

Regression Modeling Results – Bank Loan Analysis

Executive Summary Report

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- **Project Overview:** In this part of the project, we are going to build a regression model.
- **Target Goal:** Build and analyze a binomial logistic regression model that predicts loan_status.

Key Insights

Confusion matrix of binomial logistic regression.



The efficacy of a binomial logistic regression model is determined by accuracy, precision, and recall scores; in particular, recall is essential to this model as it shows the number of bad borrowers.

The model has mediocre precision (50% of its positive predictions are correct) but no recall (0%). This means the model only makes false negative predictions and fails to capture customers who will be bad borrowers.

Interest rate is by far the most important feature in the model. It has a positive correlation.

This model should not be used to make significant business decisions.

Next Steps

The next step is to construct a classification model that will predict the status of loan.