

SMART LENDER – APPLICANT CREDIBILITY PREDICTION FOR LOAN APPROVAL

TOP THREE IDEAS FOR PROBLEM STATEMENTS

1.LOGISTIC REGRESSION - LOAN DEFAULTERS:

A very important approach in predictive analytics is used to study the problem of predicting loan defaulters using “The Logistic regression model”. Here the data is collected from the Kaggle for studying and prediction. The models are compared on the basis of the performance measures such as sensitivity and specificity. Logistic regression is a statistical method for analyzing a dataset in which there are one or more independent variables that determine an outcome. And the final results showed by the models are showcased.

2.RANDOM FOREST - LOAN APPROVAL:

The cost of assets is increasing day by day and the capital required to purchase an entire asset is very high. So the easiest way to get the required funds is to apply for a loan. As it is a very time consuming process where the application has to go through a lot of stages and it's still not unsettled that it will be approved. To decrease the approval time and the risk associated with the loan many loan prediction models were introduced. Here we are comparing those models and it was found that the Random Forest proved to be the most accurate and fitting where it uses a Supervised Machine Learning Algorithm that is used widely in Classification and Regression problems. It builds decision trees on different samples and takes their majority vote for classification and average in case of regression.

3.DECISION TREE – CREDIT RISK ASSESSMENT:

Data mining techniques can also be used in the banking industry which help them compete in the market well equipped. Here an effective prediction model is used for the bankers that help them predict the credible customers who have applied for loan. Decision Tree Induction Data Mining Algorithm is applied to predict the attributes relevant for credibility. This can be used by the organizations to screen or filter the pool of requests by the customers and it has highest accuracy results.