### **Business Problem Statement Outline**

**Title:** Identifying High-Potential Customers for Optimal Delivery Strategy

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

Swire Coca-Cola's logistics strategy aims to balance operational efficiency and long-term revenue growth. Customers with annual orders below a specific volume threshold are transitioned to an Alternate Route to Market (ARTM), serviced by third-party "white truck" deliveries. However, misclassifying high-potential customers as ARTM risks losing growth opportunities due to diminished customer engagement. The problem lies in accurately identifying and retaining such high-potential customers within direct delivery (red truck) operations.

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

A data-driven approach to identify high-potential customers will:

* Prevent premature transitions to ARTM.
* Maximize revenue growth by leveraging customer engagement and coaching strategies.
* Optimize resource allocation, balancing delivery costs with profitability.
* Enhance long-term customer relationships and brand loyalty.

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

* Improved classification accuracy of high-potential customers (e.g., through AUC-ROC scores or precision/recall metrics).
* Reduction in misclassified customers moved to ARTM.
* Increase in revenue growth rates for retained high-potential customers.
* Cost-efficiency improvement measured by delivery cost per gallon/case.

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

* **Data Exploration:** Analyze historical sales data, customer profiles, and transactional data to understand customer characteristics.
* **Predictive Modeling:** Develop models to predict customer growth potential using factors such as order volume trends, engagement channels, and delivery costs.
* **Threshold Optimization:** Validate the appropriateness of the 400-gallon annual threshold and propose alternatives.
* **Scenario Analysis:** Simulate the impact of various classification thresholds and strategies on delivery costs and revenue.

#### **5. Scope**

* **Included:**
  + Analysis of two customer groups:
    - Local Market Partners buying only fountain drinks.
    - All customers, regardless of product mix.
  + Development of actionable strategies to optimize customer retention and profitability.
* **Excluded:**
  + External variables such as competitor actions or macroeconomic conditions.
  + Operational cost estimations beyond delivery-related expenses.

#### **6. Details**

* **Execution Team:** Data science students collaborating with Swire Coca-Cola stakeholders.
* **Timeline:** Determined by the Capstone course schedule.
* **Deliverables:**
  + Business problem statement.
  + Exploratory Data Analysis (EDA) report.
  + Predictive model and threshold optimization analysis.
  + Final presentation and recommendations.