

# **Swire Coca-Cola Business Problem Statement**

## **Group – 2**

### **1. Business Problem:**

- The primary problem Swire Coca-Cola faces is the challenge of accurately forecasting weekly demand for its innovative beverage products. This forecasting is crucial to avoid stockouts and minimize production overruns.
- The uniqueness of the products, combined with varying factors like flavor, caloric segment, packaging, seasonality, and emerging trends, adds complexity to demand forecasting.

### **2. Benefit of a Solution:**

- Implementing a precise forecast model will enable Swire Coca-Cola to optimize production quantities, thereby minimizing costs and enhancing customer satisfaction.
- A successful solution will help the company manage inventory efficiently, reducing surplus and ensuring that innovative products are available at ideal locations and to targeted demographics, contributing to sustained growth and operational excellence in the competitive beverage industry.

### **3. Success Metrics:**

- The success of the forecast model will be evaluated based on its accuracy in predicting demand, its impact on minimizing costs, and enhancing customer satisfaction.
- Performance metrics will be used to assess the models, with the best model chosen based on these results. Our goal is to develop a model that not only delivers high accuracy and a high R-squared value but also minimizes the Root Mean Square Error (RMSE) and Mean Absolute Error (MAE), all while ensuring a brief runtime.
- The effectiveness in enabling Swire to make strategic decisions regarding inventory management and product placement will also be a critical measure of success.

### **4. Analytics Approach:**

- The analytics approach involves developing a forecast model that integrates various factors like flavor, caloric content, packaging, seasonality, and market trends.
- This model leverages historical data of similar products to predict the demand for new flavors at specific locations within a 13-week range.

- The approach may also include evaluating additional market factors for a deeper understanding of sales data, ensuring a comprehensive analysis for accurate forecasting.

## **5. Project Scope:**

- The project will deliver a forecast model developed and tested within a 2-month period, ready for client presentation and implementation.
- The initial scope includes developing the model to forecast demand based on specified factors, with the possibility of integrating additional market factors for enhanced insights.
- Our emphasis will be on forecasting demand, determining the optimal weeks for introducing a specific product, and identifying the most suitable regions for the rollout of new products, guided by the research question at hand.

## **6. Project Details:**

- The analytics team is responsible for executing the project, with a timeline set to finish the model development and testing within 2 months.
- Important milestones include the completion of the initial model, the integration of initial testing feedback, and the final evaluation of the model against performance metrics.
- The project culminates in the delivery and presentation of the forecast model to Swire Coca-Cola, ensuring they are equipped with a powerful tool for strategic decision-making in product distribution and inventory management.