

# Customer Churn

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Prediction Modelling



# Business Problem

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- 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

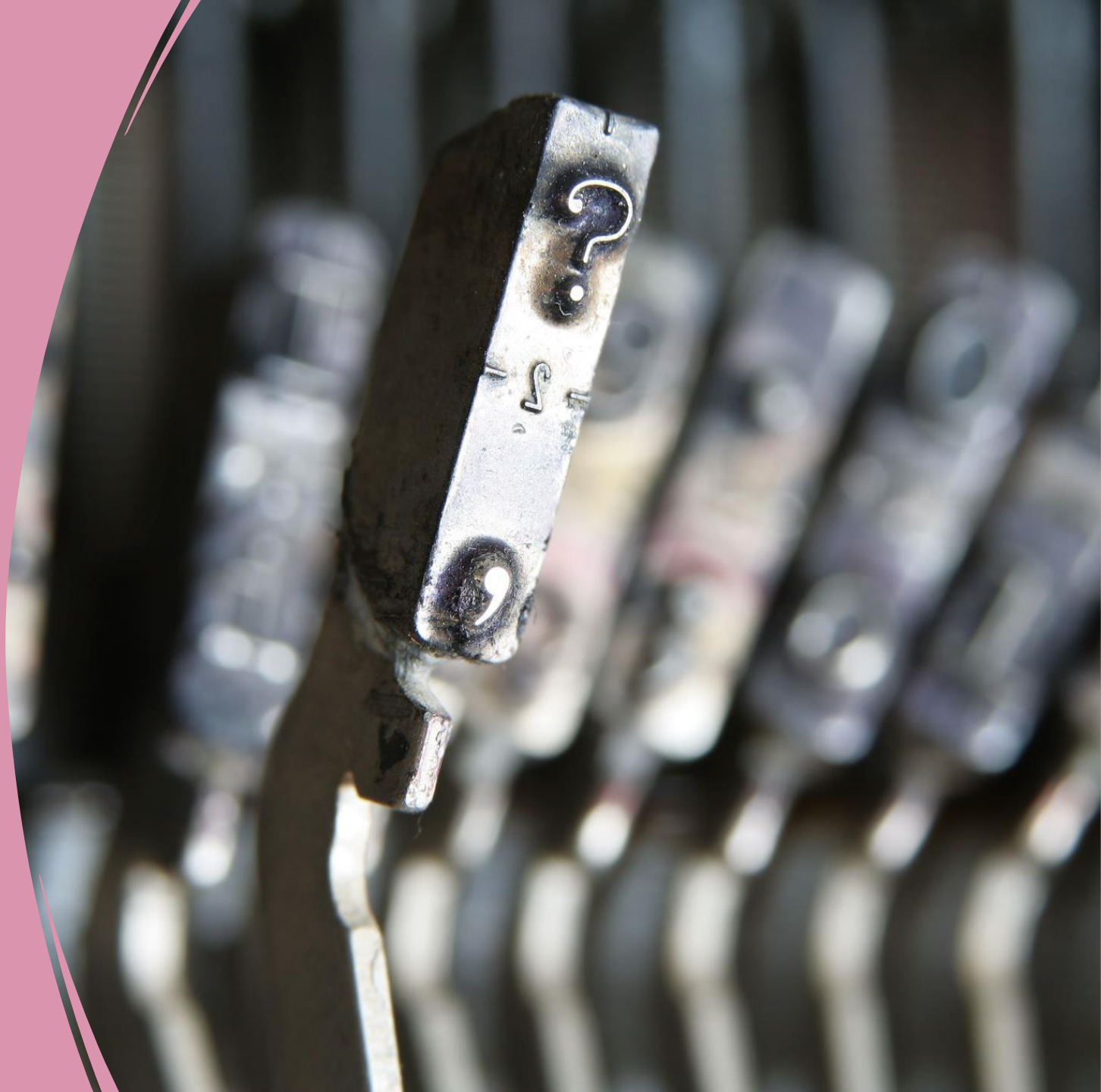
- Identify factors to retain customers over some specified period.



# Predictive Modelling

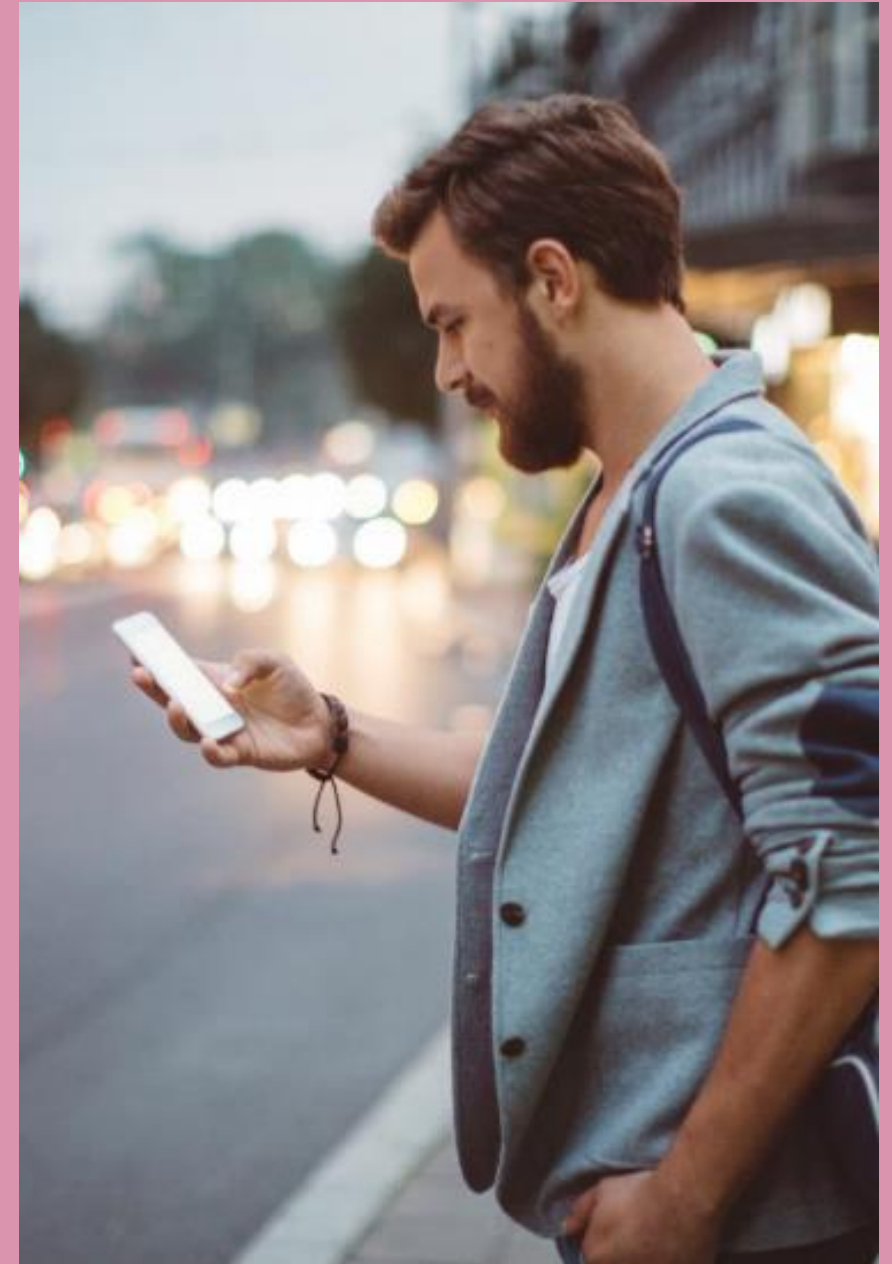
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Machine learning models were used to answer questions of our business problem with accuracy 85%-100%.

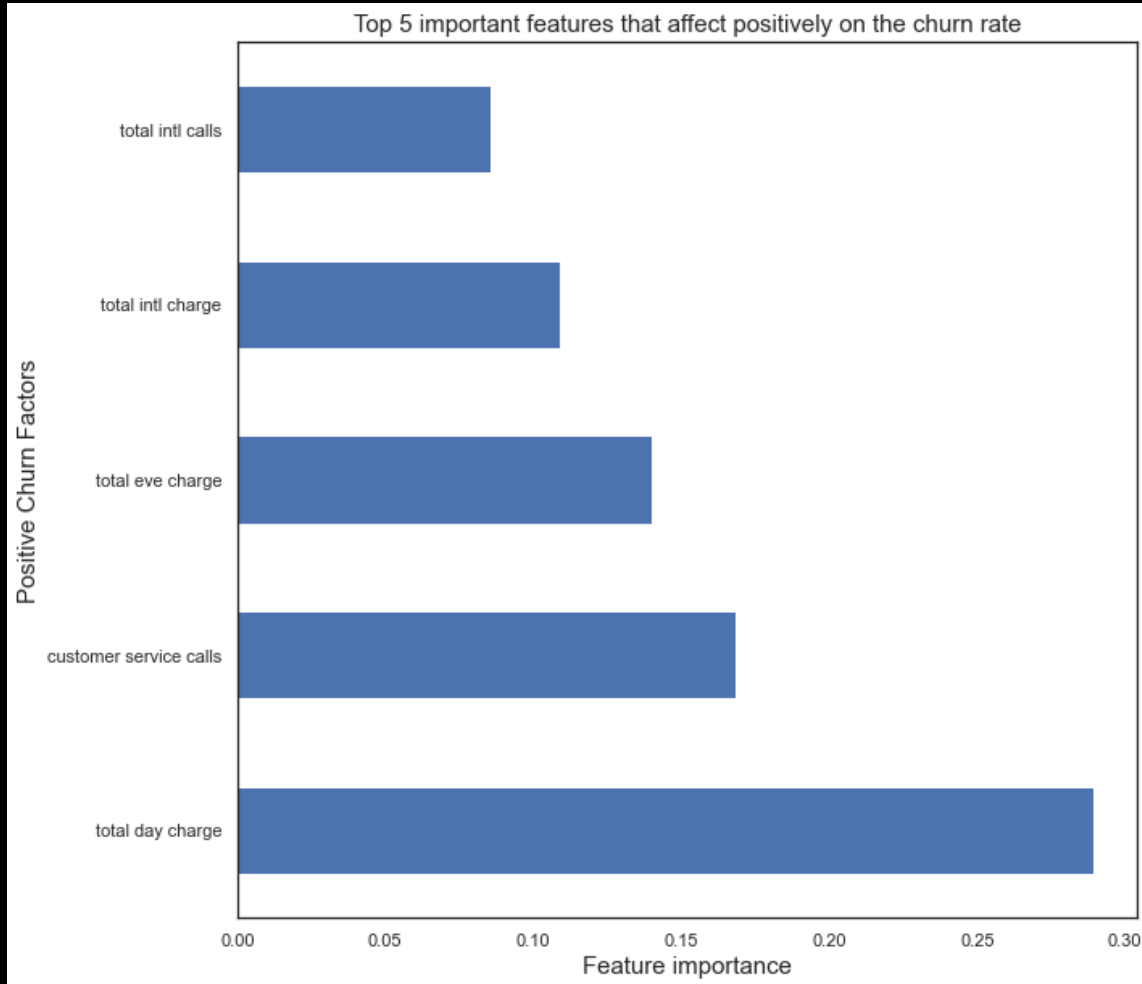


What are the  
most important  
factors in  
customer churn?

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# Factors increasing customer churn

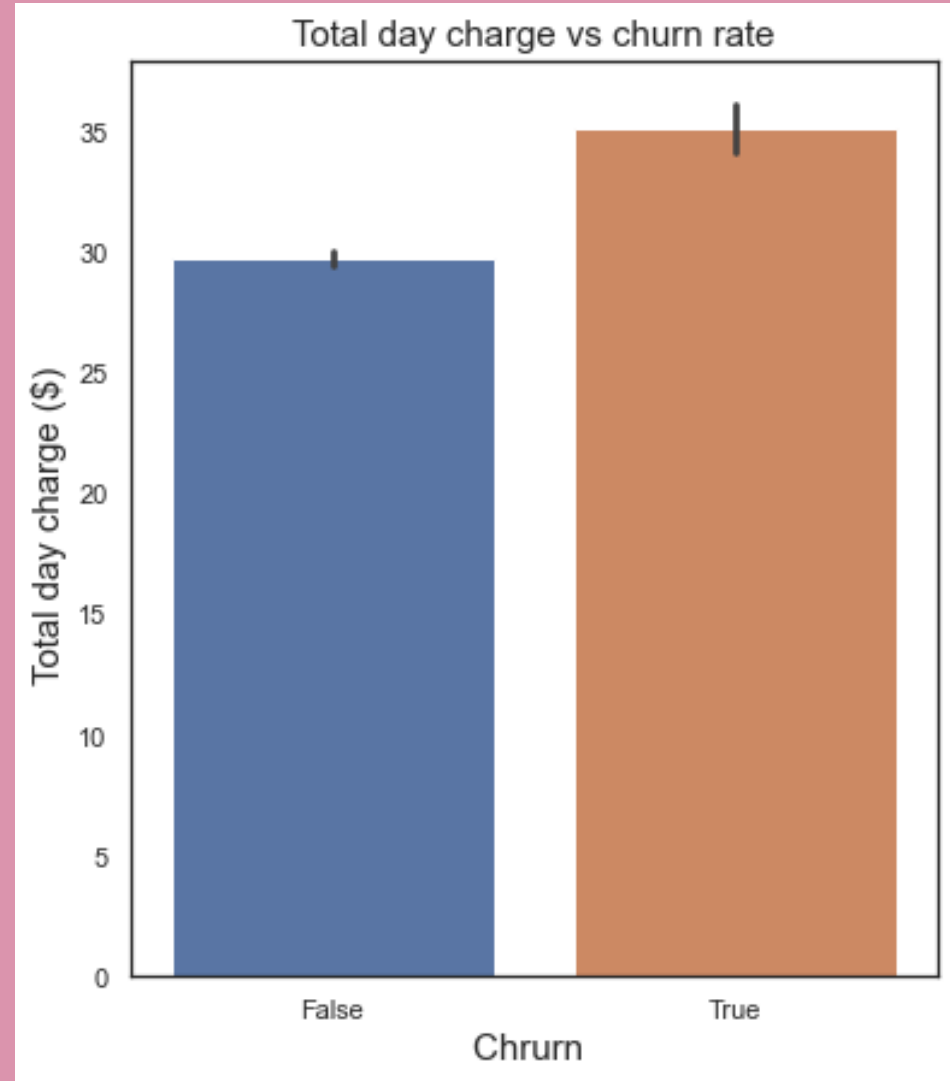


## Customer Churn

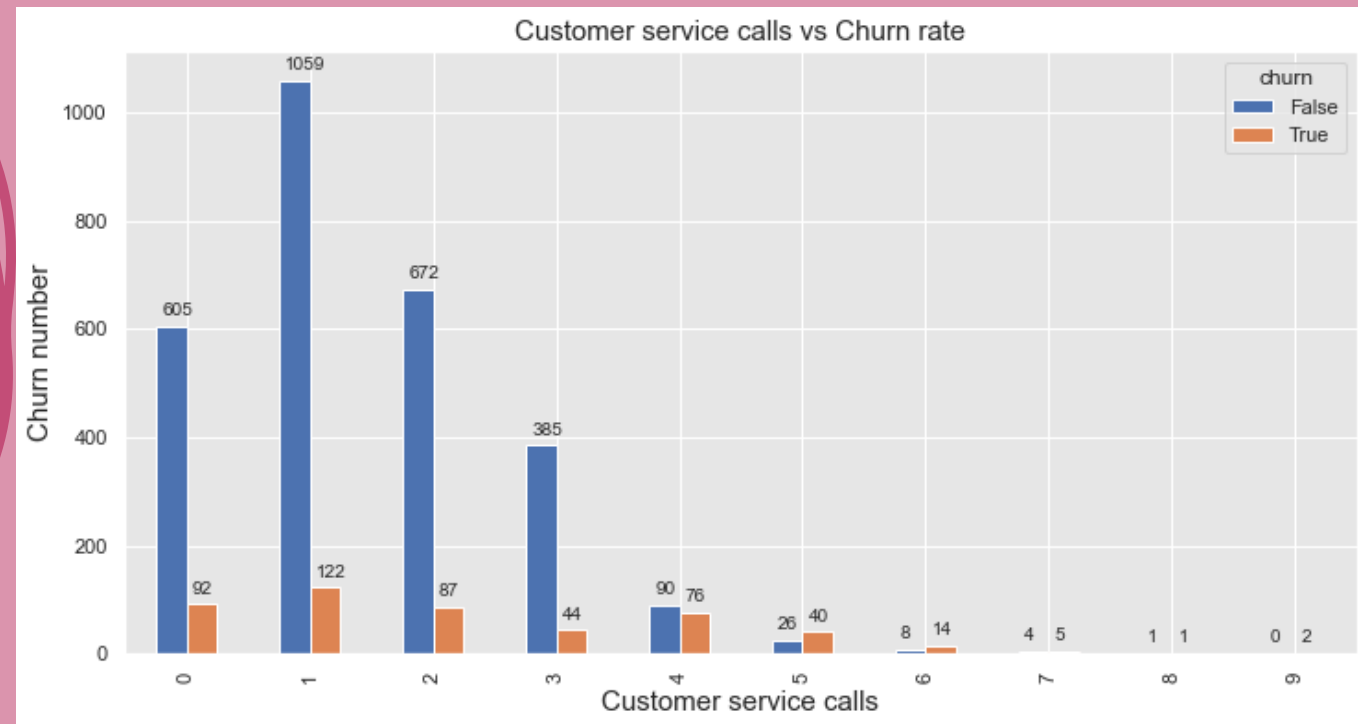
- Total day charge
- Customer service calls
- Total evening charge
- Total international charge
- Total international calls



# Total Day Charge

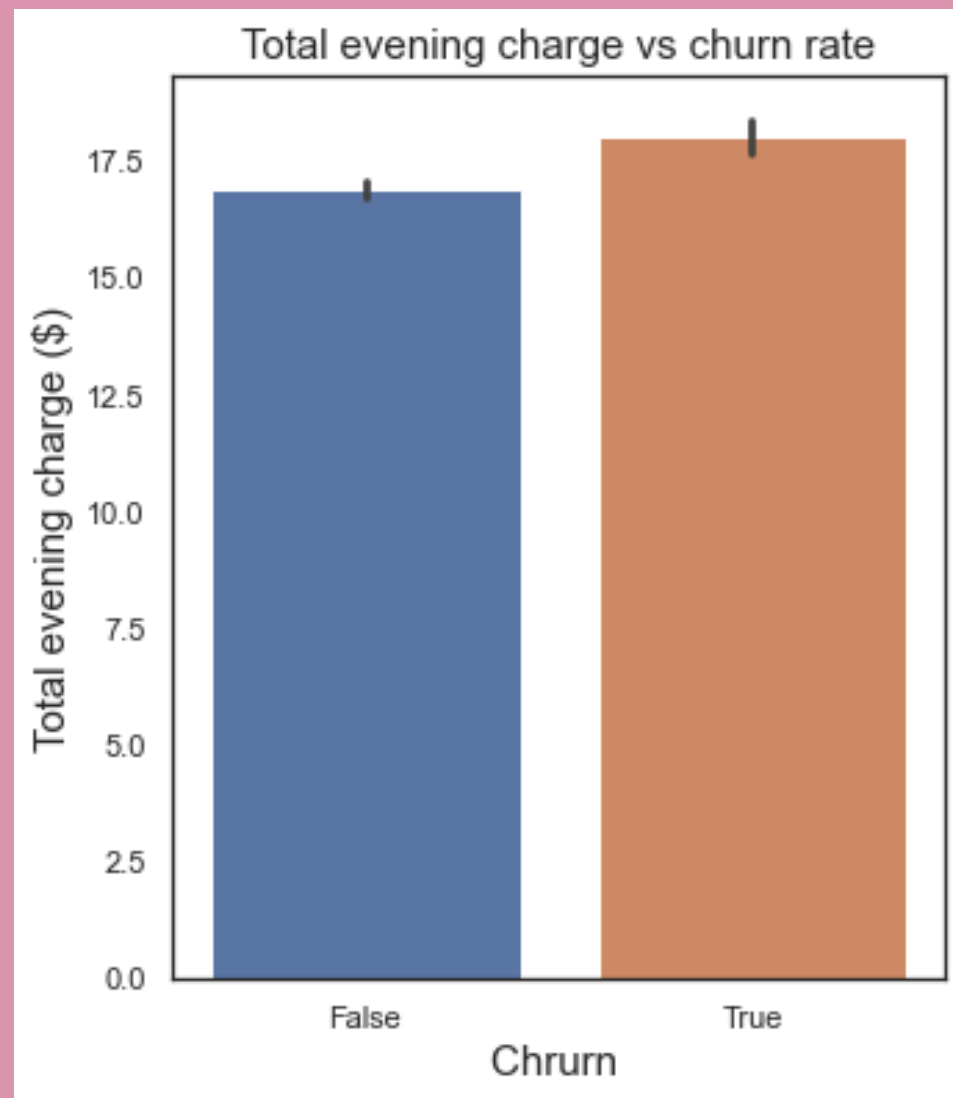


# Customer Service calls

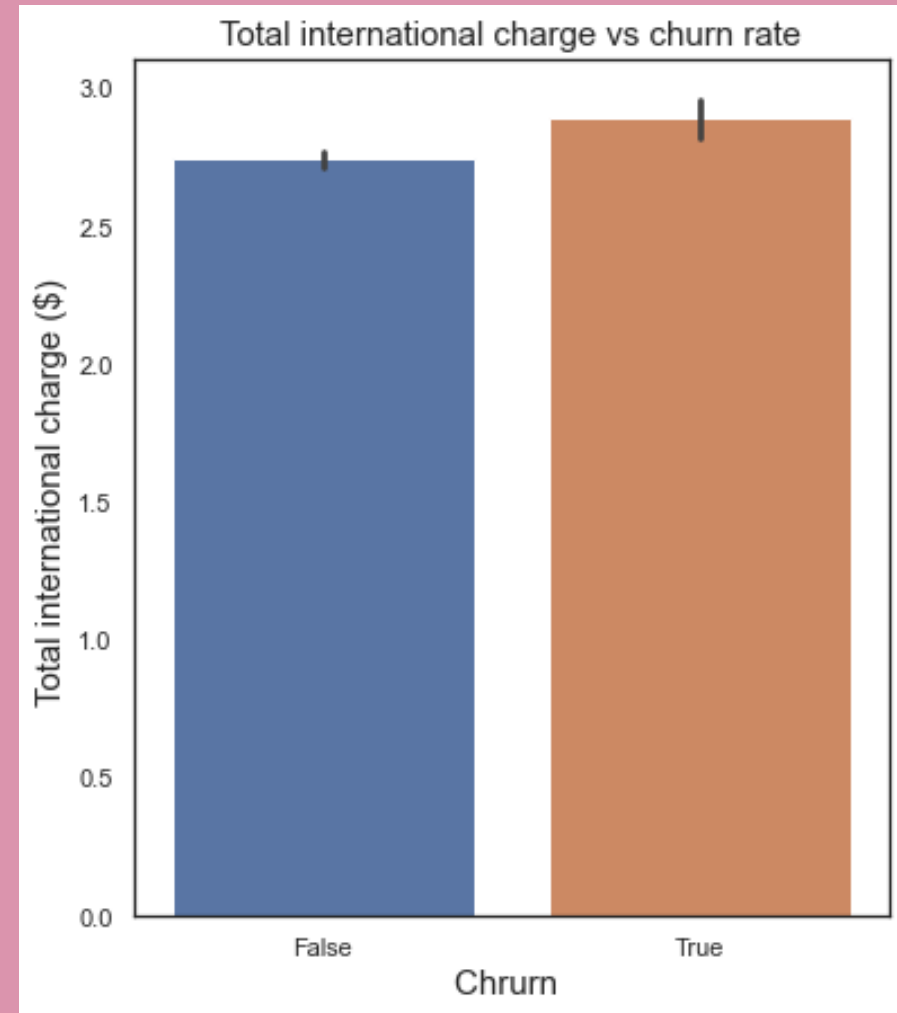




# Total Evening Charge



# Total International Charge

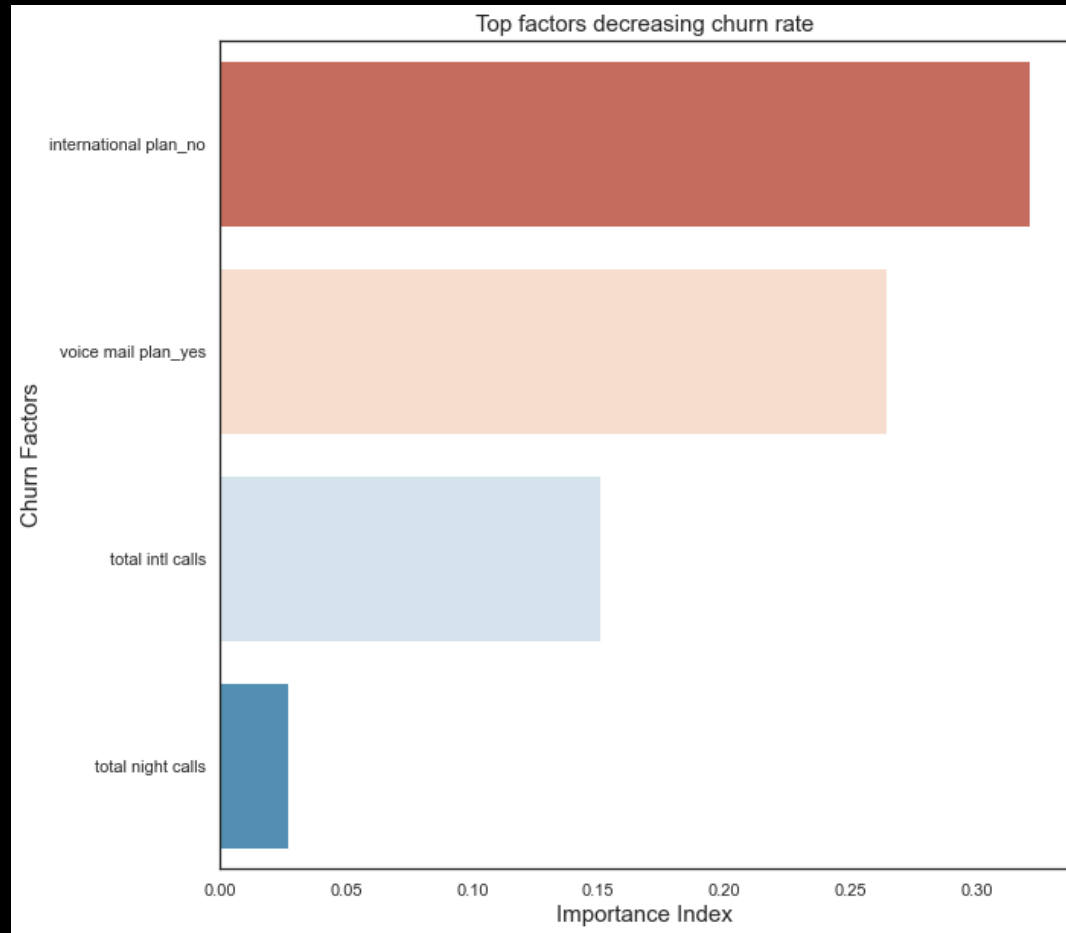


*What are the most  
important factors in  
customer retention?*

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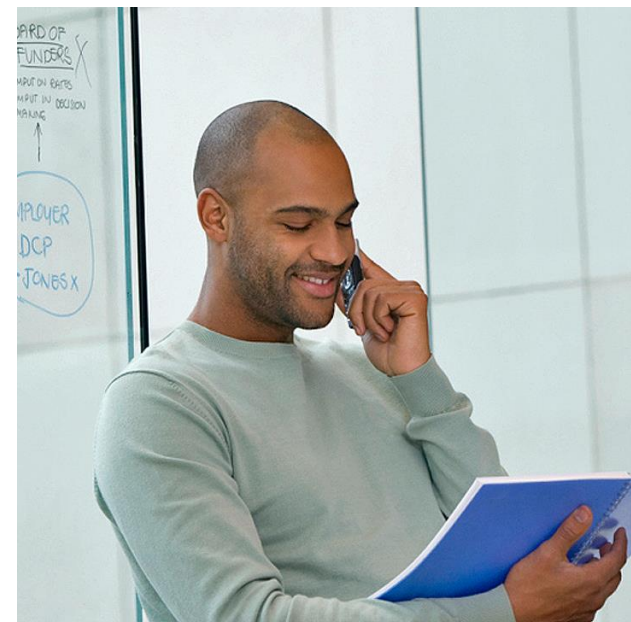
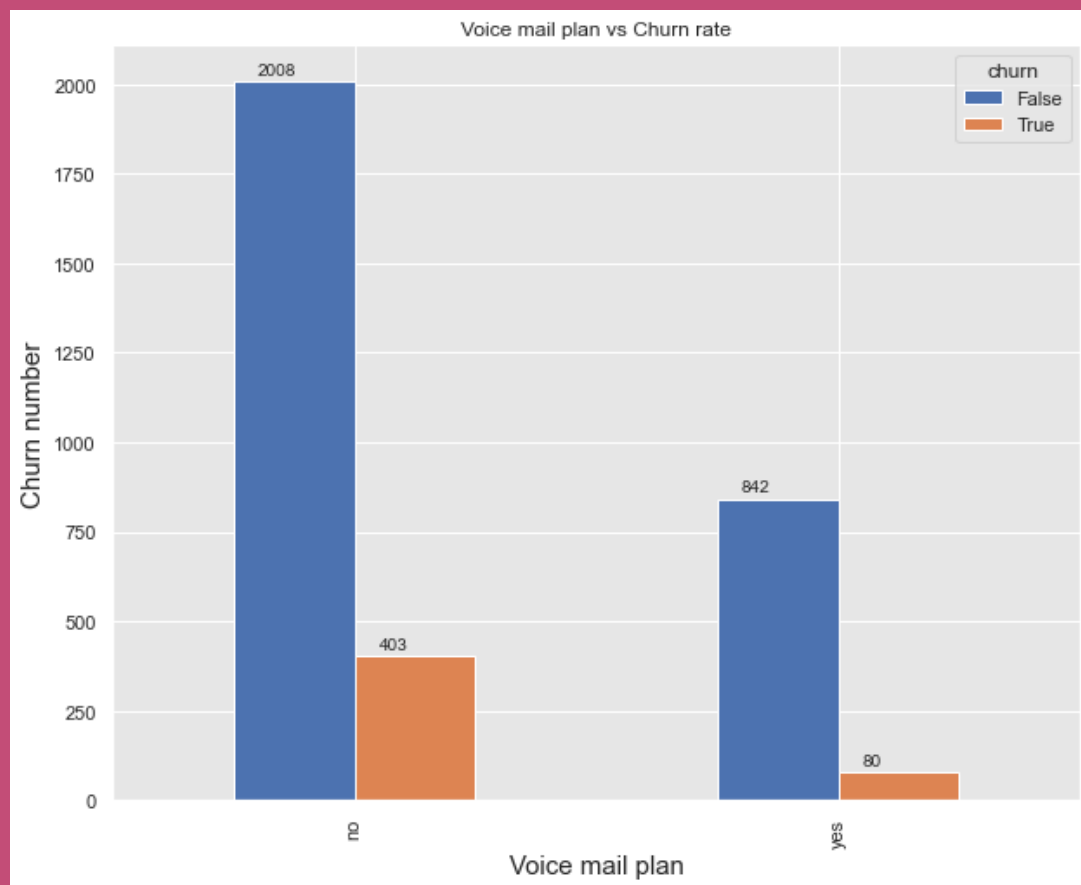
# Factors decreasing customer churn



## Customer Retention

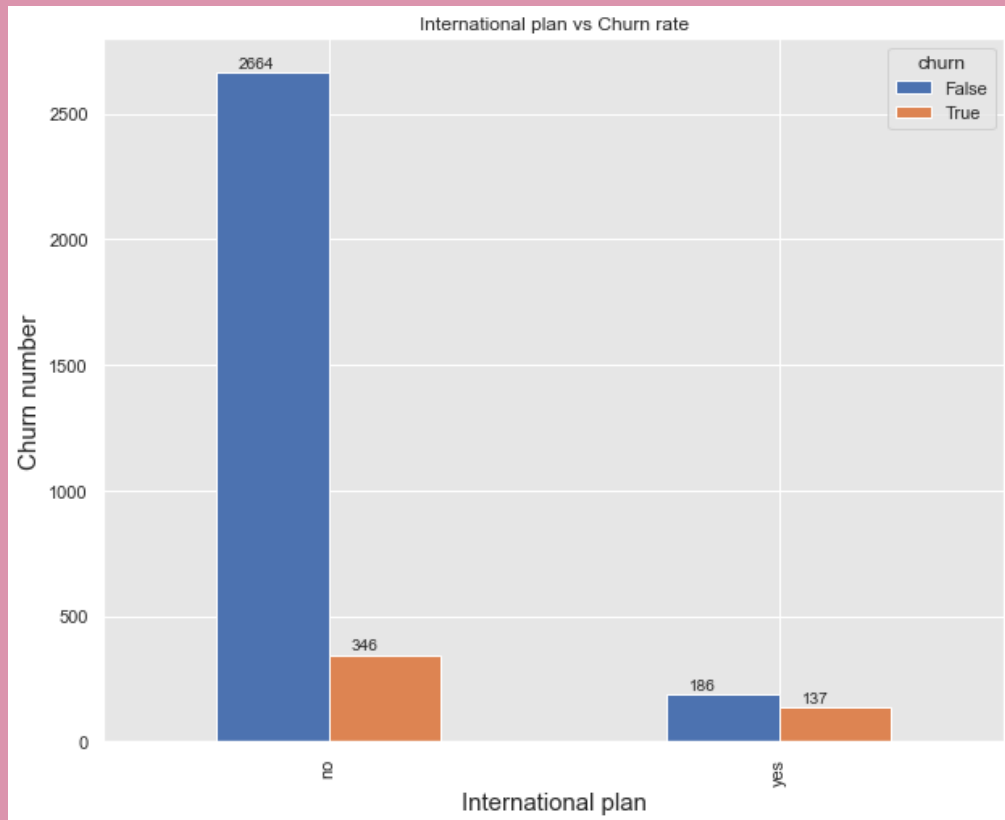
- No international plan
- Have a Voice mail plan
- State location
- Total international calls
- Total night calls

# Voice Mail Plan





# International Plan



# Conclusion

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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.*





# Future Work

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Competitor information



Internet package information



Contract information



Complaint data



THANK YOU!

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