**Credit Risk Assessment System**

## **Problem Context**

The credit score is a numeric expression measuring people’s creditworthiness. The banks usually use it to determine who should get credit, how much credit they should receive, and which operational strategy can be taken to reduce the credit risk.

## **Goal**

Reduce Risk for banks by building a Machine Learning model-based Credit Scoring and Risk management Platform.

## **Why Machine Learning?**

With machine learning, the number of data sources that can factor into a credit model are theoretically infinite. There exist countless variables that might predict an applicant’s ability to pay back their loan, and machine learning is good at finding patterns within large data sets. ML-based credit models could factor in data points that are yet unknown to predict a borrower’s likelihood of paying back their loan.

## **How does it help Banks and their Clients?**

Machine learning could allow banks and other lenders to increase revenue by approving more credit invisible applicants and more applicants whose credit scores paint an incomplete picture of their creditworthiness. At the same time, lenders may be able to increase revenue without also increasing risk. Underwriters can start rejecting loan applicants that are riskier than their credit scores imply. Accurate risk-based pricing between two very similar borrowers, and these differences may be worth capitalizing on by offering one borrower a higher interest rate. This could increase the profit margin on each borrower without adding to an underwriter’s time scrutinizing a borrower’s application. As a result, at scale, lenders could see a significant boost in revenue.

Banks= {underwriters, lenders, banks, borrower}