



My goal in this project is to figure out what features are causing customer churn at a Telecom company and create a predictive model to help them in the future predict if a customer will cancel their account based on the important features I discovered in my model.

How does the location of the clients affect churn?

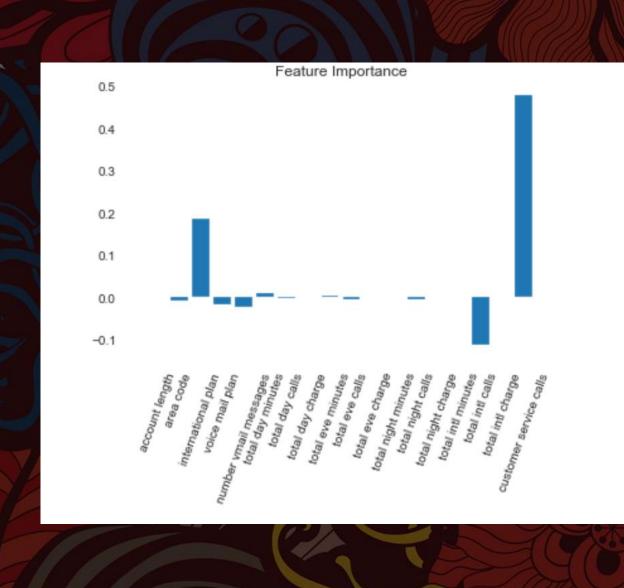
Is the International charges priced competitively by minutes enough to keep customers?

Question 2

Question 1

Question 3

How does the international plan affect the churn rate?



Important Features Discovered from Logistic Regression Modeling

Accuracy score of: 85%

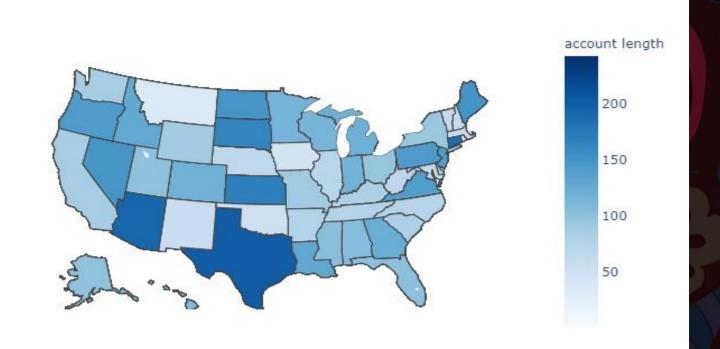
Top Features to Explore Further:

- 1. Total International Charge
 - 2. Area Code
- 3. Total International Minutes

Question 1: How does the location of the clients affect churn?

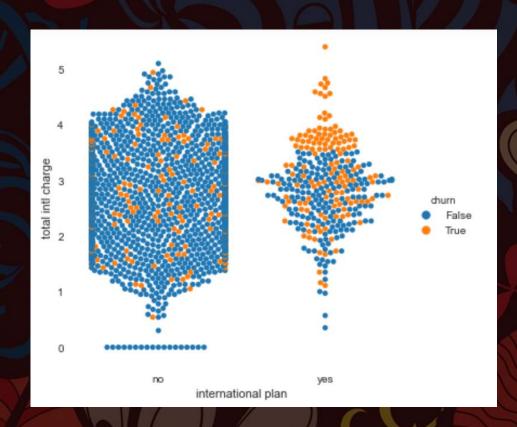
States with the highest amount of customers

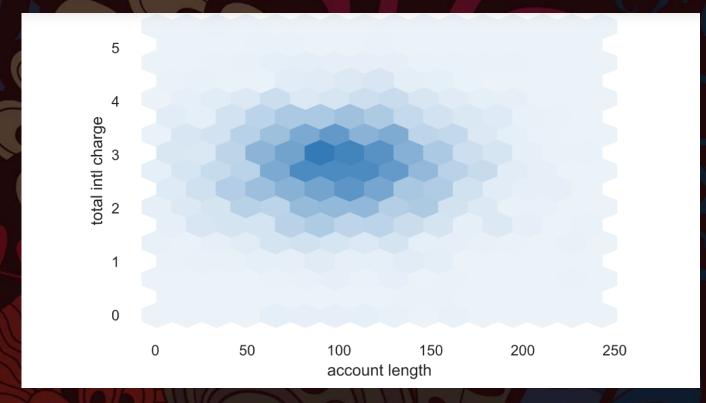
- 1. West Virginia -106
- 2. Minnesota 84
- 3. New York 83
- 4. Alabama 80
- 5. Wisconsin 78



There are lower account lengths for states who are not typically known to be big business areas.

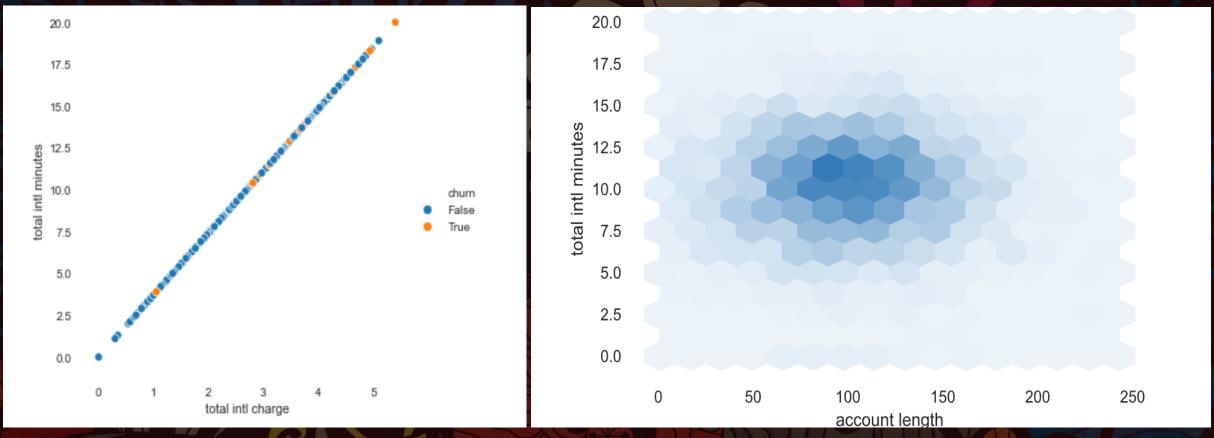
Question 2: How does the international plan affect the churn rate?





There are higher customer churn with customer with international plans when their total international charges are 3.5 and higher a month. There is a sweet spot for accounts staying active when the total international charges are between 2 and 3.5 a month.

Question 3: Is the International charges priced competitively by minutes enough to keep customers?



There are higher customer churn when the customer uses more than 10 minutes a month on the international plan. The average account length uses around 7.5 to 13 international minutes a month.

