**Capstone 2 Project Proposal:**

***Customer Segmentation / Predicting Likelihood of 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 the likelihood of a customer accepting an offer. They also added they would like a segmentation of its customers.

**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. Their desire is to reduce unnecessary customer contact costs while also limiting any associated decrease in expected revenue.

**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 percentage, I will build a model that will predict the likelihood of any given customer accepting the offer. I will also utilize unsupervised machine learning techniques to segment customers based on their features. Using the segmentation and the historical acceptance rate for each customer, we can analyze which group/groups responded better to the offer versus those who did not.

I will also provide the client the key features identifying each of the customer groups and which features contained the most favorable influence on the offer acceptance percentage. From there, the marketing team can formulate targeted approaches for the offer. The team will also be able to be more targeted in marketing other offers and generating new offers for respective customer groups.