**CUSTOMER CREDIT CARD DEFAULT**

**Abstract**

Over the years, the delinquency rate on credit card payment is on a rise, as the result of which financial institutions like banks end up with a significant loss of money. Having a financial risk prediction model is crucial for financial institutions and this will help to provide insights about credit card holders who have higher probability to default based on their characteristics. This project aims at making predictions on the credit card holders who are likely to default and the factors that are most significant with regards to correctly predicting the credit card defaulters. This would help the banking system in reducing the high delinquency rate and even making customers cautious of the factors that could affect their credit score.

The dataset being used for this project is that of the Taiwanese Credit card holders which is available in the UCI Machine Learning Repository, Center for machine learning and intelligent Systems (<https://archive.ics.uci.edu/ml/datasets/default+of+credit+card+clients>). It consists of 30,000 instances, each of which corresponds to an individual credit card holder; and it has 24 attributes which consists of the customer’s demographic information and their past payment history.

This project focuses on the application of exploratory data analysis, Classification and Regression techniques; and makes use of Python and tools such as Tableau. The performance of the various models based on Machine Learning algorithms are compared and evaluated in order to select the most robust one.