***Business Problem Statement***

The problem that Home Credit is facing is that they do not have a reliable way to predict if an applicant will default on their loan. This causes 2 issues:

1. They are losing business from applicants who can repay the loan but get rejected.
2. They approve some applicants that end up defaulting on the loan, causing Home Credit to lose money.

***Benefit of a Solution***

The benefit of a predictive modeling solution is that Home Credit will be able to predict if an applicant will default on their loan with higher accuracy. This will allow them to maximize their revenue by reducing the number of defaults.

***Success Metrics & Analytics Approach***

Success can be measured using two metrics:

1. Overall revenue – we would hope to see this improve
2. Total number of defaults – we would hope to see this decrease

The analytics approach for this problem will a supervised approach. We will use a binary classification model to predict whether an applicant is likely to default on their loan.

***Project Details and Deliverables***

The deliverable for this project will be a predictive model that Home Credit can use to make a prediction for each new applicant. The model will be built around an agreed upon number of variables, any variable outside of those will be out of scope.

This project will follow the following 3-month plan:

* First month: Conduct exploratory analysis and present results
* Second month: Choose a model, train, and analyze performance at the end of the month
* Third month: Deliver a trained model and a formal presentation of the results.