Capstone 2 Project Proposal:

Customer Segmentation / Predicting Offer Acceptance

What is the problem you want to solve?

A company has tracked the results of six marketing campaigns for the same offer. The offer is a discount on a bundle of products including wine, meat, fish, sweets, and a small piece of gold jewelry. With response data from over two thousand customers who received the offer six times, the company would like me to predict customer acceptance rates to view which customers will accept the offer more often, less often, or not at all. A segmentation of their customers has been requested as well.

Who is your client and why do they care about this problem?

The client is an anonymous company that sells wine, meat, fish, sweets, and gold products. The client's customers can purchase their products in-store, online, or from their catalog. The client wants to utilize their historical campaign data to now run a seventh campaign that is more targeted, reducing unnecessary customer contact costs while also limiting any associated decrease in revenue. The segmentation has been requested as the client would like to understand the key features of each customer group to successfully market the current offer and any future offers to their customers.

What data are you using? How will you acquire the data?

I am using a dataset that the company provided tracking the customers response to the six offer attempts and each customer's unique features.

How will you solve this problem?

Utilizing each customer's features and acceptance rate, I will train a model predicting the likelihood of any given customer accepting the offer. If a customer is predicted to accept to have an acceptance rate above zero, I will assign then assign the customer to an acceptance likelihood group (Low/Medium/ High). I will also utilize unsupervised machine learning techniques to segment customers based on their features. With the segmentation and historical acceptance rate for each customer, I can analyze and rank the resulting customer groups based on their average acceptance rates.

I will provide the client with key features identifying each of the customer groups and which features contained the most favorable/unfavorable influence on the offer acceptance rate. From there, the marketing team can formulate targeted approaches for the offer and improve future marketing strategies for the offer/other offers.