Home Credit Business Problem Statement

Business Problem:
Many potential borrowers lack sufficient credit histories, making it difficult for Home Credit to accurately assess their creditworthiness. This creates a challenge in extending loans to unbanked individuals while managing default risk. To continue expanding financial inclusion responsibly, Home Credit must rely on alternative data to assess repayment risk for these applicants.

Analytics Approach:
This project will use predictive analytics to support lending decisions:
- A machine learning model will estimate the probability that each applicant will successfully repay a loan.
- The model will leverage alternative data sources, including customer application information and telecommunications data.
- Model outputs will be expressed as a probability of repayment for each applicant.

Home Credit will use these repayment probabilities to guide decisions on loan approval, loan amount, and loan maturity.

Benefit of a Solution:
Predicting which applicants are likely to successfully repay their loans allows Home Credit to extend credit to qualified borrowers without traditional credit histories while managing default risk.

Success Metrics:
This project will be considered successful if Home Credit is able to broaden financial inclusion to borrowers with insufficient or non-existent credit histories while managing default risk, thereby enabling better lending decisions.

Scope:
The deliverable is a predictive tool that estimates repayment probabilities for loan applicants. Home Credit will use these probabilities to make informed lending decisions, allowing the company to responsibly expand access to credit. This project focuses on using predictive insights to improve business outcomes; detailed analysis of why applicants may default is out of scope.

Details:
- The project work will be carried out by the student analytics team.
- An initial predictive application will be ready for review within six weeks.
- Final deliverables, including actionable recommendations for lending decisions, will be completed within three months.