all the products, Coca cola has the most no of units sold as well as total sales. It is followed by Dasani water and Diet Coke. Surprisingly, Diet coke has lower sales than Dasani water while the total number of units sold is almost the same.
9. From my analysis, I found that Costco retailer is different from other retailers like Walmart, CVS. Because in Costco, Dasani water has the most sales compared to Coca Cola. While Fanta and Powerade have lower sales for every retailer. Hence the company should find a way to tackle this problem.
10. Profit Margin for each retailer: Walmart profit margin is $83.81K, CVS profit margin is $24.48K, and Target have the lowest profit margin of $5.52K.

**Top 10 Key Points:**

 **Walmart's Sales vs. Profit Efficiency**:

* **Total Sales**: Walmart leads in total sales, but this does not translate to high operating profits. **Action**: Investigate cost structures and optimize operational efficiencies to convert high sales volumes into higher profits.

 **Operating Profit Insights**: **High Operating Profit**: Target shows the highest operating profit, indicating efficient operations. **Action**: Maintain and further enhance operational efficiencies to sustain profitability. Other retailers like CVS and Costco also show strong profitability despite lower sales volumes compared to Walmart.

 **Regional Profitability**:

* **Southeast Region**: The Southeast region has the highest operating profit, followed by the West and South regions. The Northeast and Midwest regions show potential for improvement. **Action**: Focus on targeted marketing and operational improvements in underperforming regions to boost profitability.

 **Seasonal Sales Trends**:

* **Sales Peaks and Troughs**: Sales peak in July and December, with troughs in April and October. **Action**: Enhance marketing strategies and promotional efforts during low sales periods (Q1 and Q3) to smooth out seasonal fluctuations and boost sales.

 **Purchase Frequency and Patterns**:

* **Customer Behavior**: Customers make larger, less frequent purchases at CVS, Target, and Costco, favoring popular brands like Coca-Cola and Dasani Water. At Walmart, customers make smaller, more frequent purchases. **Action**: Tailor marketing strategies to each retailer's customer behavior to maximize sales and customer satisfaction.

 **Correlation and Pricing Strategies**:

* **Strong Correlations**: Total Sales strongly correlate with Units Sold and Operating Profit, emphasizing the importance of sales volume. **Action**: Implement strategies to increase unit sales, such as promotions and discounts, and optimize pricing to maximize profit per unit.

 **Product Line Performance**:

* **Top-Performing Products**: Coca-Cola is the top-selling product, followed by Dasani Water and Diet Coke. Interestingly, Dasani Water has higher sales than Diet Coke despite similar unit sales. **Action**: Continue to promote Coca-Cola and Dasani Water while developing strategies to boost sales of Diet Coke and other lower-performing products like Fanta and Powerade.

 **Retailer-Specific Performance**:

* **Retailer Differences**: Costco has unique sales patterns, with Dasani Water being the top seller, unlike other retailers where Coca-Cola dominates. **Action**: Customize product offerings and marketing strategies to fit the sales patterns and preferences of customers at each retailer to maximize sales.

 **Profit Margin Analysis**:

* **Retailer Profit Margins**: Walmart has the highest profit margin ($83.81K), followed by CVS ($24.48K), and Target has the lowest ($5.52K). **Action**: Investigate the reasons behind Target's lower profit margin and implement strategies to improve it, possibly by optimizing costs and increasing sales volumes.

 **Stock Price Correlation**:

* **Weak Positive Correlations**: There are weak positive correlations between Coca-Cola's stock price and total sales, price per unit, units sold, and operating profit. **Action**: While these correlations are weak, maintaining strong sales and profitability could still have a positive impact on stock performance. Focus on overall financial health and consistent performance to support stock prices.