## **USER CASE 1: PREDICT CUSTOMER SUCCESS**

Around 10% of Swire Coca-Cola's business is "B2B", driven by local business such as restaurants. Swire must balance potential profitability of the new restaurant when determining price and funding. A low price may help win the business, but it may not be profitable. On the other hand offering discounts to successful restaurants can create a loyal customers but discounts to failing business can lead to loss.

The main objective of this project is to improve the ability to predict success/profitability/sales by predicting the popularity, longevity, and total 3-year sales volume of new Swire customers based on historical data. Loyal customers are valuable indicator of business's success as they likely to continue supporting the business, which is important for long-term business success.

We can address this issue using predictive analysis approach.

- 1. Use a supervised machine learning approach with a classification model. We can predict the success of the business by making target variable as a categorical variable(not-loyal, less-loyal, loyal). The model will make use of the predictors like customer attributes(location, customer type), sales data, census data, and customer reviews data to predict the target variable. The model is trained using logistic regression to predict the target variables. The model would be able to provide insight of customers which help the company to decide whether customers are loyal or not. Based on this it is possible to make decision about offering discounts and funding to the new restaurants.
- 2. We can apply same model with target variables as success, failure with predictors as we used above. The model is trained by setting a threshold for sales, longevity to measure the potential success.

By analyzing customer behavior the business will gain insights into customer preferences which improve customer experience and leads to higher satisfaction and further loyalty, ultimately leading to increased profit and success.

The success of this project is determined by the increase profit when compared to the previous years. Customer reviews and feedbacks are the measure of increased customer satisfactions. The project will deliver a model which predicts the success/failure of the new local restaurants based on customer attributes, sales data, and customer reviews. Analyzing why customers are losing interest is not included in the scope of the project for now and could be added in the future as an ongoing effort to improve customer experience.

We are going to execute the project by April 1st 2023 and will use feedback to give the best deliverables. The important milestone of the project is an evaluation of the project's performance, including an assessment of customer satisfaction, sales and revenue, and overall success. We will finish the project by April 11, 2023.