

Credit Scoring Model

The Assignment

The client, a Non-Banking Finance Corporation that specializes in lending to Small and Medium retail enterprises, needed to create a credit model based on predictive analytics to make lending decisions for customers with limited credit history. The borrower's eligibility and sanction of loan needed to be guided by assessment of character, credit worthiness, capital, willingness and capacity to repay loan using the proprietary credit scoring model.

Our Solution

The client was aiming to service the small and medium enterprises who are unable to avail credit from conventional lenders such as commercial banks and finance companies. Small business development in India is characterized by difficult access to the capital, legal and law limitations, undeveloped infrastructure, high transactional costs, as well as high loan interest rates. As the large number of small and medium retail businesses utilize credit from what is called the shadow banking industry, conventional methods of credit scoring are not effective because of lack of financial data, non-existence of a formal credit history etc. We needed to develop a new credit scoring model based on logical regression which would be based on information about the borrower, allowing us to differentiate between the "good" and the "bad" loans and determine a probability of default.

Our predictive model learnt by utilizing the customers' historical data together with peer group data from his/her own sector as well as other data to identify 'good' applications and 'bad' applications on an individual basis, and also forecast the probability that an application with any given score will be 'good' or 'bad'. These probabilities or scores, along with other business considerations, such as profit, churn, and losses, were then used as a basis for decision making for the loan as well as the amount of money to be loaned to the customer, the interest rate that should be charged and the repayment terms of the loan.

Takeaways for the Client

With the automation of the loan process, decisions on loans could be made almost instantly cutting down the processing time for each loan. By using unconventional data, the client was able to safely extend credit to clients who are deemed too 'risky' using conventional credit scoring methods.

ASSIGNMENT DETAILS

- ▲ SECTOR
BANKING
- ▲ DOMAIN
RISK MANAGEMENT
- ▲ GEOGRAPHY
INDIA
- ▲ PROJECT DURATION
6 Months