<u>LOAN APPROVAL</u>:

TOPIC: Smart Lender-Application Credibility Prediction for Loan Approval

AUTHOR NAME: Vedansh Shrivastava

PUBLISH DATE: February 4,2022

KEY POINTS OF THE PAPER:

- In this article, we are going to solve the Loan Approval hosted by the **Analytics Vidhya**.

- This is Classification problem in which we need to classify whether the loan will be approved or not

- Classification refers to a predictive modelling problem where a class label is predicted for a given, example of input

- A few example of classification problems are spam Email detection

- Dataset would have the same columns except for the largest column that is **"loan status".**

PROBLEM STAMENT:

- Dream Housing Finance company deals in all kinds of home loans. They have a presence across all urban, semi-urban and rural areas.

- The customer first applies for a home loan and after that, the company validates the

  Customer eligibility for the loan.

- The company wants to automate the loan eligibility process(real-time) based on customer detail provided while filling out online applications forms.

- These details are Gender, Marital Status, Educations, number of Dependents, Income, Loan amount, credit History, and others.

- To automate this process, they have provided a dataset to identify the customer segments that are eligible for loan amounts so that they can specifically target these customer.

- As mentioned above this is binary classification problem in which we need predict our target label which is "loan status"

- Loan status can have two values; yes or no

<u>LOAN APPROVAL</u>:

TOPIC: Smart Lender-Application Credibility Prediction for Loan Approval

AUTHOR NAME: Ambika and Santosh Biradar

PUBLISH DATE: May 2021

KEY POINTS OF THE PAPER:

- The enhancement in the banking sector lots of people are applying for bank loans but the bank has its limited assets which it has to grant to limited people only.

- So finding out to whom the loan can granted which will safer option for the bank is a typical process.

- So in this paper, we try to reduce this risk factor behind selecting the safe person so as to save lots of bank efforts and assets

- This is done by mining the big data of the previous records of the people to whom the loan was granted

- Before and on the basis of these records/experiences the machine was trained using the applied data science which give the most accurate result.

- The main objective of this paper is predict whether assigning the loan to particular person will be safe or not.

PROBLEM STATEMENT:

- The SBA(Small Business Administration) helps small business by providing them guarantees for bank loans.

- If a company is unable to pay the loan to the bank.

- SBA covers the guaranteed amount and the rest of the loss is suffered by the bank.

- In order to determine if a loan is prone to being defaulted, exploratory and predictive data analysis can be effectively utilized.

- The SBA loan data provides various metrics such as the bank details and company details such as the bank details such as their size, location, type of loan and amount along with the duration of the loan

- If the loan is defaulted, the date on which it has been checked off is specified.

- To predict the whether the customer will fall under default or not

LOAN APPROVAL

TOPIC NAME : Smart Lender-Application Credibility Prediction for Loan Approval

PUBLISHED NAME : KAJAL KUMARI

PUBLISHED DATE :22/05/2022

MODIFIED DATE : 09/06/2022

KEY POINTS FOR THIS PAPER:

Know your credit status is the first step toward your loan application.Your credit score is a reflection of how responsible you have been with your earlier credit. This is the first thing that the lenders check in loan application. Credit score ranges from 300 to 900 with higher score indicating better credit worthiness. Any score above 750 is considered to be good . For lenders ,a good score if acts as an indicator that future credit will also be dealt responsibly. Therefore, it is always good to be touch with your credit score .Regular checking of credit score will help you know where you stand and how you can improve if need be.

PROBLEM STATEMENT :

Understanding the problem statement is the first and foremost step .This would help you give an intuition of what you will face ahead of time .Let us see the problem statement. Dream Housing Finance company deals in all home loans.They have a presence across all urban ,semi -urban and rural areas .Customer first apply for a home loan after that company validates the customer's eligilibility for loan. The company wants to automate the loan eligibility process (real - time) based on customer detail provided while filling out the online application form. These details are Gender, Marital Status,Education,Number of Dependents , income,loan,Amount ,Credit History and other.

LOAN APPROVAL

TOPIC NAME : Smart Lender-Application Credibility Prediction for Loan Approval

PUBLISHED NAME:Vishnu Vardhan

PUBLISHED DATE:14/12/2018

KEY POINTS FOR THIS PAPER:

1. The one whose salary is more can have a greater chance of loan approval.

2. The one who is graduate has a better chance of loan approval.

3. Married people would have a upper hand than unmarried people for loan approval

4. The applicant who has less number of dependents have along probability for loan approval.

5. The lesser the loan amount the higher the chance for getting loan.

PROBLEM STATEMENT:

There is a company named dream housing finance that deals in all home loans. They have presence across all urban and rural areas. Customer first apply for home loan after that company validates the customer eligibility for loan. However doing this manually takes a lot of time .Hence it want to automate the loan eligibility process based on customer information. So the final thing is to identify the customer segment that are eligible for taking loan. How will the company benefit if we give the customer segments is the immediate question that arises .The solution…..Banks would give loans to only those customer that are eligible so that they can be assured of getting the money back .Hence more accurate we are in predicting the eligible customer the more benefical it would be for he Dream Housing Finance Company.

TYPES OF PROBLEM

      1.Logistic Regression.

      2.Decision Tree Algorithm.

      3.Random Forest Technique.