SMART LENDER – APPLICANT CREDIBILITY PREDICTION FOR LOAN APPROVAL

PROPOSED SOLUTIONS

Novelty / Uniqueness:

The novelty of the present study is that the model subtracts the two most pressing issues in the banking sector which is finding out if the borrower is risky and lend the loan to non-risky borrower. The automation of the loan eligibility process acts on the customer details provided while filling online application form. The details are gender, marital status, education, number of dependents, income, loan amount, credit history and others. We are screening the customers through three main factors which is by customer identification, credit underwriting and fraud underwriting. Previous records of applicant is used for better filtering and we direct customers with low interest loans according to their income.

Feasibility:

The screening of perfect candidate is a must before lending a loan. With huge loan requests it is impossible to manually pick or predict the right applicant. For this selection, Data Mining Techniques are used such as Logistic Regression, Random Forest etc. Logistic Regression helps in classification where it is used to predict a binary outcome based on a set of independent variables. Random forest is a **supervised learning algorithm**. The "forest" it builds is an ensemble of decision trees, usually trained with the “bagging” method. The general idea of the bagging method is that a combination of learning models increases the overall result.

Social Impact / Customer Satisfaction:

Since the applicants are approved with low interest loans according to their income and there will be no social impact. The customers will be convenient to pay their interest and no loan defaulters will be identified. This model also helps in concluding that a bank should not only target the rich customers for granting loan but it should assess the other attributes of a customer as well which play a very important part in credit granting decisions and predicting the loan defaulters.

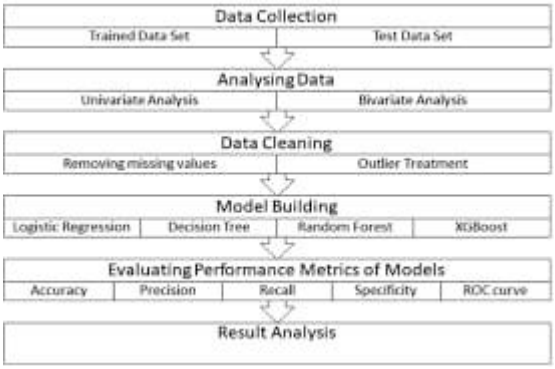
Scalability Of The Solution:

This model also supports huge set of data and undergoes so many data mining techniques. Those applicants who have high income and demands for lower amount of loan are more likely to get approved and are more likely to pay back their loans. Some other characteristic like gender and marital status seems not to be taken into consideration by the company. But here all the characteristics are considered for approving a loan and not only the rich gets approved for a loan but also a candidate with low income gets to approved for a loan with a low interest. This helps them to pay back their debt without any due.

Business Model (Revenue Model):

1.Appliacant Flow Handling:

2.Analyzing or preprocessing a dataset:



3.Model Results: