

Capstone Project 1:

How do the banks decide if a person will pay their next credit card payment? How do the banks assess the risk of giving out loans to individuals?

In the banking and investment world, this is the question that needs to be answered countless times in a day. It is critical for the banks to know the answer for each individual that they work with to be able to make financial gain (or to not have financial loss). Not only do they have to answer it right, also they have to answer it in a way that would be applied to so many cases as quickly as possible.

Today, banks use data science and machine learning to tackle this problem. This capstone project will show an demonstration how machine learning can be used in the finance and banking world.

We will look at the dataset in Taiwan from April 2005 to September 2005 that contains information about default payments, demographic factors, credit data, history of payment, and bill statements of credit card clients. Then, we will create a model that predicts if the individual will default on card payment based on the dataset. By doing this, we will see which features are more important for the banks while making the decision whether the person will make the next payment or not. The project will include data visualization and exploratory data analysis and it will conclude with some metrics that measure the success of the predicted model.