## LEASE DEFAULT PREDICTION IN SRI LANKAN BANKING INDUSTRY

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## **ABSTRACT**

Banks play a vital role in an economy as a financial intermediary, where it operates between depositors and borrowers. Deposits flow in to the bank flow out as loans, in the process banks make profits mainly from the difference between interest rates of accepting deposits and granting loans. They will try to secure their main source of income by granting loans to healthy businesses and good prospects who will repay their loans.

Leasing is a product which is profitable and secured way of lending money when compared to a loan. Since it takes less time to grant the facility, customers also prefer to apply for leases when they are purchasing vehicles & machineries rather than applying for a loan. With the popularity of the product, more people are applying for leases and banks need to carefully identify the credit worthy customers when granting facilities. Lease or a loan which ever it is, banks should lend to right customers otherwise it will get default and incur financial losses.

Credit Risk is considered as the most harmful because bad debts would impair a bank's profit. Banks establish the anchor of the growth for other sectors by providing them credit facilities, so its banks responsibility to grant facilities to correct parties and recover them mitigating Credit Risk. The reliability of the banking industry is crucial concern for financial system stability because the system dominated by the banking sector and rely on it.

One parameter to evaluate success of a bank is their ability to manage Credit Risk and maintain Credit quality. It's a difficult task for banks to correctly identify prospect lease customer and asses the risk of the customer defaulting lease, and with the volatility of economy and increasing rate of loan defaulters makes it even harder for banks to manage their credit risk.

This study was conducted to predict Lease default customers in Sri Lankan Banking industry and thereby help banks to manage their credit risk with supporting them to take correct credit decision.

This Paper will propose a machine learning model to predict the suitability of a customer to grant a lease facility by assessing certain attributes.

Keywords: Lease Period, Credit Risk, Machine Learning, Default Prediction, Market Risk, NPA