Home Credit Default Risk: Business Problem Statement

Business Problem:

Financial institutions and lenders often use a customer's credit history to approve loans and set interest rates. Individuals that lack credit are often denied loans or vulnerable to predatory lenders even if that individual is capable of repaying their loans. This creates a loss of opportunity to the borrower and creditor.

Benefit of a Solution

If an alternative evaluation method is created to estimate a potential borrower's ability to repay their loan, Home Credit can make more informed lending decisions and expand financial inclusion. A new evaluation method could benefit Home Credit financially by reaching a larger client base and reducing the number of loan defaults.

Success Metrics

Project can be deemed successful if:

- Approval rate for individuals with little to no credit history increases
- Heart Credit profitability increases from the new borrowers while maintaining or reducing risk levels

Analytics Approach

A supervised classification algorithm using a logistic regression model will be employed to predict the probability of loan default. The target variable is if the loan is paid on time and not defaulted (yes/no). We will use data from various sources including telco and transactional information to train our model.

Scope:

In Scope

- Development of a predictive model using alternative data provided to predict loan repayment capability of potential borrowers
- Detailed report of findings and model predictions
- Python or R code used for data and model exploration

Out of Scope

- Integration of model into current business processes
- Additional predictive models for other loan types or products

Details:

Execution + Timeline

This project will be executed by the members of Team ____ on or before a date agreed upon by all involved parties

Milestones

- Business problem statement delivery and approval
- Exploratory data analysis
- Presentation first draft
- Final presentation to stakeholders