

LITERATURE SURVEY

1. EXISTING SOLUTIONS

There are many existing solutions deployed for this use case.

A. loan prediction model using Machine Learning (ML) algorithms

- The dataset with features, namely, gender, marital status, education, number of dependents, employment status, income, co applicant's income, loan amount, loan tenure, credit history, existing loan status, and property area, are used for determining the loan eligibility regarding the loan sanctioning process
- Various ML models adopted in the present method includes, Linear model, Decision Tree (DT), Neural Network (NN), Random Forest (RF), SVM, Extreme learning machines, Model tree, Multivariate Adaptive Regression Splines, Bagged Cart Model, NB and TGA. When evaluated these models using Environment in five runs, TGA resulted in better loan forecasting performance than the other methods.

B. Loan prediction model based on the data mining techniques

- Data mining techniques, such as Decision Tree , Naïve Bayes (NB) and Bayse Net approaches.
- The procedure followed was training set preparation, building the model, Applying the model and finally. Evaluating the accuracy.
- This approach was implemented using Weka Tool and considered a dataset with eight attributes, namely, gender, job, age, credit amount, credit history, purpose, housing, and class. Evaluating these models on the dataset, experimental results concluded that, Decision Tree based loan prediction approach resulted in better accuracy than the other methods.

2. TECHNICAL PAPERS

- A. Loan Prediction Using Machine Learning and Its Deployment On Web Application
- B. An Approach For Prediction Of Loan Approval Using Machine Learning Algorithm

3. EXISTING PRODUCTS

- A. Loan Credibility Prediction System - <https://towardsdatascience.com/predict-loan-eligibility-using-machine-learning-models-7a14ef904057>
- B. Loan Automation Application - <https://www.automationanywhere.com/solutions/financial-services/loan-automation>