



BUSINESS PROBLEM STATEMENT

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Business Problem: What is the problem?

Swire Coca-Cola, franchise owner of Coca-Cola bottling services, faces an issue with identifying customers, brands, and clients in their book of business to whitelist for White Truck services within their Western USA market. Businesses whitelisted for Red Truck services take up a lot of resources. Thus, we want to identify "who to and who not to whitelist into the White Truck services?"

Benefits of a solution. How will the business benefit from a solution?

Currently Swire Coca-Cola has run this on an ad-hoc level, meaning just whenever there is a request or need to offboard a business into White Truck services it would happen. Thus, this would provide Swire Coca-Cola a proactive approach to predictive analytics to cut losses and costs with businesses within specific customer categories.

Here are a few ways Swire Coca-Cola would benefit as a whole:

- 1. Identify key factors and customer characteristics that differentiate low-potential customers from high-potential customers.
- 2. Develop a predictive model to classify customers accurately into White Truck or Red Truck services.
- 3. Provide actionable insights to balance cost-efficiency with revenue growth and long-term customer retention.

Success Metrics. How will stakeholders judge whether the project was a success? By identifying customer groups/profiles and the probability of customers defaulting into White Truck services or Red Truck services. (*i.e hitting a 80-95% accuracy and AUC, customer profiling through unsupervised models, etc.*)

Analytics Approach. What is the general character of the analytics approach to solving the problem?

Our approach will involve both supervised and unsupervised modeling methods, in which past financial data that includes the target variable (gallons ordered and successfully delivered) and customer profile data will be utilized. (*i.e a classification-based model where the target variable may be a binary outcome of whitelisting business profiles for Red/White Truck services*.)

Scope: What will be delivered and what will be out of scope? What might be added later?

To completely understand, analyze and deliver end-results or suggestions to our stakeholders, Swire Coca-Cola, the following objectives will be completed:

1. Clearly understanding the problem at hand and meeting with the stakeholders to verify, quantify and qualify the issue at hand.





- 2. Performing exploratory data analysis to share our personal outlook on the data and the problem the company is facing.
- 3. Perform modeling to consider predictive analytic solutions, properly qualify the problem and determine key characteristics which identify customers with higher cost estimates in delivery and White Truck whitelisting opportunities.
- 4. Compiling a summary report and presentation to Swire Coca-Cola to showcase insights, findings and solutions.

Details: Who is going to execute the project? When will the project be finished? Are there important project milestones?

This project is mainly executed by our team of contractors: Andy Pan, Elham Mirza, Chris Joyce and Joseph Pushnam.

Milestones: The first 1-2 weeks will be used to run an EDA, and leaving the upcoming months to be utilized for research, data modeling, and reporting to Swire Coca-Cola. (*Estimated time for completion is* **3 months**.)

Summary

This project combines Swire Coca-Cola's operational goals with data-driven insights to create a proactive strategy for optimizing delivery logistics. By identifying high-growth potential customers and accurately classifying delivery methods, the project ensures cost savings, revenue growth, and a foundation for sustainable business success.