E-Commerce Shipping

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OUTLINE

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Work Flow

☑

Search for the dataset

☑

EDA

☑

classifaction model

☑

Experiments

☑

ROC curve

Introduction

We have an E-commerce website and our products shipping to every where.. we have business problems in shipping that's why we trying to solve it by making a model that predicts the product shipment delivered on time or not,to make our customers more satisfied

Data :

Sourse

Size

Type

Kaggle .com

**10999 columns
12 Rows**

String - Integer

›

Is the data balanced or unbalanced?
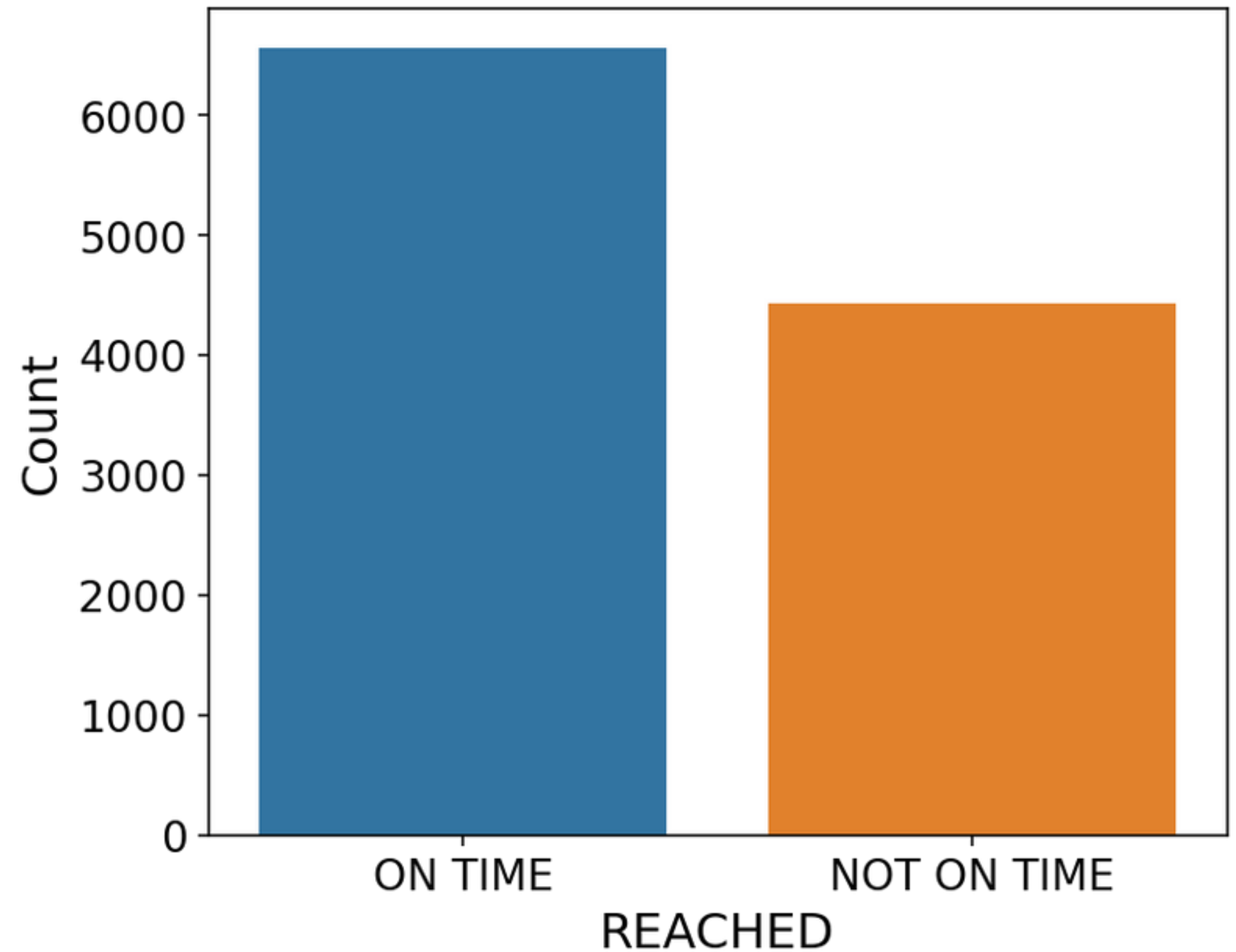
Experiments

Model	F1	Precision	Recall
Random over sampling	0.64	0.528	0.83
SMOT	0.64	0.529	0.82
Random under sampling	0.65	0.53	0.84

After balanced our Data
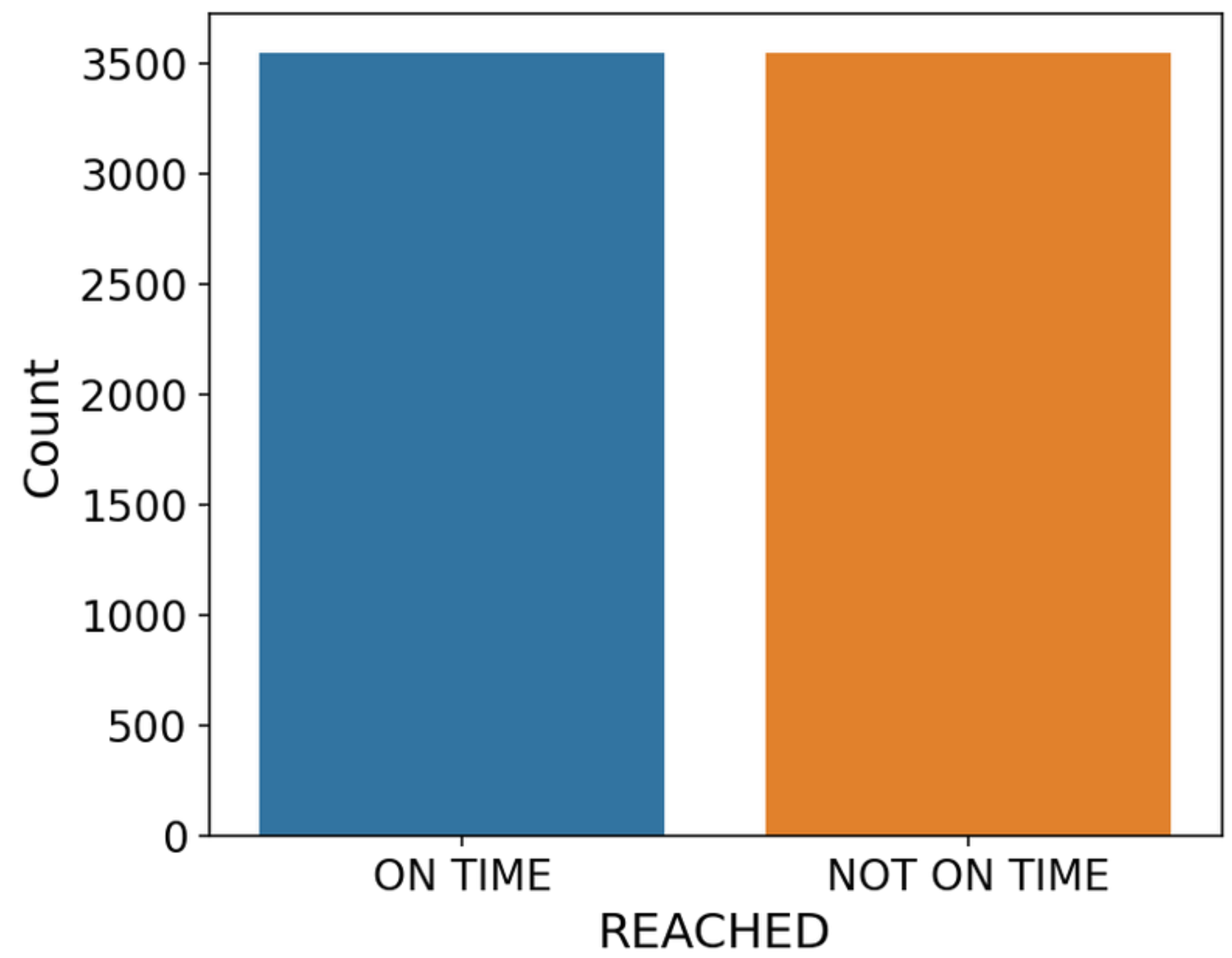
Experiments

Model	F1	Precision	Recall
Baseline Model	0.53	0.523	0.538
Dummy model	0.526	0.528	0.525
Scaling	0.526	0.528	0.525
Grid search	0.69	0.528	0.99
Decision tree	0.69	0.53	1
Random forest	0.57	0.54	0.61
Voting (KNN-LG-Random Forest)	**0.65**	**0.54**	**0.73**
Stacking classifier	0.58	0.54	0.62
XG-boots	0.67	0.53	0.92

ROC CURVE

this figure show the ROC curve
for all models
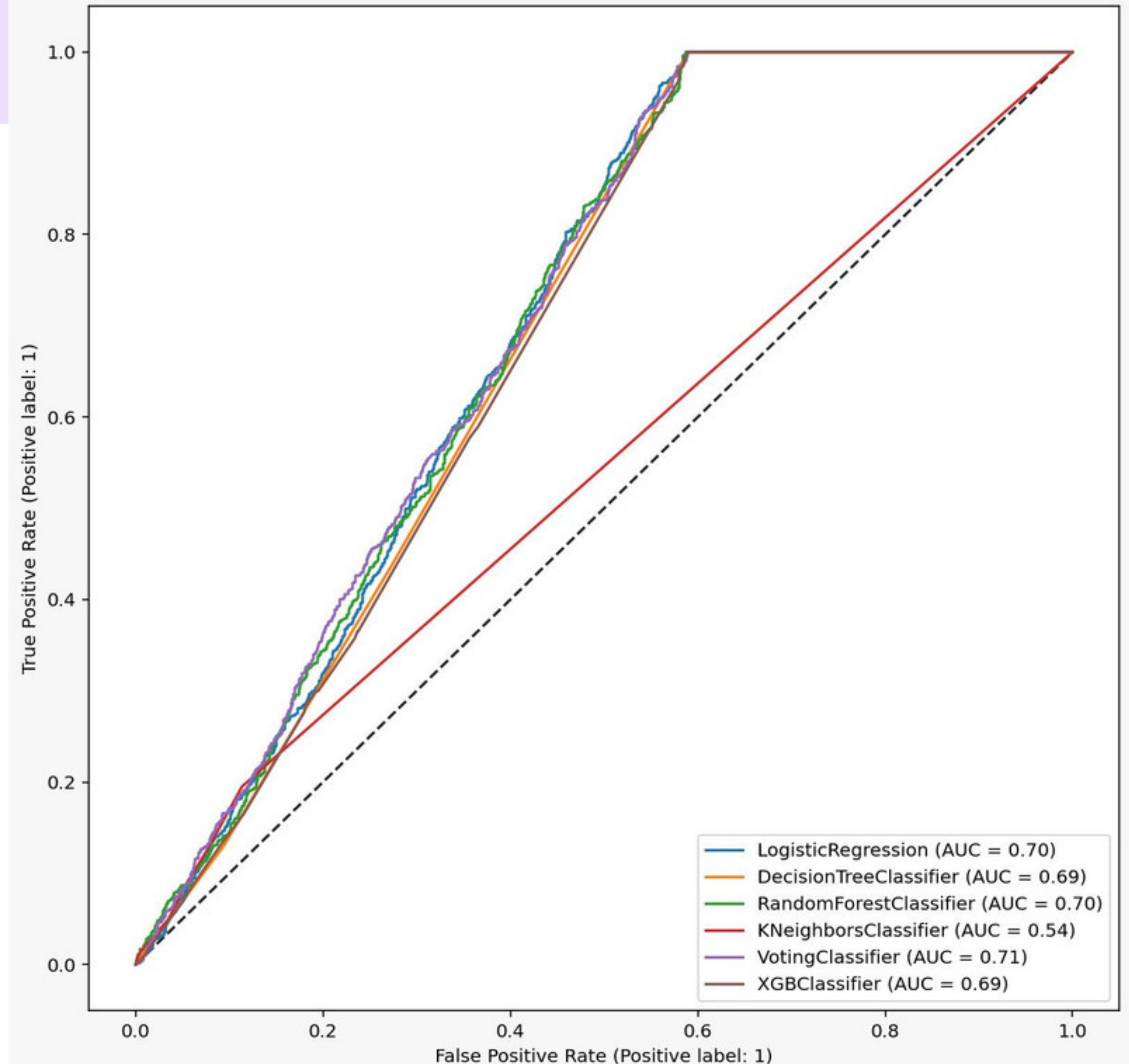
Precision and recall curve for best model

Precision and Recall Curves
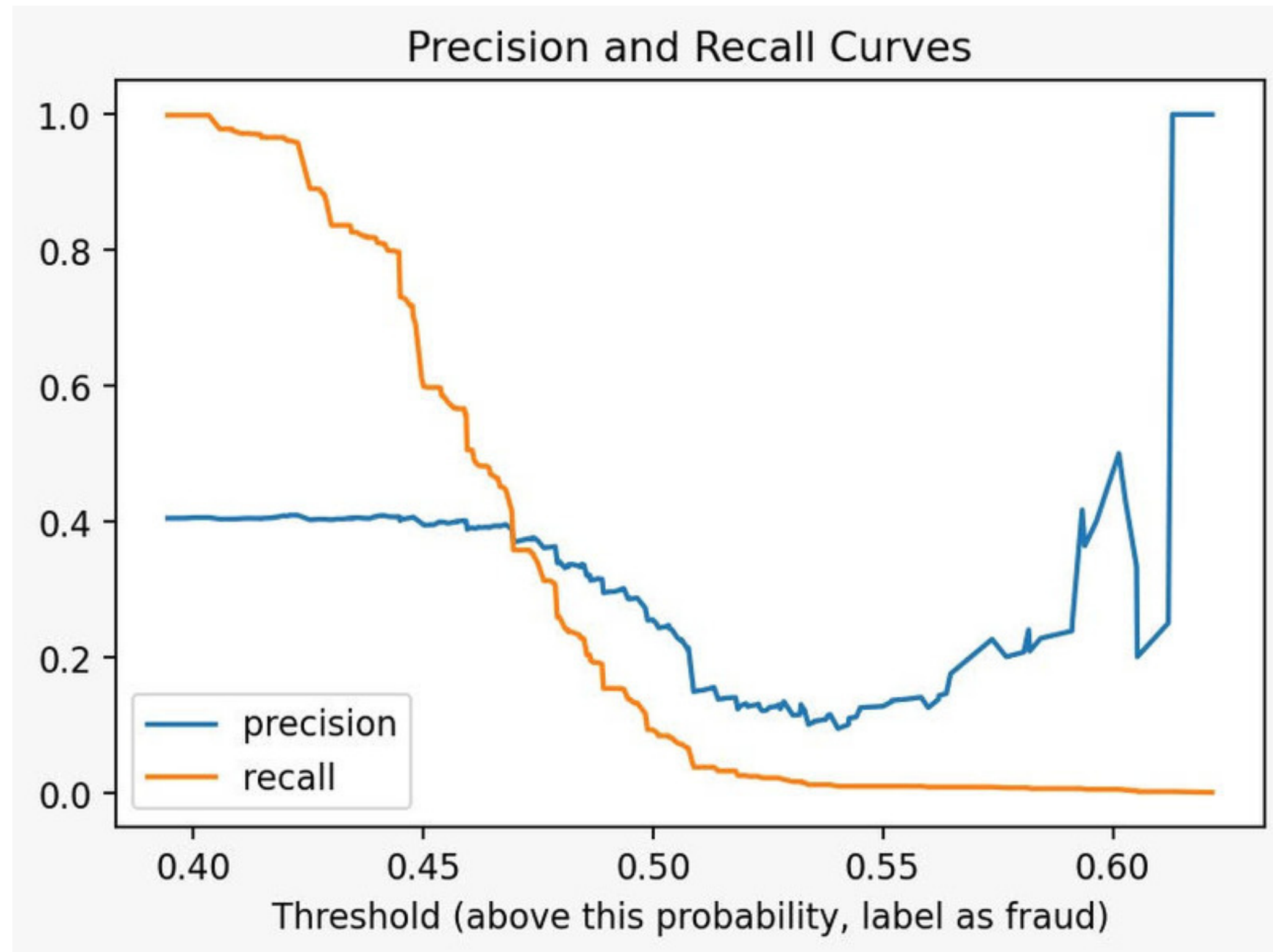
CONCLUSION

We noticed during the project, that Voting Model gave us the best results among the models, and it can help the compain to predict the products has reached on time or has not reached on time.

Thank you!

Questions?