Predicting Churn for Telco

Zach Paul

Problem Statement

Telco wants to increase their customer retention

We want to create a model that can predict if a customer will be leaving, before they leave

   Can spend additional time and energy on that particular customer to prevent them from leaving

Predict if a customer is unhappy to maintain a consistent revenue stream

Methodology

Over 7000 different customer accounts

  Their spending, their service usage, and the account type

Tracked if the customer had left within the last month

Created a model that utilized each person's stats to see if a certain type of customer would be more likely to leave
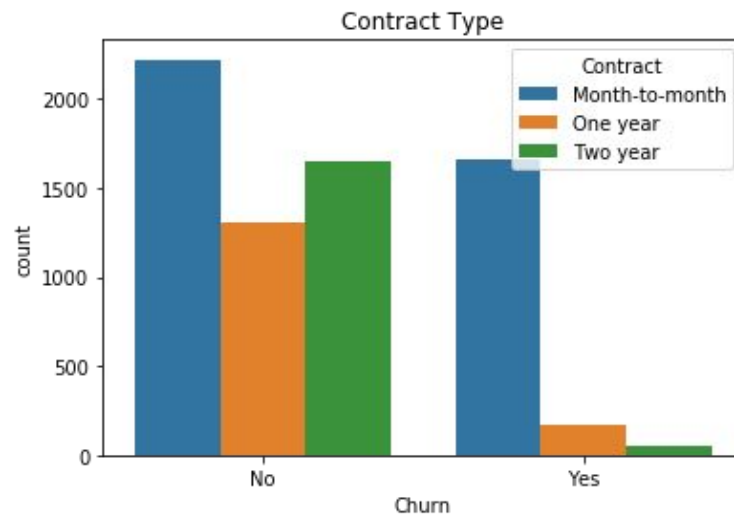
  Is a family more likely to stay over a single individual?

Contract Type

Month to month is the most popular, however it is also the most likely to churn.

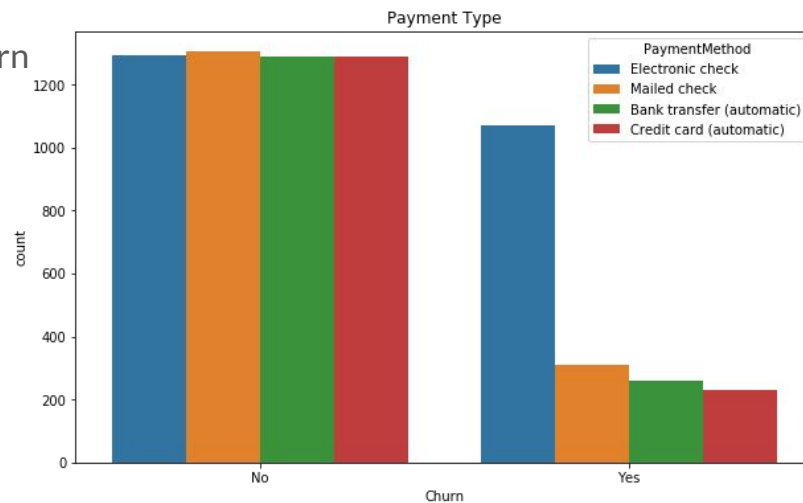Almost all accounts that left were month-to-month

Longer contracts are better for retention

Payment Type

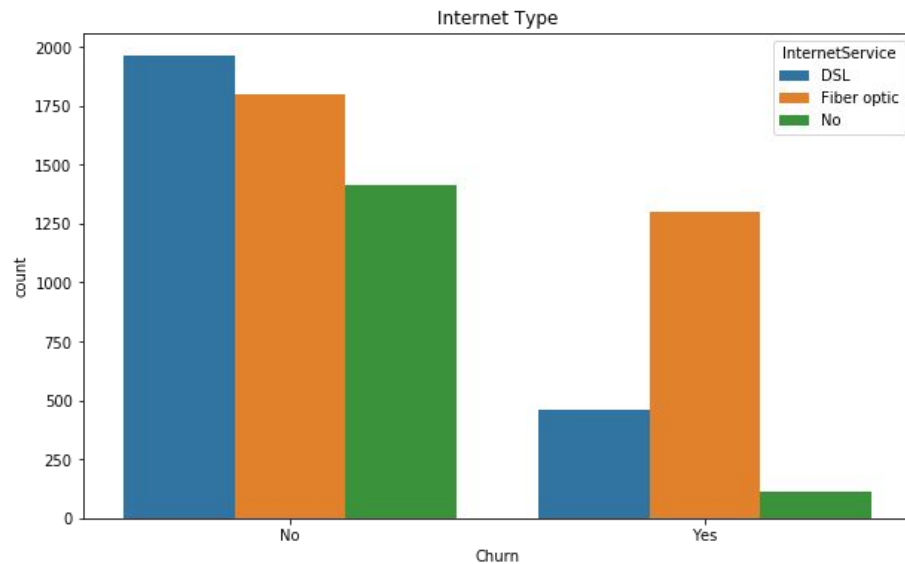Electronic checks are the most popular type of payment method

Again, the most popular feature is the most likely to churn

Internet Type

Fiber optic shares a similar popularity to DSL

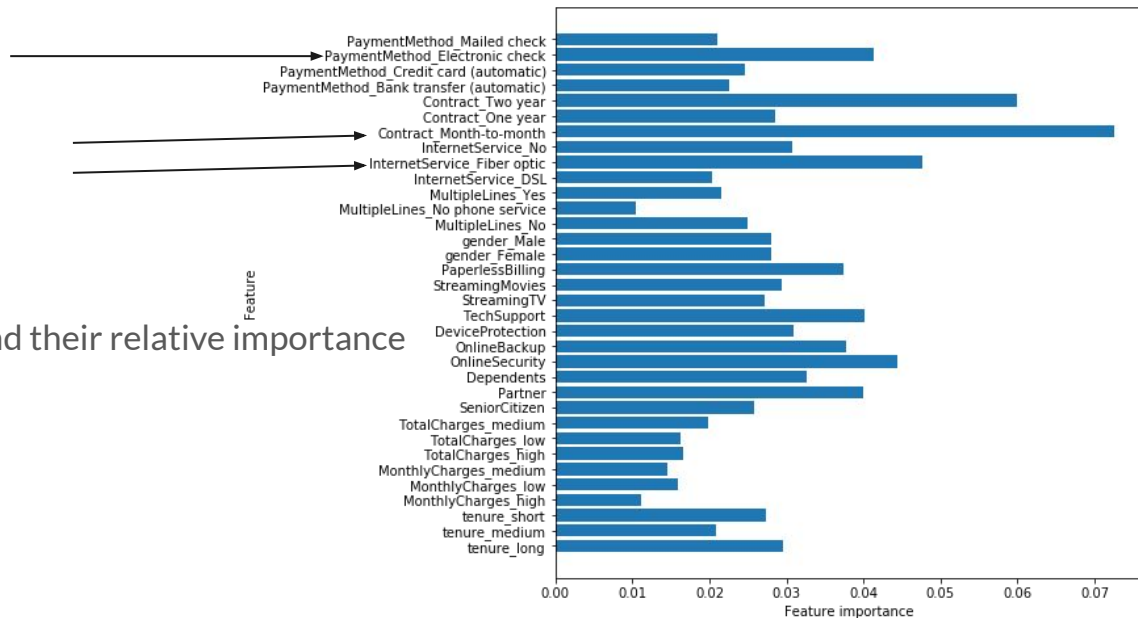Fiber optic users churn at a higher rate

Internet Type

Model Results

Listing of the features in the model, and their relative importance

Month to month contracts

Electronic Checks

Fiber optic internet

Recommendations

Incentivize longer contracts

      A customer in a month to month contract is the most likely to leave

Encourage paying by other methods

      Reduce the bill by an amount if a customer doesn't use electronic check

Encourage using all of the amenities provided

      Utilizing tech support was an important feature for retention

Future Work

Creating a model that will also predict how much money a customer will spend

Won't waste money trying to keep a customer that won't spend much

Determine what to offer to customers to prevent them from leaving

Target the least amount of money spent to retain a customer

Thank You For Your Time!