Looking Closer at Classification Project

Model: No Oversampling

Scores:

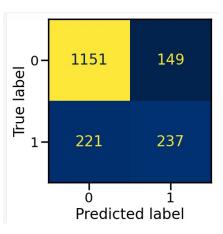
• ROC AUC: .83

Excellent discrimination

• Recall: .51

Establishes a benchmark

Confusion Matrix:



- correctly classified 1151 people who didn't cancel their subscription.
- correctly classified 237 customers as people who did cancel their subscription.
- incorrectly classified 149 customers as cancelled their subscription when they actuall kept their subscription.
- incorrectly classified 221 customers as people who kept their subscription but actually canceled it.

Model: Oversampling

Scores:

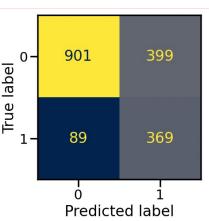
• ROC AUC: .749

• Acceptable Discrimination

• Recall: .80

Improvement over no oversampling

Confusion Matrix:



- correctly classified 901 people who didn't cancel their subscription.
- correctly classified 369 customers as people who did cancel their subscription.
- incorrectly classified 399 customers as cancelled their subscription when they actually kept their subscription.
- It incorrectly classified 89 customers as people who kept their subscription but actually cancelled it.