Michael Dabkowski

Module 20 HW Challenge

Write a Credit Risk Analysis Report (20 points)

1. Provide an Overview that explains the purpose of the analysis

2. Using a bulleted list, describe the accuracy, precision, and recall scores

3. Summarize the results from the model. Include your justification for recommending the model for use by the company, if you don't recommend the model, justify your reasoning.

1. The purpose of this analysis is to create a prediction model that can identify the creditworthiness of borrowers and the potential risk they may pose to the company.

2. The accuracy score of this model is .99 or 99%. The model performs at an exceptionally high accuracy level.

Precision: The precision of healthy loans is 1.0, meaning the model predicts healthy loans with perfect precision. High risk loans are .87 or 87%, meaning less precision, and therefore can have some that are incorrect.

Recall: Recall could be known as the true positive rate. Once again, the recall for healthy loans is 1.0 or 100%. The model captures all the healthy loans. The high risk loans are .89 or 89%, which means the model can identify 89% of the high risk loans.

3. With an accuracy of 99%, I would recommend this model. However, I would try to figure out how to boost the high risk % up. In the lending aspect though, 90% for high risk loans would be deemed acceptable. A company should be taking on some risk to help with their profits. Working in the industry myself, you don't want a 100% healthy loan portfolio because it would mean you aren't taking enough risks and are losing opportunities for growth/profit.