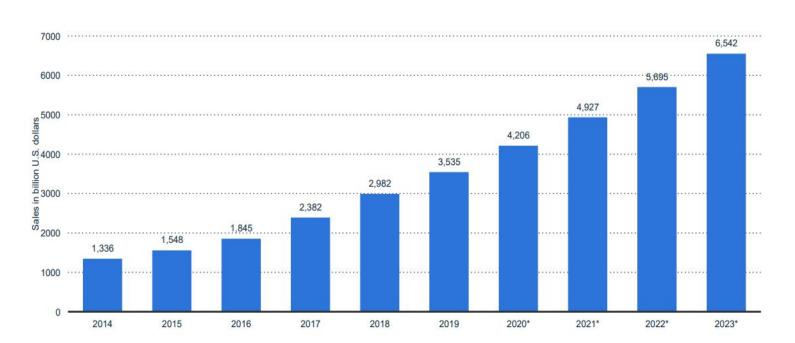
Winning the e-commerce Sale 10/20/2020

e-commerce at a Glance

Retail e-commerce sales worldwide from 2014 to 2023 (in billion U.S. dollars)

Global retail e-commerce sales 2014-2023



The Problem



E-commerce in 2020 is predicting to reach \$800Billion



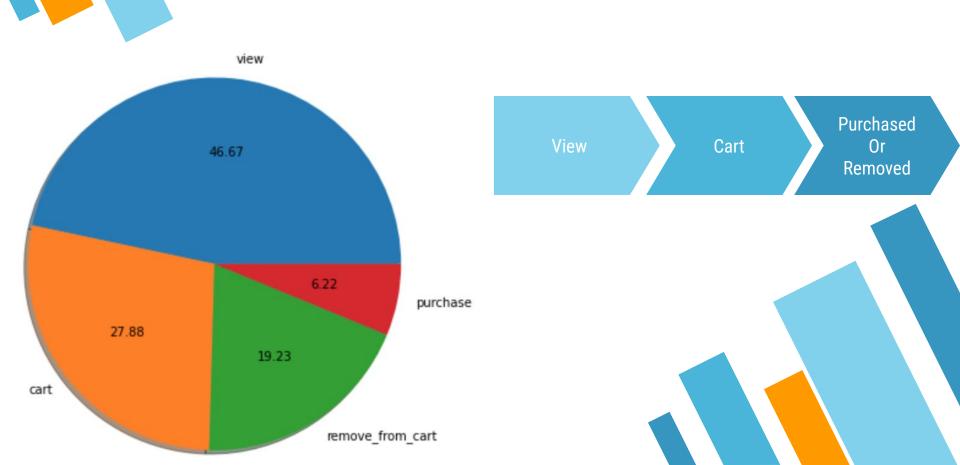
³/₄ of items added to cart were not bought.



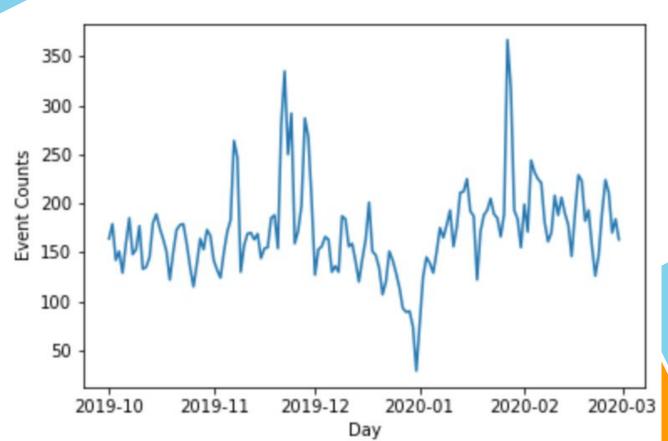
Huge opportunity for sales!!

The Data

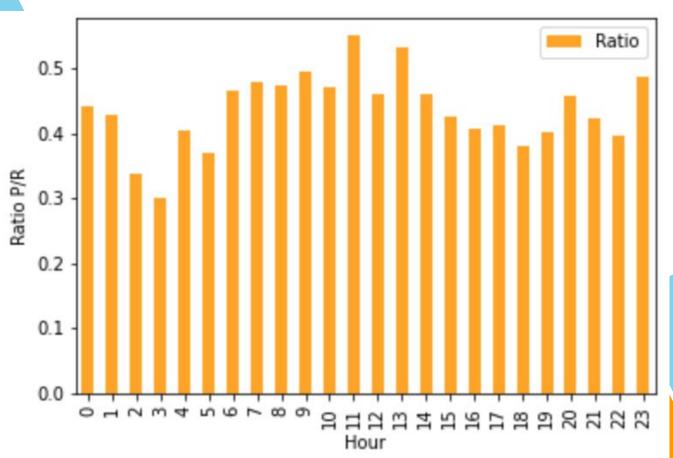
Data Breakdown



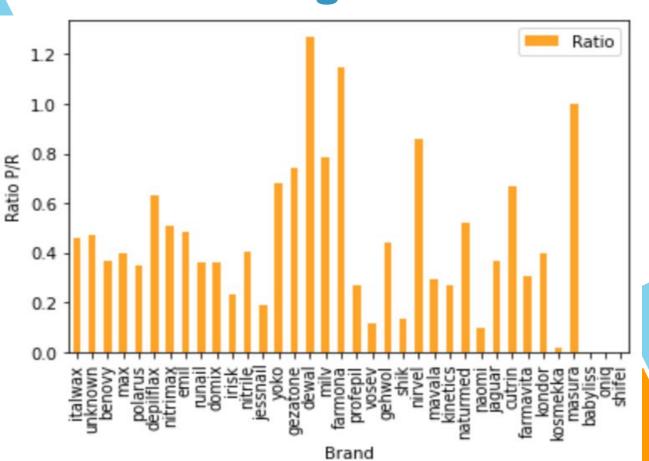
Trends Over the Months



Hourly Trends



Purchasing Behavior





The Good, The Bad, and The Ugly







The Bad







The Ugly







The Model

Modeling

Hyperparameters:

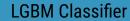
criterion: gini

max_depth: 115

max_features: 100

n_estimators: 400

bootstrap: True



Decision Tree Classifier

Random Forest Classifier

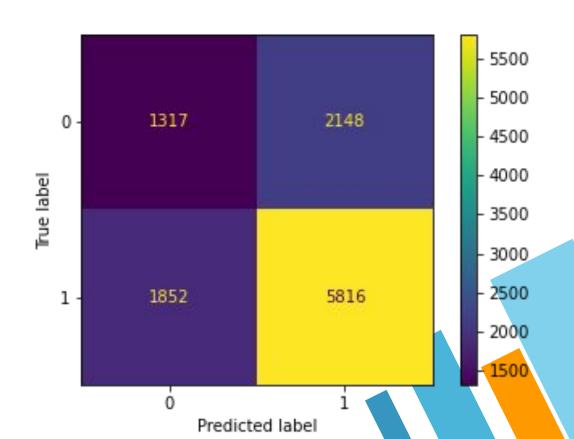
Best Model

The Solution

Recall:

Test: 76%

Train: 87%





Next Steps

More Power Improved Tuning

More Insights
Different Industries



William Melville

LN: https://www.linkedin.com/in/william-melville/

GH:https://github.com/Johnny-Foreigner