# Capstone Project 1 Ideas

1. Project: Predict Whether Customers Purchase Again for E-commerce

Customer Lifetime Value (CLV) is critical for ecommerce to manage acquisition effort. CLV/CAC is widely used by marketers to define ROI constraints for acquisition advertising programs. However, due to the limited data (less than 3 years and lacking some behavioral features ), it’s hard to predict CLV directly. However, predicting whether the customer will purchase again after the first purchase could be a good proxy for CLV. And it helps the business to swift their marketing strategy between growth and retention.

Goal: Build a predictive model to predict repeat purchase for each customer based on the customer’s first purchase information.

The data sets contain both online and offline transactions recorded by Google Analytics and internal CRM tool, and digital marketing campaign data recording by Adwords, Bing Ads and etc.

Three data sets:

* Customer Data set
* Order Data set
* Order Item Data set

2. Project: Predict subscription for each client

A Portuguese banking institution wants to scale up their marketing campaigns and it’s very crucial for them to learn insights from the current marketing campaigns. Specifically, they want to know subscription rate in future during the marketing campaign period.

Goal: build a predictive model to classify whether the client will subscribe a term deposit or not

Dataset: <http://archive.ics.uci.edu/ml/datasets/Bank+Marketing#>

3. Project:Customer sentiment analysis

Net Promoter Score (NPS) is a measure that is used by many companies for calculating and understanding customer satisfaction. The ecommerce company want to enhance their understanding of customer opinions and actions by mining NPS comments. So the e-commerce company could improve their customer service and shape their marketing strategy.

Goal: Apply sentiment analysis on NPS data set to get most negative comments and positive comments for the company

Data set: NPS survey data collected by the e-commerce company

