Our purpose is to empower you with the data driven intelligence you need to make quick and confident credit decisions. Our new scores have been back tested and validated on an independent testing set to ensure the most predictive scores possible.

Payment Outlook Indicator Validation

Payment Outlook Score predicts near-future payment behavior. Score ranges from 0 to 100 with lower scores indicating higher probability of severe delinquency, defined as 20% or more of past due amount being over 60 days past terms.

The score accurately predicted delinquency (20% or more of payments exceeding 60 days past due) 80.75% of the time, and the score accurately predicted timely payments (less than 20% of payments exceeding 60 days past due) 84.22% of the time.

Image 1: Confusion Matrix for Payment Outlook Indicator showing accuracy of predictions for that score. Values found in the darker squares are the percentage accurately predicted by the model.

Business Viability Indicator Validation

Business Viability Score predicts long-term financial stability. Score ranges from 0 to 100, with lower scores indicating a higher likelihood of facing extreme financial distress or bankruptcy within the next 12 months.

From the test, accounts in the "treatment" group where we know bankruptcy occurred, we went back to a year prior and were able to accurately predict the bankruptcy event 81.48% of the time .

Image 2: Confusion Matrix for Business Viability Indicator showing accuracy of predictions for that score. Values found in the darker squares are the percentage accurately predicted by the model

Model Maintenance Plan

Credit2b will continue to train the model on a monthly basis, looking at a sample of 10,000 accounts each month and back-testing to ensure we are maintaining our initial threshold of correctly predicting timely payments.

CHANGE IN CONCEPT ①

Handle changes in definitions of the data by *model relearning* and/or *redesigning*

Choose *appropriate historical time window* for retraining based on nature of the change

Requires *human intervention* to initiate update of the model

DRIFT IN CONCEPT ②

Handle "minor" data deviations by updating the model through *online learning*

Continue training of the current model by utilizing *recent data*

Trigger *automated* model update via monthly evaluation of the model's performance

MANUAL MAINTENANCE ③

Analyse system-alerts on unusual fluctuations in score trends

Review analyst initiated alerts to identify if any action is required

Conduct periodic performance reviews by data science team

MODEL DESIGN → MODEL TRAINING → VALIDATION BY BACKTESTING → DEPLOYMENT → PERFORMANCE MONITORING