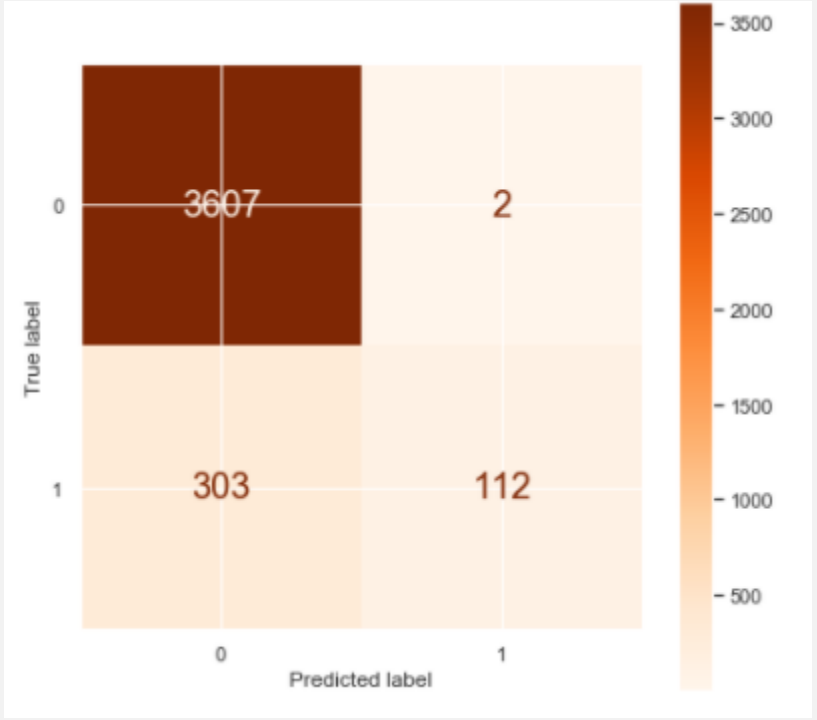
Executive Summary

Insights & Recommendations

Situation

- The BCG project team thinks that building a churn model to understand whether price sensitivity is the largest driver of churn has potential.
- We have developed a model that predict the chances of customers churn using the provided data.
- The model does not classify true classes properly as the recall of the model is 0.26988.



Complication

- We conduct a brief analysis of the strategy that the SME division head proposed. This is not necessarily the optimal strategy. The trained model does not predict churn type on behalf of the trained data.
- The strategy suggested by the SME division head we offer a 20% discount to all customer targeted. However, this might not be optimal either.
- We assumed before that customers offered a discount will not churn. However, that may not be true. The discount may not be large enough to prevent churn.

Purpose Solution

we can predict the churn probability for each customer as a function of price, margin and other factors. Therefore, we can try to find a strategy for each customer that optimizes either their expected revenue or profit.

We will need to try to:

- Change the level of discount offered overall
- Predict the response of customers to that discount (i.e., the churn probability) based on how much that discount affects their prices, the revenue and margin.
- Take care that we've applied the discount to all affected variables. To make this easier, we might want to retrain our model using a simpler set of variables where we know that we can factor the discount correctly into the predictors.
- Find the discount level that balances customer retention vs the cost of false positives.
- An even more sophisticated strategy is to find the right level of discount for each customer that maximizes their predicted revenue or margin.