

SYRIATEL CUSTOMER CHURN EVALUATION

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OVERVIEW

- Our company would like to reduce monetary losses related to customer churn, meaning losses related to customers who do not use the company's services for very long.
- Our goal with this project is to look for any predictable patterns we can ascertain from available data which might help pinpoint cause(s) of customer churn.

DATA AND METHODS

- SyriaTel dataset with over 3,300 accounts contains basic information like account numbers and length, as well as location, plan and call data.
- We will use predictive modeling because this allows us to not only evaluate possible reasons for churn in the past, but to also predict the risk for customer churn in real time.

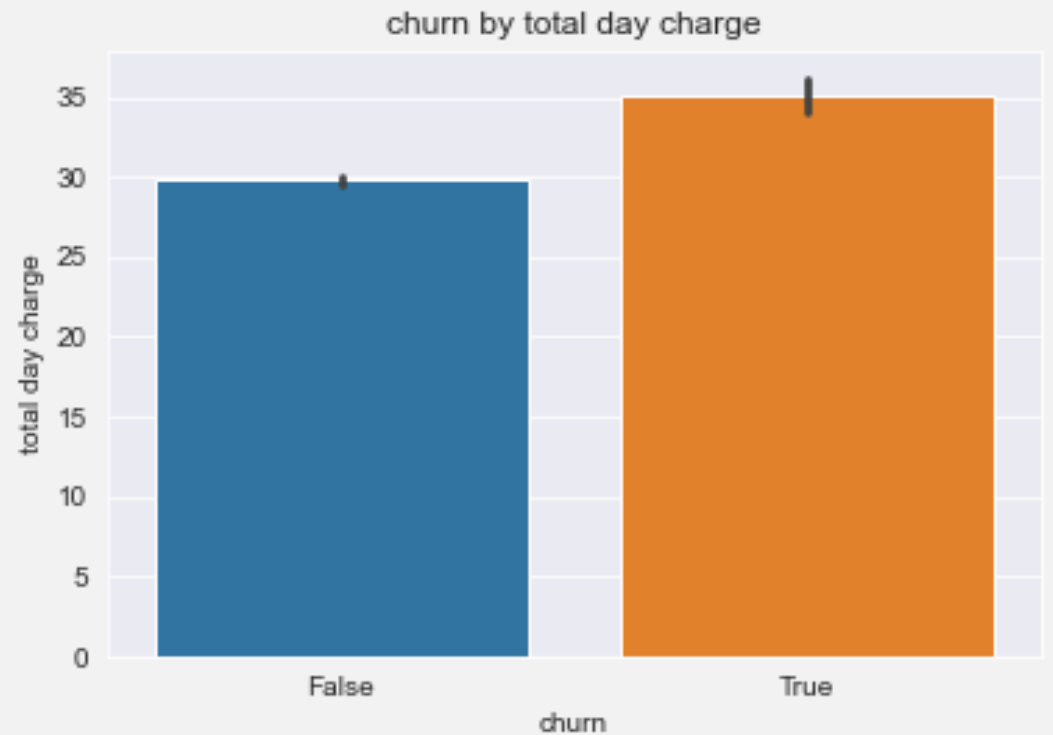
LIMITATIONS

- Outside variables not represented in the data could impact churn
- SyriaTel promotions or lack thereof, or policy changes
- Promotions of competitor telecom companies

CHURN BY TOTAL DAY CHARGE

Cost plays a role in customer churn.

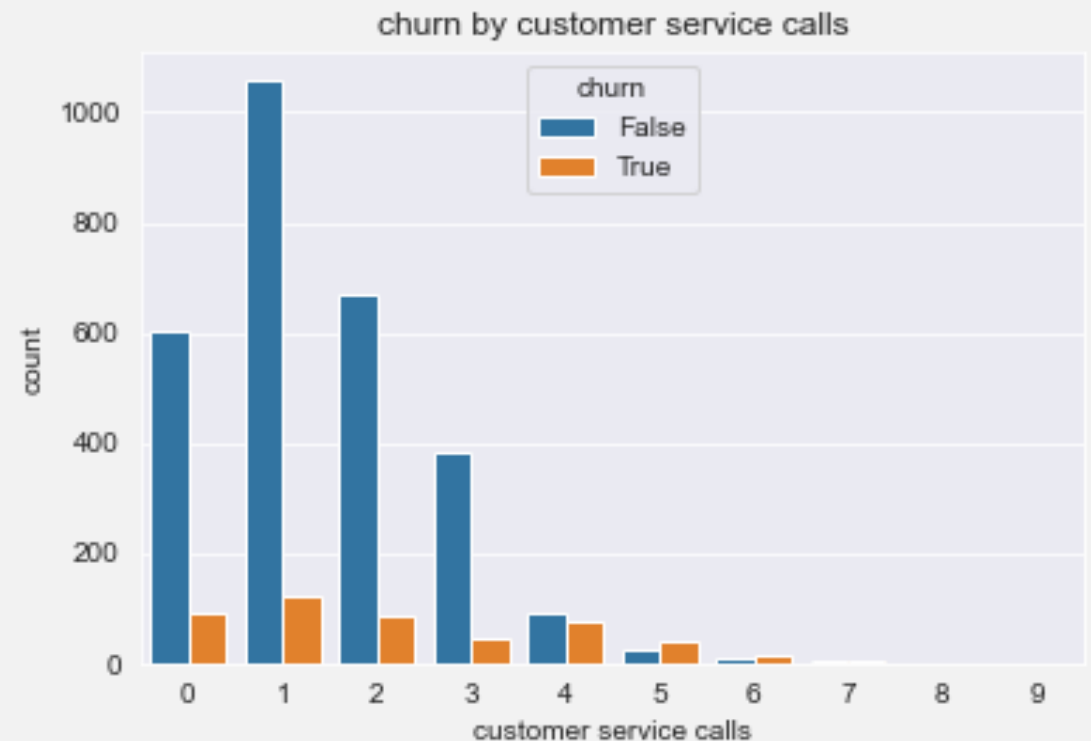
Customers who churn experience higher day charges.



CHURN BY CUSTOMER SERVICE CALLS

Most customers only call
Customer Service three or fewer
times.

Customers who call CS four or
more times churn at a much
higher rate.



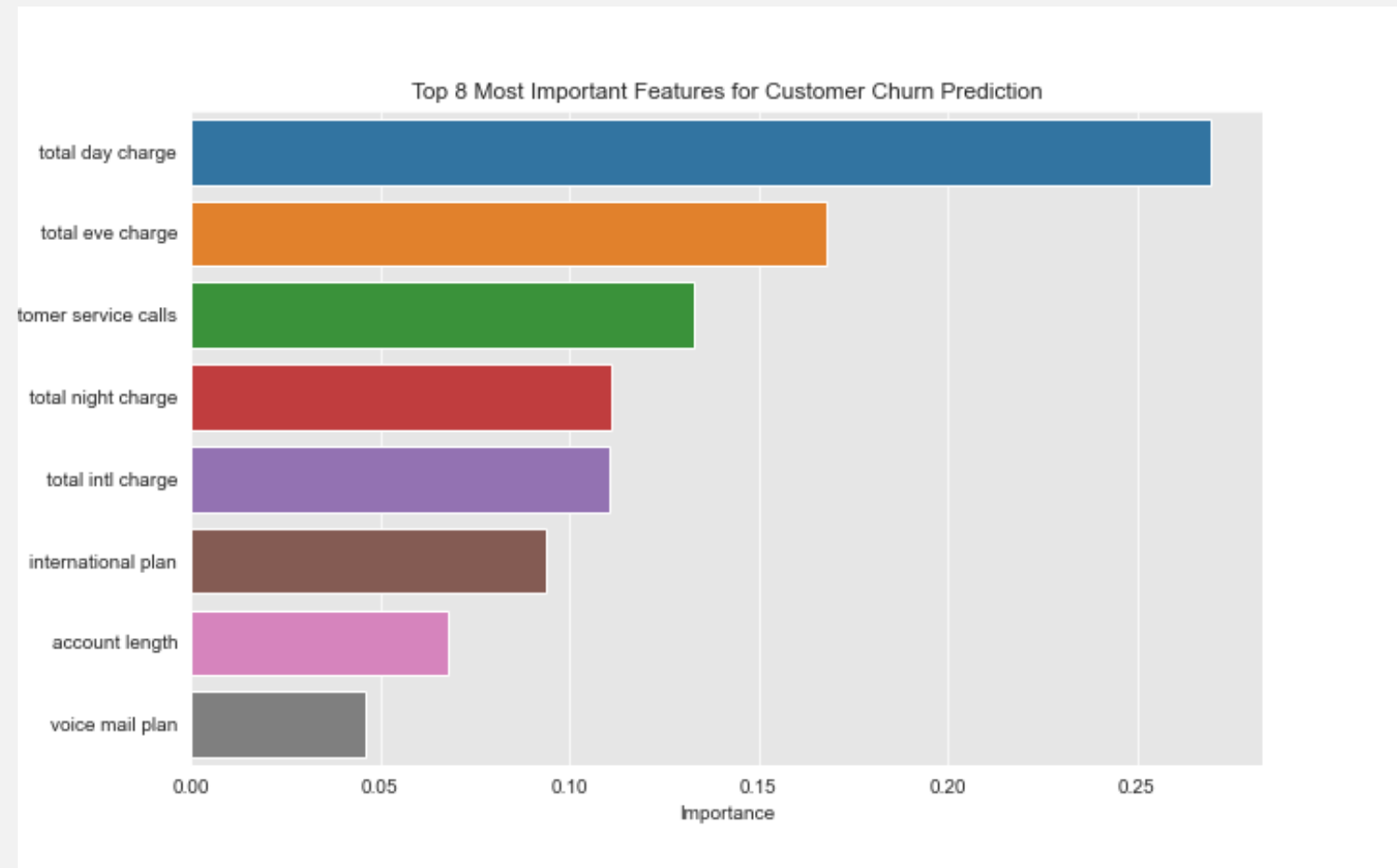
MODELING

- Our best model was a decision tree with a recall score of .76, meaning the model successfully identified 76% of all positive cases.
- We chose recall to evaluate our models as it minimizes false negative outcomes, the least desirable outcome type for our business purposes.

FEATURE IMPORTANCE

Charges in general are important features with daytime charges being most important.

Customer service calls rank highly



CONCLUSIONS

- Implement predictive modeling to address high churn risk customers in real time
- Evaluate charges overall
- Promotional offers
- Customer retention strategy targeting heavy users of daytime minutes
- Address Customer Service quality

NEXT STEPS

It may be worth collecting additional data by way of customer satisfaction surveys.

Evaluating churn by location could be worthwhile if we have time to dedicate.

Thank you!

Questions are welcome.

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