

CREDIT RISK CASE STUDY – PROBLEM STATEMENT

Credit Risk:

Credit risk is nothing but the default in payment of any loan by the borrower. In Banking sector this is an important factor to be considered before approving the loan of an applicant.

Impact of Credit Risk:

The bank's revenue pattern depends on the saving account and loans they offer. Once an account holder puts money in their saving account, they get certain interest on their account balance. The bank keeps some part of these balances in reserve to make payments in case of withdrawals. The rest of the money is given as loans to borrowers. The interest put on loan is the revenue earned by the banks.

Therefore taking into consideration the factors that will decide whether a person will pay back the loan or not is crucial for banks. This is a common credit risk problem which is solved using analytics.

While receiving application of a borrower, the bank asks certain details about the applicant. The general factors that help predict loan default are income, occupation, age, loan amount etc of the applicant.

Problem Statement:

About Company:

Dream Housing Finance company deals in all home loans. They have presence across all urban, semi urban and rural areas. Customers first apply for home loan after that company validates the customer eligibility for loan.

Problem:

Company wants to automate the loan eligibility process (real time) based on customer detail provided while filling online application form. These details are Gender, Marital Status, Education, Number of Dependents, Income, Loan Amount, Credit History and others. To automate this process, they have given a problem to identify the customers segments, those are eligible for loan amount so that they can specifically target these customers. Here they have provided a partial data set.

Case Study on Credit Risk

Data:

Variable	Description
Loan_ID	Unique Loan ID
Gender	Male/ Female
Married	Applicant married (Y/N)
Dependents	Number of dependents
Education	Applicant Education (Graduate/ Under Graduate)
Self_Employed	Self employed (Y/N)
ApplicantIncome	Applicant income
CoapplicantIncome	Coapplicant income
LoanAmount	Loan amount in thousands
Loan_Amount_Term	Term of loan in months
Credit_History	credit history meets guidelines
Property_Area	Urban/ Semi Urban/ Rural
Loan_Status	Loan approved (Y/N)