Customer Churn

Prediction Modelling

Business Problem

- Customer churn is a big problem which can lead to financial losses.
- Identify customer churn.
- Reduce customer churn.
- Increase customer loyalty (retention).

Customer Churn

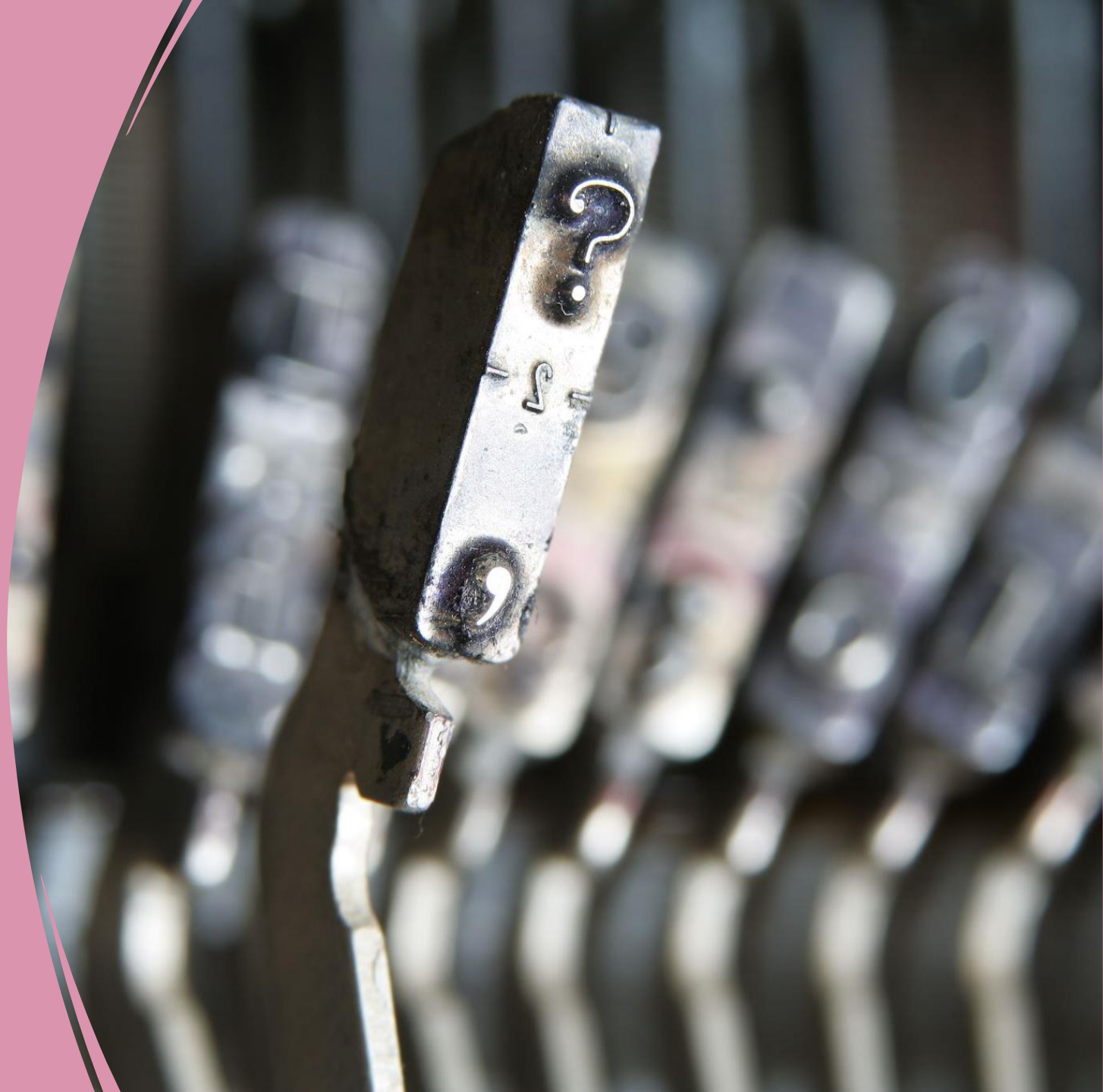
- Identify factors which leads customers to stop the use of a service by switching to a rival service, switching to a lower-tier experience in the service or reducing engagement with the service.

Customer Retention

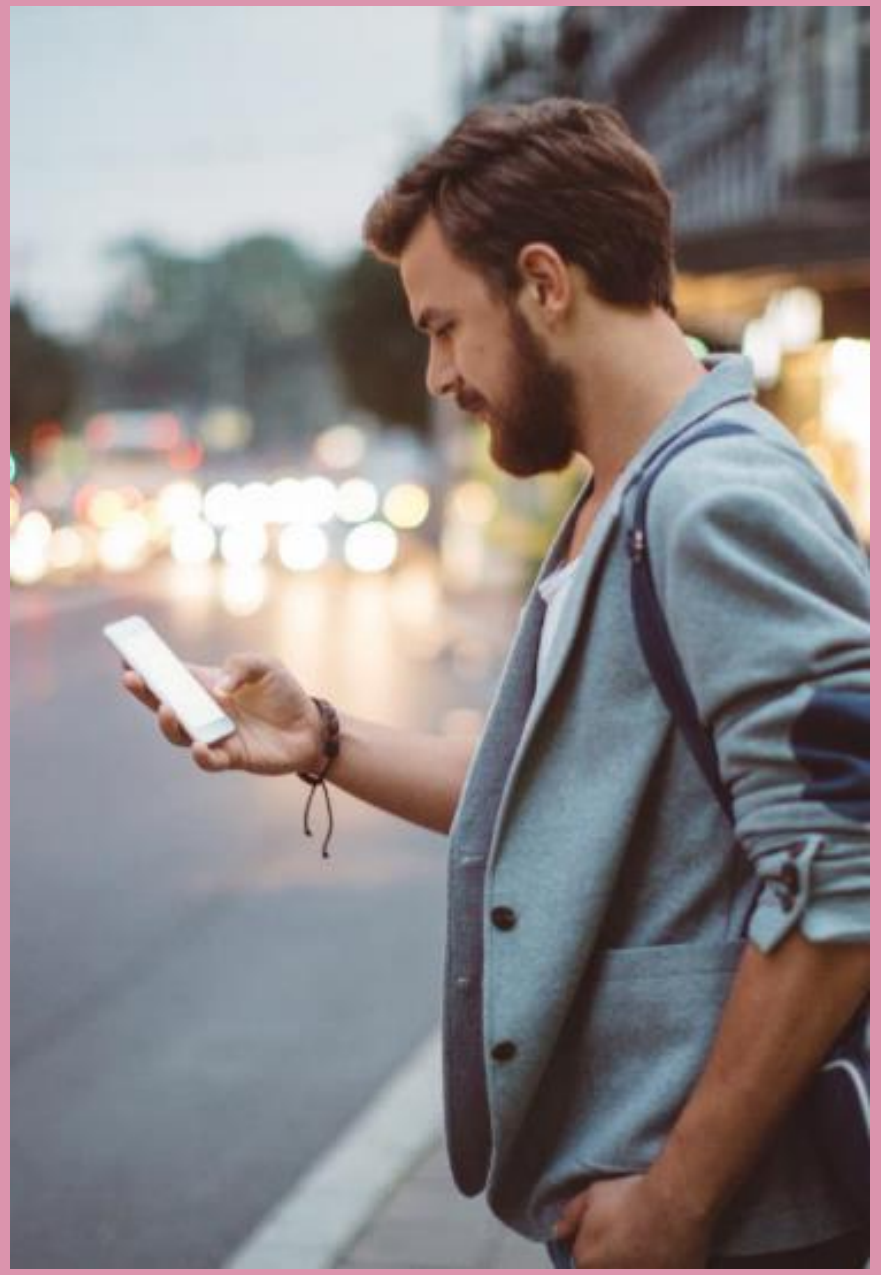
- Identify factors to retain customers over some specified period.

Predictive Modelling

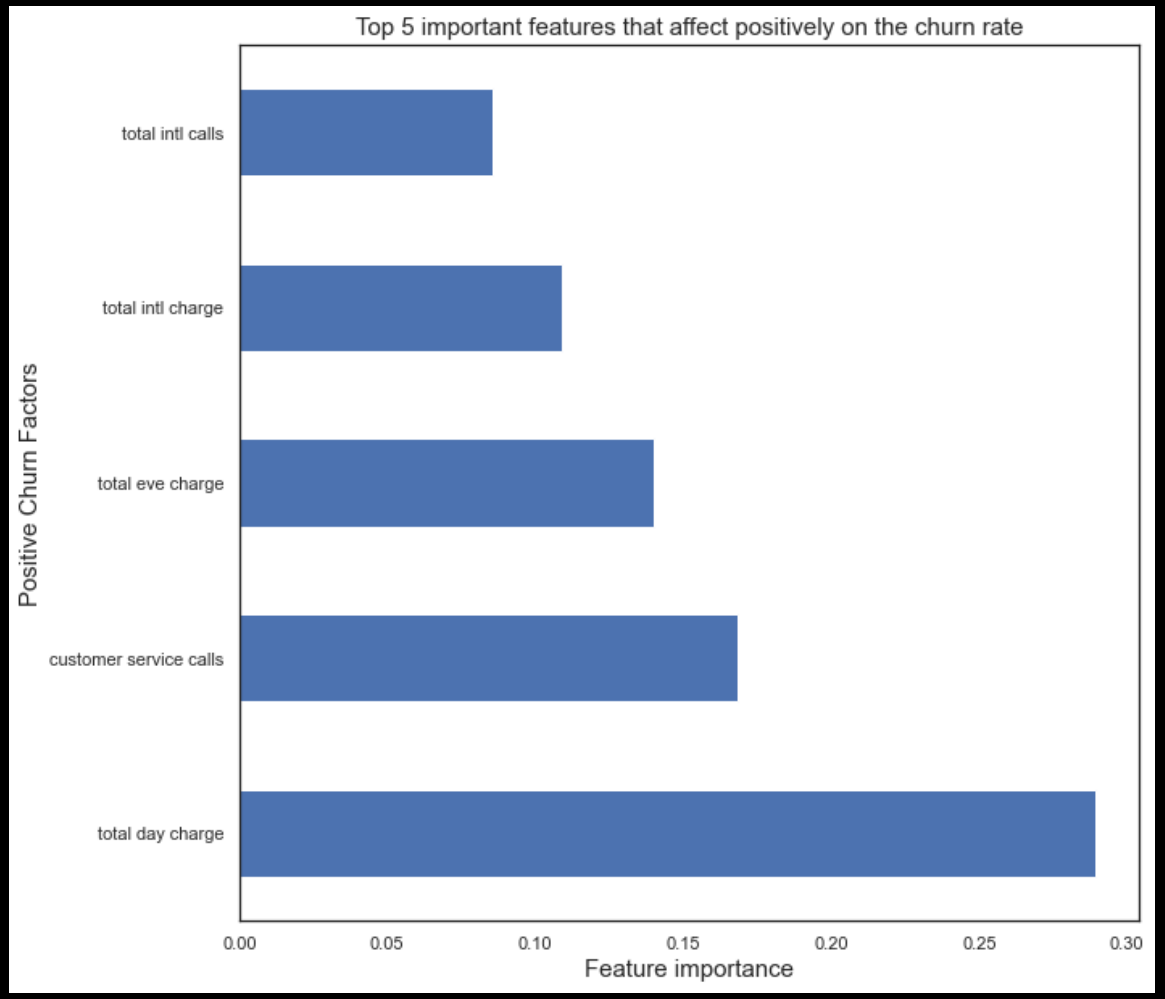
Machine learning models were used to answer questions of our business problem with accuracy 85%-100%.



What are the most important factors in customer churn?



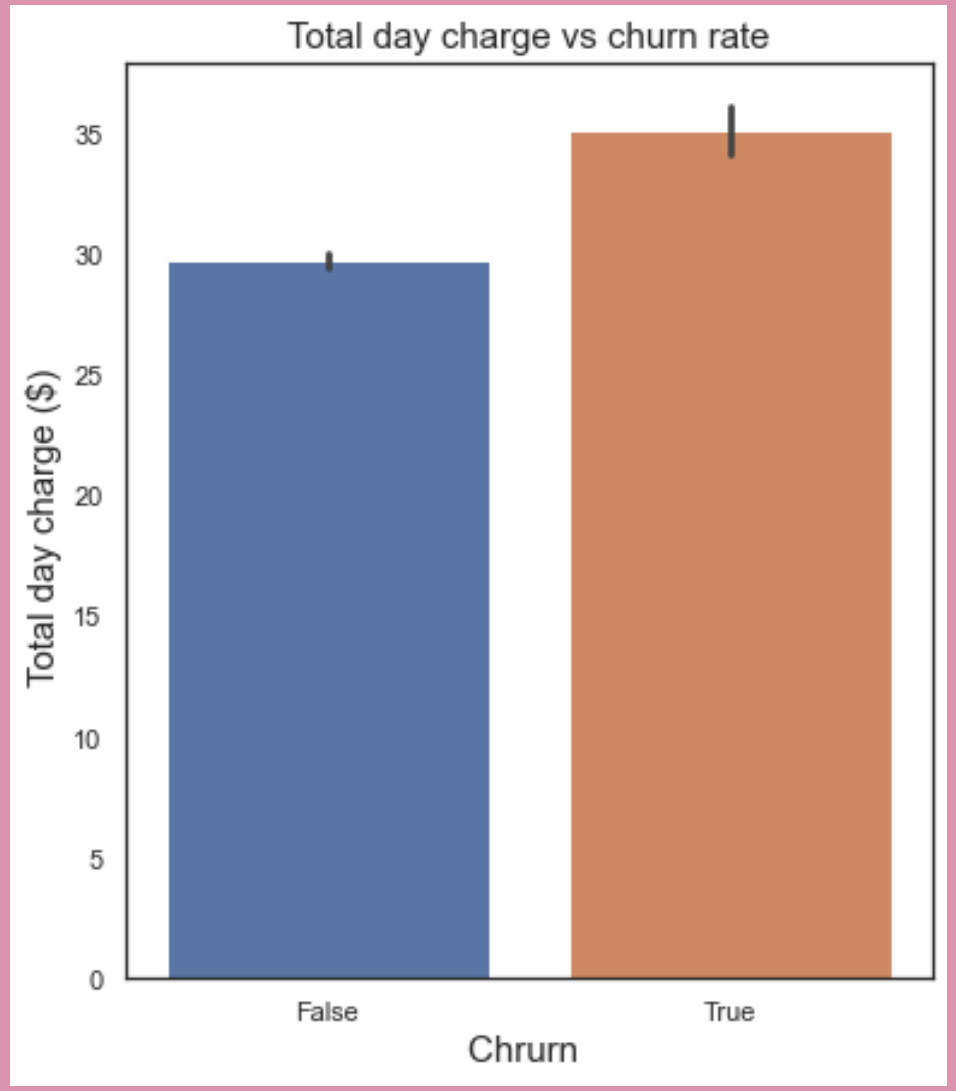
Factors increasing customer churn



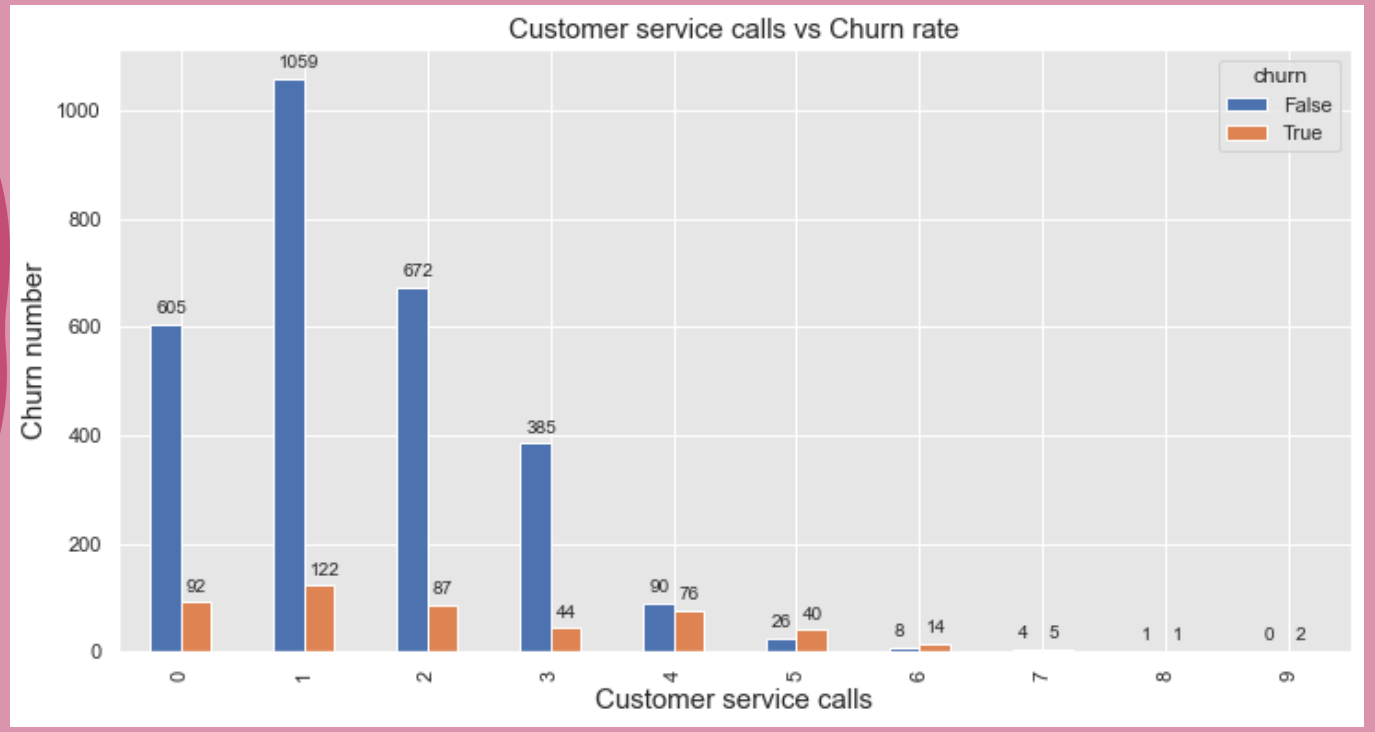
Customer Churn

- Total day charge
- Customer service calls
- Total evening charge
- Total international charge
- Total international calls

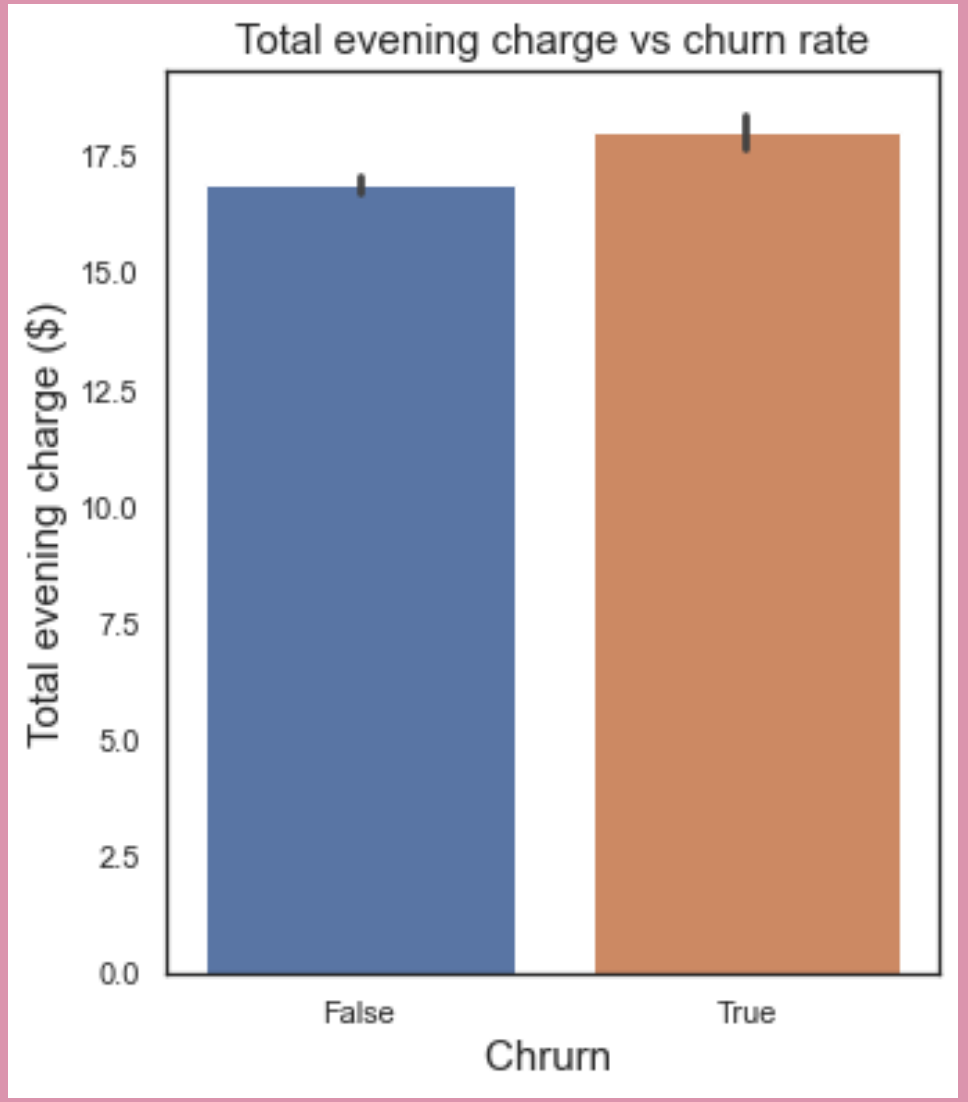
Total Day Charge



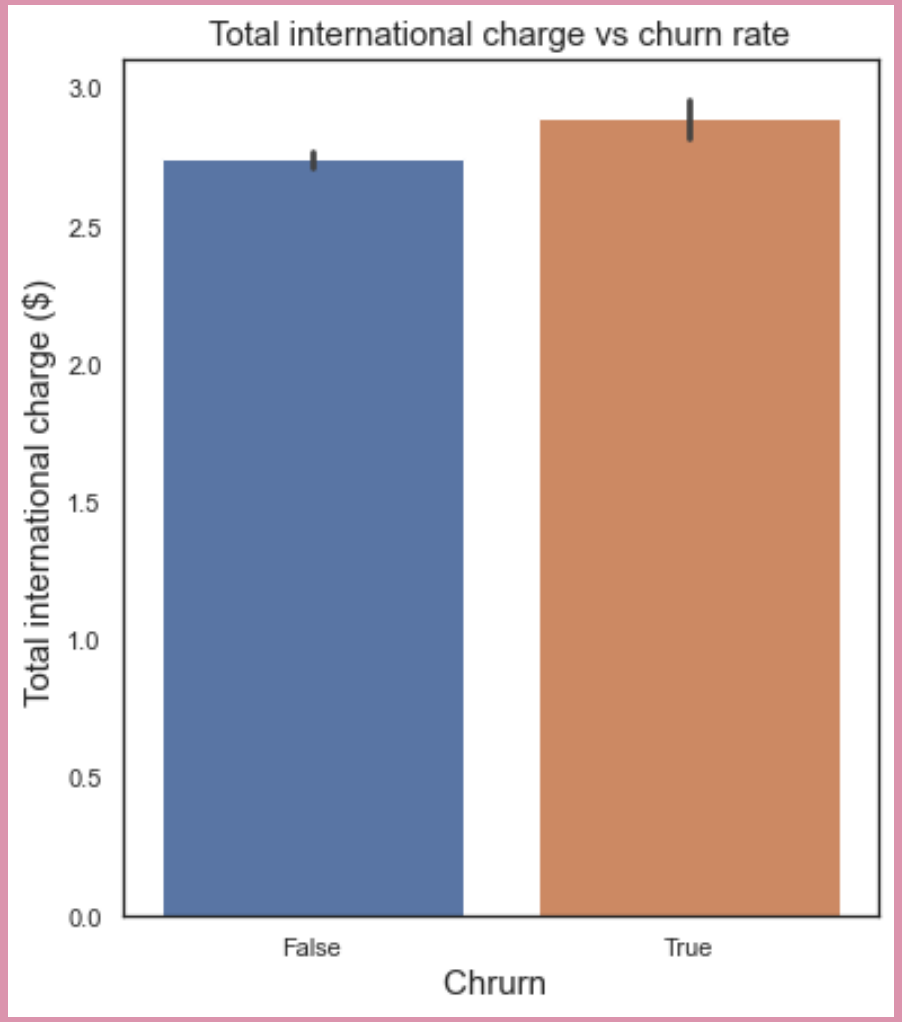
Customer Service calls



Total Evening Charge

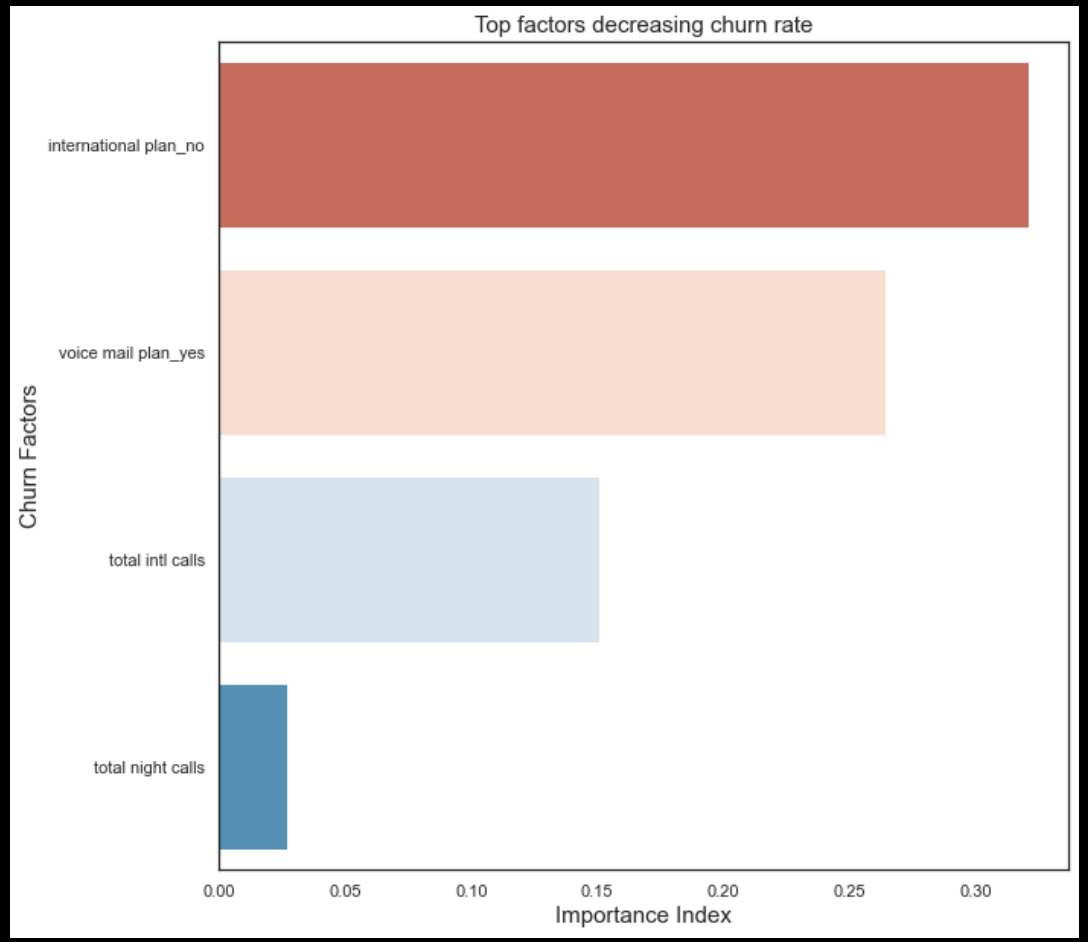


Total International Charge



What are the most important factors in customer retention?

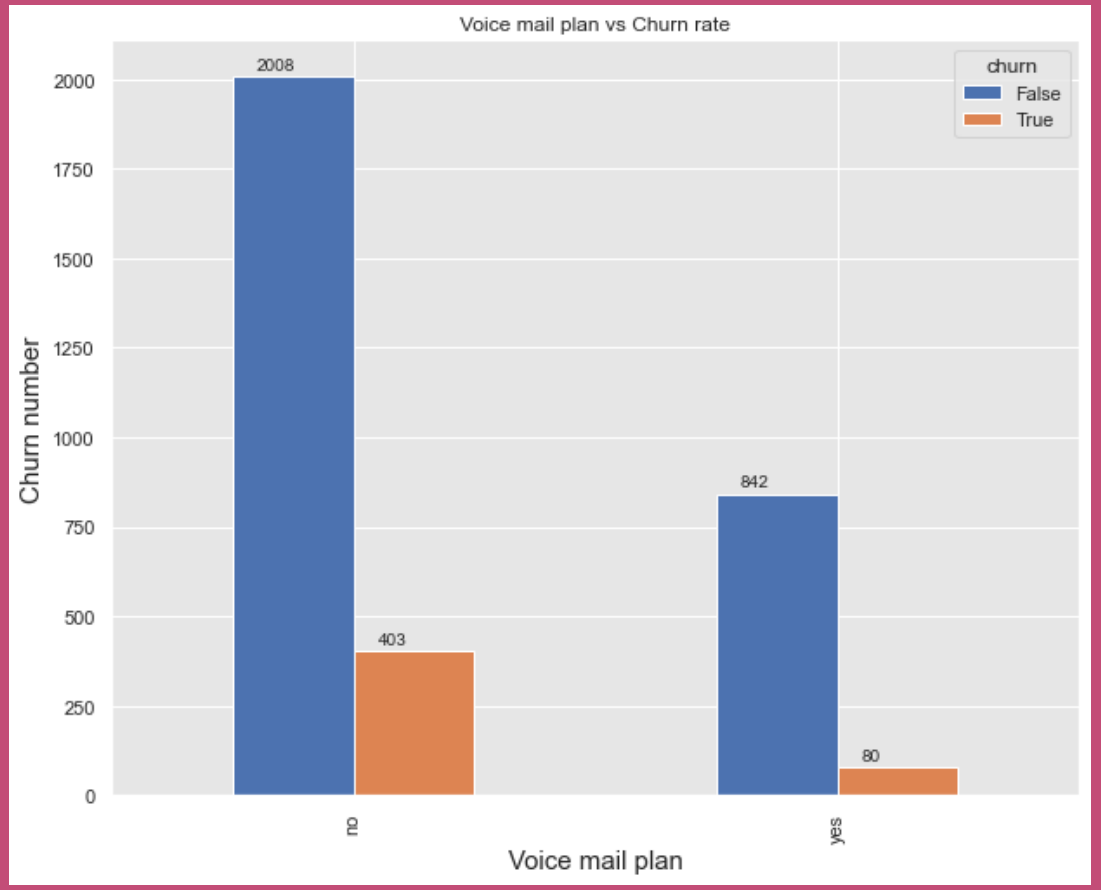
Factors decreasing customer churn



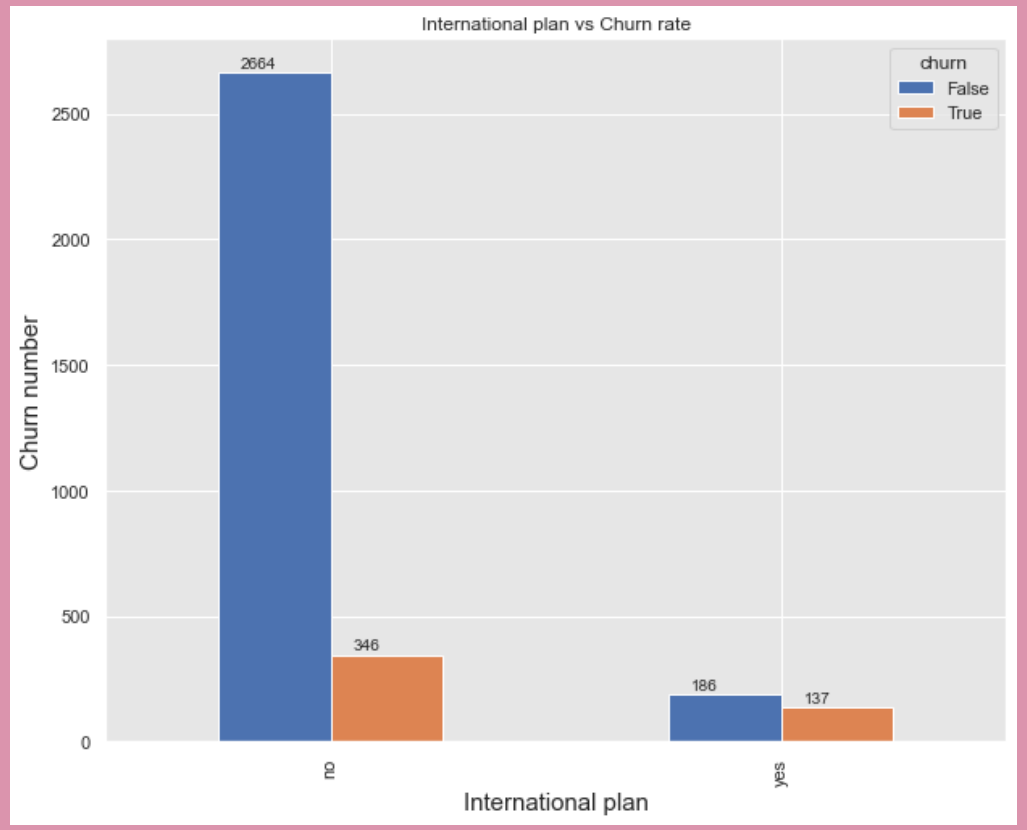
Customer Retention

- No international plan
- Have a Voice mail plan
- State location
- Total international calls
- Total night calls

Voice Mail Plan



International Plan



Conclusion

Churn prediction machine learning models gave answers for our churn problem

factors affecting Churn: Total day, evening and international charge, customer service calls

Recommendations

Decrease call charge for day and special charges for evening calls.

Have a better international plan.

Customer service calls is a measure usually for bad experience. Improve the quality of phone service.

Compete with rival companies and provide better offers i.e., competing voice mail plan.

Future Work

- Competitor information
- Internet package information
- Contract information
- Complaint data

THANK YOU!