Business Problem Statement

The business case at hand revolves around Home Credit's core objective of promoting financial inclusion among the underserved population by offering a positive and secure borrowing experience. The main challenge lies in accurately predicting clients' repayment abilities and strengthening their financial capacity through loans, while minimizing loan rejections. By enhancing their predictive capabilities, Home Credit aims to make informed decisions regarding loan approvals and tailor loan terms that align with clients' repayment capabilities. This approach ensures that deserving clients are not denied loans while maintaining responsible lending practices.

The analytical problem involves developing a predictive model that accurately assesses the repayment abilities of Home Credit's clients, particularly those who are unserved. The challenge arises from the need to make reliable predictions about clients' creditworthiness using alternative data sources, such as telco and transactional information, due to the absence of traditional credit histories. Therefore, the target variable in this case refers to the clients' repayment abilities, which is used to evaluate their loan repayment capacity. This problem can be addressed using supervised learning, as the model leverages historical data that includes information about telco and transactional activities. The binary outcome prediction helps in assessing whether a client is likely to repay the loan or not.

Enabling loans to underserved individuals with no credit history empowers them, enhances their financial well-being, and diminishes economic inequalities. This fosters a more inclusive financial ecosystem, resulting in broader societal advantages.

The success metrics for the project include:

Accuracy of Predictions: Developing a model that accurately assesses clients' repayment abilities, distinguishing between those likely to repay and those who are not. Accuracy is measured by comparing the model's predictions against actual repayment outcomes.
Reduction in Loan Rejections: Decreasing the number of loan rejections for deserving clients by accurately assessing their repayment abilities. Success is measured by monitoring the percentage decrease in loan rejections compared to historical data.
Customer Satisfaction and Retention: Enhancing the borrowing experience and meeting the needs of underserved clients, measured through surveys, feedback analysis, and customer satisfaction scores. Higher satisfaction indicates improved loan experiences, customized loan terms, and increased loyalty and retention.

The key deliverable would be the developed predictive model itself. This would include the machine learning algorithms, statistical models, and associated code that can accurately predict clients' repayment abilities based on alternative data sources.

As the designated data analyst, I will undertake the responsibility of working on this project. We expect the results ready to review by the team by July 15 using the available data sources. Based on the reviews and the necessary add-on’s, the deadline for the project will be July 21.