Prediction of Credit Card Attrition

Problem statement

For the credit cards line of business in consumer banking, account attrition is defined as the voluntary intimation of account closure to the bank by the customer. Credit card attrition generally has a negative impact on the cards business P&L with loss of sales and revenue along with asset/balance erosion.

There could be many factors affecting account attrition including dissatisfaction with customer service, cards value proposition not meeting customer's expectation, better competitive offers etc. Leveraging the more significant of these factors, a business can understand the likelihood of attrition for each account. This helps in building strategies for proactively countering account attrition.

Aim:

Using Logistic Regression, create a model that can predict the likelihood of an account holder's attrition in the next six months.

Requirements

Bank-CreditCardAttrition datasets, Machine Learning model, Python, Sklearn Dimension Reduction, Logistic Regression model

Description:

In this project, there is a dataset that include Customer information information like age, gender, Education level, card category, Credit limit etc. Dataset is titled "Banking-CreditCardAttrition.csv".

The data is sample of credit card customer account as of Mar-2013 and the attrition has been defined as customers closing their credit card account within next 6 months (Apr-2013 – Oct-2013). The sample has a mix of snapshot data as of Mar-2013 and historical data covering the past 12 months prior to Mar-2013, including their demographic profile and transaction information.

I have used Logistic Regression Classifier to build the model.

Results:

I achieved 87% percent Accuracy.