**Business Problem Statement**

Many people struggle to get loans due to insufficient or non-existent credit histories. And this population is often taken advantage of by untrustworthy lenders. Home Credit strives to broaden financial inclusion for this underserved population by providing a positive and safe borrowing experience.

We will be taking a supervised classification approach to build a model tuned for maximum accuracy, for Home Credit Loan Servicing team, that will predict the client’s capability of loan repayment. The model output will be a probability of loan repayment failure. The model will also provide the principal, maturity, and repayment calendar that will help empower the clients to be successful.

The project deliverable will be the predictive model. Additional deliverables will need to be agreed upon with the Home Credit Loan Servicing team and added to a revised business problem statement. This project will be considered a success if the loan default rate has been significantly reduced over a year using the prediction model compared to the average of previous years without the model.

The project will be completed by December 1, 2023, with the draft of the model to be circulated for testing by October 1. This timeline will provide plenty of time for the analytics team to run the accuracy test of the model prediction alongside with the current manual review process, in collaboration with the loan servicing team.