Telco Customer Churn Analysis

Business Case

- The purpose of this project is to predict Customer Churn using the Telco Customer Churn Data Set
- Churn is defined as the percentage of customers who's business you lost during a set period of time. It can be calculated by dividing the amount of customers lost by the total number of customers you had at the beginning of this time frame.

Business Value

 It is easier and cheaper to retain a current customer than it is to acquire a new customer

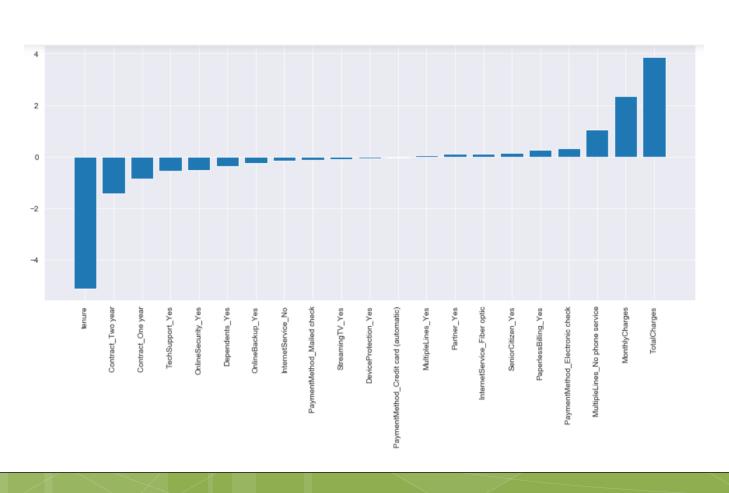
Goals

- Identify the most predictive features for Customer Churn
- Provide business recommendations on how to reduce Customer Churn
- Create a model that maximizes recall score because for this business case False Negatives are a bigger problem than Precision of the model

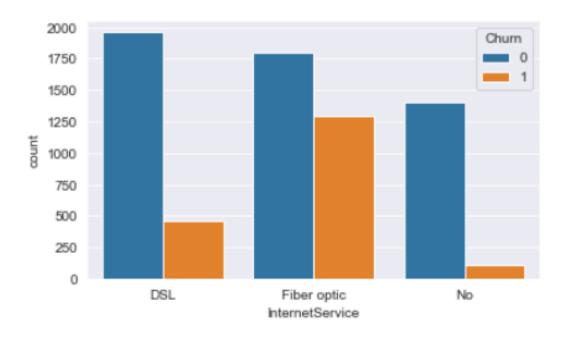
DataSet

- This data set is available through the Kaggle link below:
- https://www.kaggle.com/blastchar/telcocustomer-churn

Predictive Features

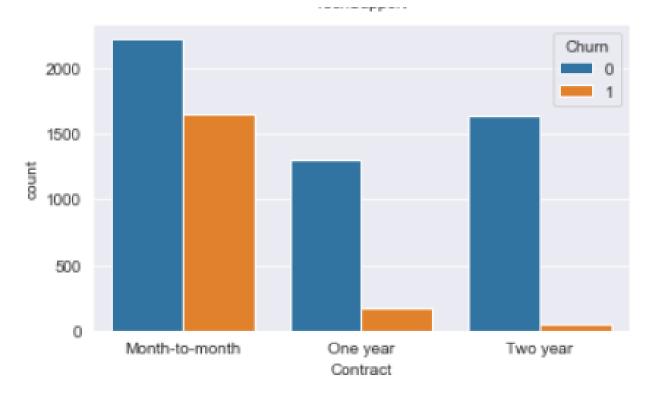


Recommendation #1



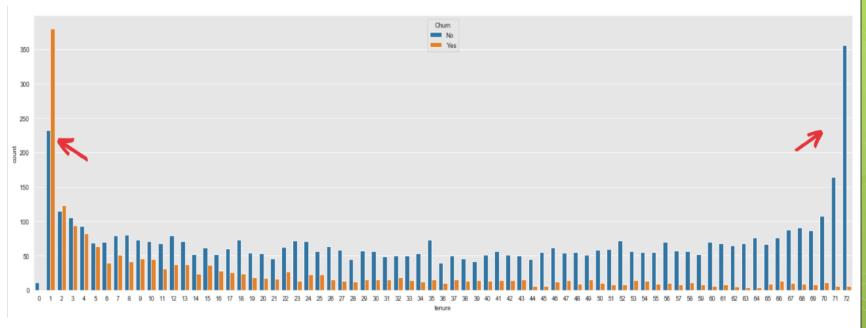
Increase quality of the Fiber Optic Internet service

Recommendation #2



Try to sign customers up for yearly contracts

Recommendation #3



 Provide loyalty promotions to customers to show appreciation for their tenure

Model Use

- Model was able to predict customer churn with a 83% accuracy
- Input customer data to predict whether they will churn
- Focus retention efforts on customers that are predicted to churn through promotional offers

Future Work

- Survey Customers on how they rate each service, providing a discount on service to increase participation
- Gather Customer location data to see if service is worse in certain areas
- Try out more models to improve accuracy

THANK YOU

• Questions?