Vehicle Loan Default Prediction

Objective:

To build a model that is capable of predicting whether a person will default on his/her first EMI payment of vehicle loan.

Client/End User:

The end user Larsen & Toubro Financial Services (LTFS) will have a deeper insight on decision making on sanctioning loan for a particular applicant. Such as the result given by the model will give more confidence when deciding.

Data:

We use LTFS's own data which they used to conduct a competition in 2019. The dataset contains about 53000 entries with features such as loan amount, asset cost, customer employment status etc. The dataset contains 40 independent columns with 1 dependent column which 0 or 1 as value. (0-Paid, 1-Default).

Workflow outline:

Planned workflow as of now:

- Clean data for any missing, incorrect data types.
- Build features if necessary from the data. For e.g. the data set contains date of birth of the applicant. But a more useful feature would be to calculate the age of the applicant.
- Randomly split the data into training and test dataset.
- Test with different classifiers with a sample of data and choose the best among them.
- Tune the model parameters in order to acquire better performing model.
- Test the model and present the results.