

Home Credit Default Risk

Business Problem

Home Credit provides financial services and aims to help people who are unbanked to offer financial inclusion. Home Credit has to be able to predict their client's ability to repay a loan. They want to avoid rejecting customers if they are actually capable of repayment and give them loans with principal, maturity, and a payment plan. The purpose of this project is to make a prediction on their customers default risk and make a plan for them.

Benefit of Solution

The benefits of figuring out which customer will or will not default are:

- Preventing financial losses to those that are more likely to default
- Gain customers that are unbanked and give them access to credit options
- Focus more on customer needs rather than default risk

Success Metrics

Our success will be measured based off of our ability to accurately predict customers who will default. The submission will be evaluated using the ROC curve between the predicted probability and the observed target.

Analytics Approach

The focus of this project is on predictive analytics to see default risk. A supervised approach will be used to get the model to classify customers. The classification model will put customers into groups where either they will default or they will not default. The target variable in the data is TARGET. It is a binary variable where 0 is doesn't default and 1 is does default.

Scope

The deliverables for this project include:

- Report of default risk findings and predictions
- GitHub repository of all code that has been produced

Details

This project will first be done by Claranne Fechter and then she will join a group to collaborate. We will finish on April 27, 2025. Some milestones of this project include:

- Business Problem Statement
- Exploratory Data Analysis
- Modeling
- Practice Presentation
- Final Presentation