

## Hello World Business Problem Statement

### Business Problem

Swire Coca-Cola's MyCoke360 ordering platform has been experiencing cases of cart abandonment from their customers, defined as when customers add products to their cart but fail to complete their orders by their next order date. This customer behavior could be contributing to lost revenue and operational inefficiencies. Repeated abandonment may signal a deeper issue such as pricing concerns or misalignment with customer needs. Leadership requires a clear understanding of the drivers of cart abandonment and once identified, provide a recommendation of recovery in order to improve financial and portfolio impact and prioritize interventions that reduce revenue leakage.

### Benefit of a Solution

Analyzing why customers are abandoning their cart and the root causes will allow Swire Coca-Cola to predict customers that are most at risk of cart abandonment and implement strategies to combat the issue as a preventative measure. Benefits may include increased revenue from higher order completion rates, improved customer satisfaction with the ordering platform allowing call center agents to focus more on selling than taking orders, and identifying at-risk packages to create a strong portfolio.

### Analytics Approach

Due to the large dataset containing various features of customer order history and descriptions, a classification model will be implemented to predict the likelihood that a customer will abandon their cart on MyCoke360. A classification model also allows for pattern recognition in order to determine the top key predictors when analyzing the habits of customer cart abandonment.

### Steps:

1. **Data Collection & Cleaning:** Clean the raw data and combine Google Analytics event data with all order systems, sales, customer, and material data. Define abandoned carts and recovered carts to create labeled outcomes.
2. **Model:** Build a classification model to predict the probability of cart abandonment at the order window level. Features will include customer segment, device type, time of activity, package type, and historical behavior.
3. **Implementation:** Use the model outputs to identify customers and packages at highest risk of abandonment. Interventions may include reminder emails/texts, ease of checkout improvements, and adjustments in pricing and availability of packages.
4. **Evaluation:** Measure success by tracking reductions in abandonment rate, increases in recovery rate, incremental revenue from prevented abandonment, and

identification of at-risk packages. Evaluate whether abandonment patterns highlight portfolio risks requiring adjustments to package mix, pricing, or availability.

5. **Revision:** After initial evaluation, identify areas of weakness in the model and revise - possibly include A/B testing where the new model is compared to older models to see if improvements were made in terms of strength of prediction.

## Project Scope

The project deliverables will include the following:

1. Exploratory data analysis (EDA) of Google Analytics and order data from 5/31/2024-5/26/2025
2. Identification and model of behavioral predictors, recovery conditions, financial impact, package trends, and portfolio risk
3. Business recommendations for reducing abandonment and recovering revenue w/ implementation plan

## Success Metrics

Swire Coca-Cola's goal is to have less users abandon their cart before their next order window. Success will be measured by:

1. **Reduced Abandonment Rate:** Achieve a 10% reduction in cart abandonment rate within the first 6 months of implementation
2. **Recovery Rate:** Increase revenue by at least \$3M annually through recovery of abandoned carts and improved conversion
3. **High Risk Package Identification:** Identify at least 3 packages consistently over-represented in abandoned carts and enabling corrective actions
4. **Customer Engagement:** Improve customer checkout completion rates by 15% among customers targeted with reminders or interventions

## Details

- **Project Team:** Tina Young, Sabrina Lin, Courtney Yoshimoto, and Alphonsinah Ototo
- This project will be executed by members of Hello World on or before November 19, 2025 with a rough schedule as outlined:
  - Business Problem Statement
  - EDA
  - Prediction Model & Testing
  - Final Presentation