IMPLEMENTATION OF EARLY WARNING SYSTEM OF LOAN CUSTOMER DEFAULT FOR BANK IN SRI LANKA

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Abstract

Credit has been the main source of income for bank throughout banking history. With deteriorating economic conditions, identifying the best person to grant credit has become a challenge. In the current Sri Lankan context, most banks are facing the issue of provisioning for bad loans which remove a proportion of profit. Thus, it directly affects the profitability of the bank and increases credit risk.

This project aims to identify a high-risk customer after granting a loan. A customer could be a good customer in the past and now looking for a new credit facility. Further, the revaluation of the customer base is done periodically by banks to identify the position of customers in the ever-changing environment.

The model built in this research will ease the customer revaluation process and provide a window of early warning of customer default. For this purpose, data science will be used that will aid algorithms like K means, ad boost, Logistic regression, random forest, and neural networks. The analysis will be done using easy to implement a tool called Orange.

Predicting customers who are going to default will have a lot of plus points to the bank and its customers. Hence now the bank can play an advisory role to its customers and help them to overcome a future disaster. In a changing environment, banks cannot just be a lender; banks are now moving into an advisory role as well.