

Churn Analysis

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Data

- 3,333 subscribers
- Account features
- Usage
- Billing
- Churn or non-churn
- State
- Phone number

Questions to answer

- What characteristics do churn customers have?
- Which characteristics are more important?
- Can we reliably classify churn and non-churn customers?

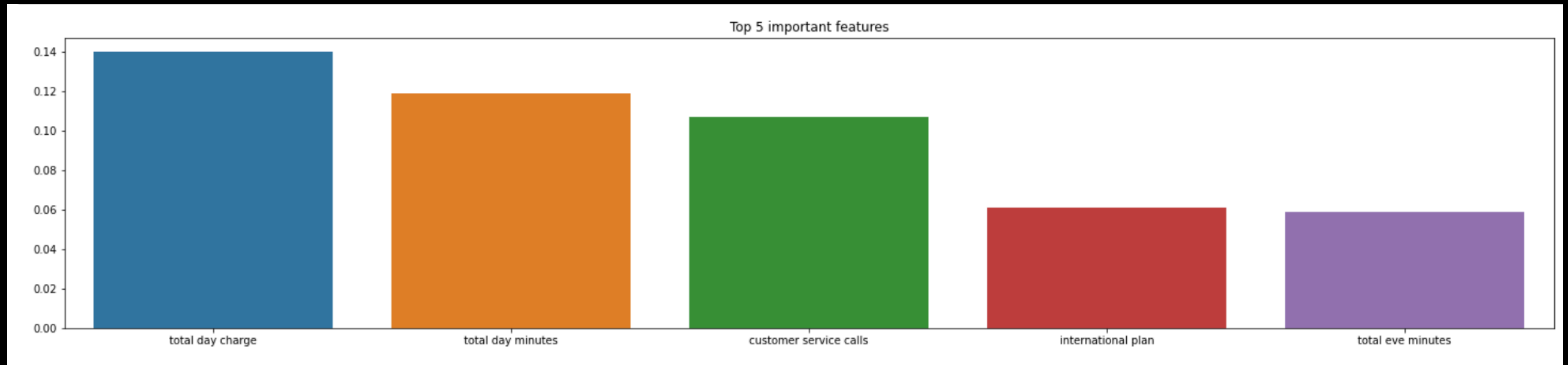
Characteristics

- All characteristics are very similar between churn and non-churn customers.



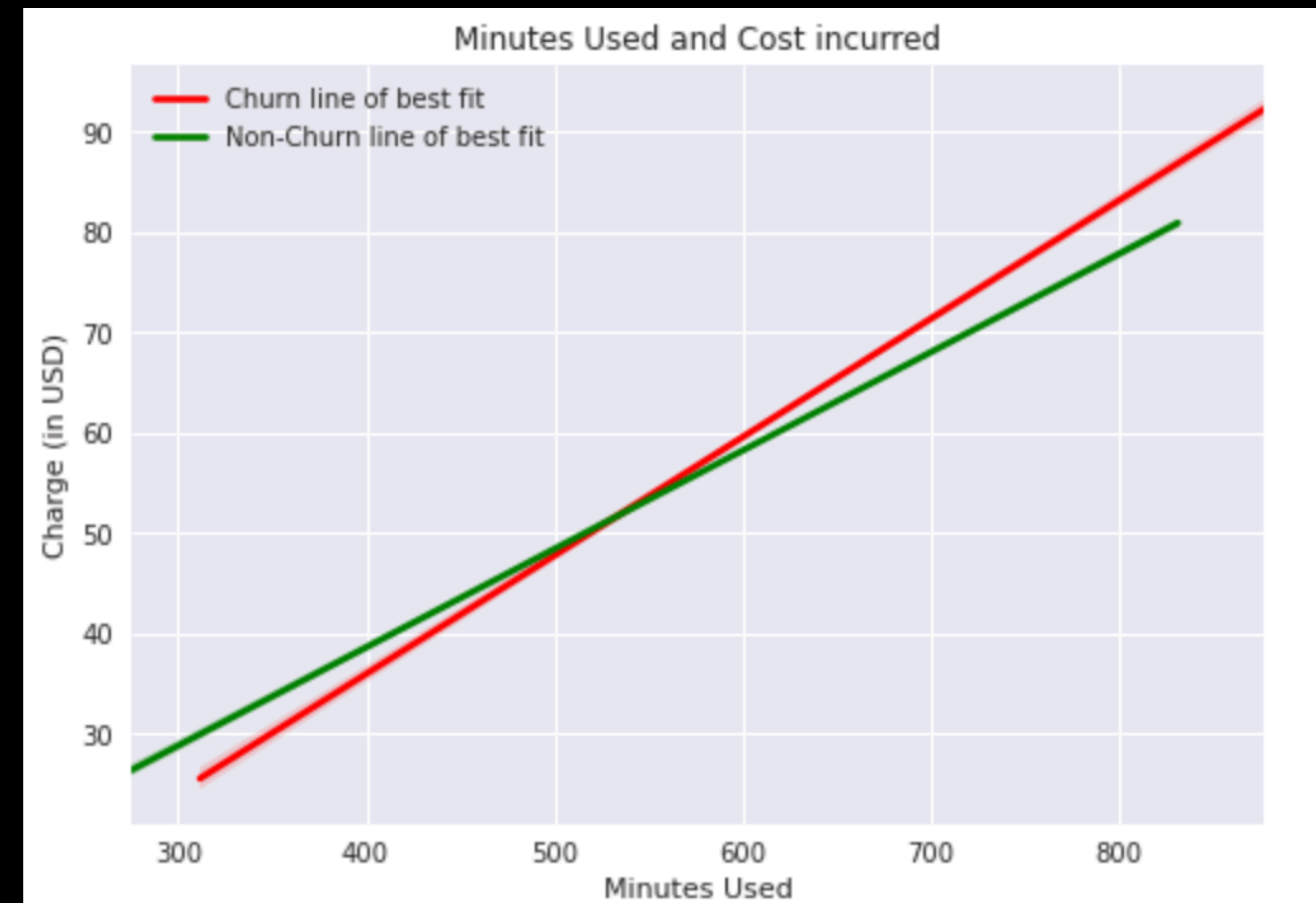
Important characteristics

- According to the first model, usage and billing seem to be the top categories that define churn customers.
- State is the least important.



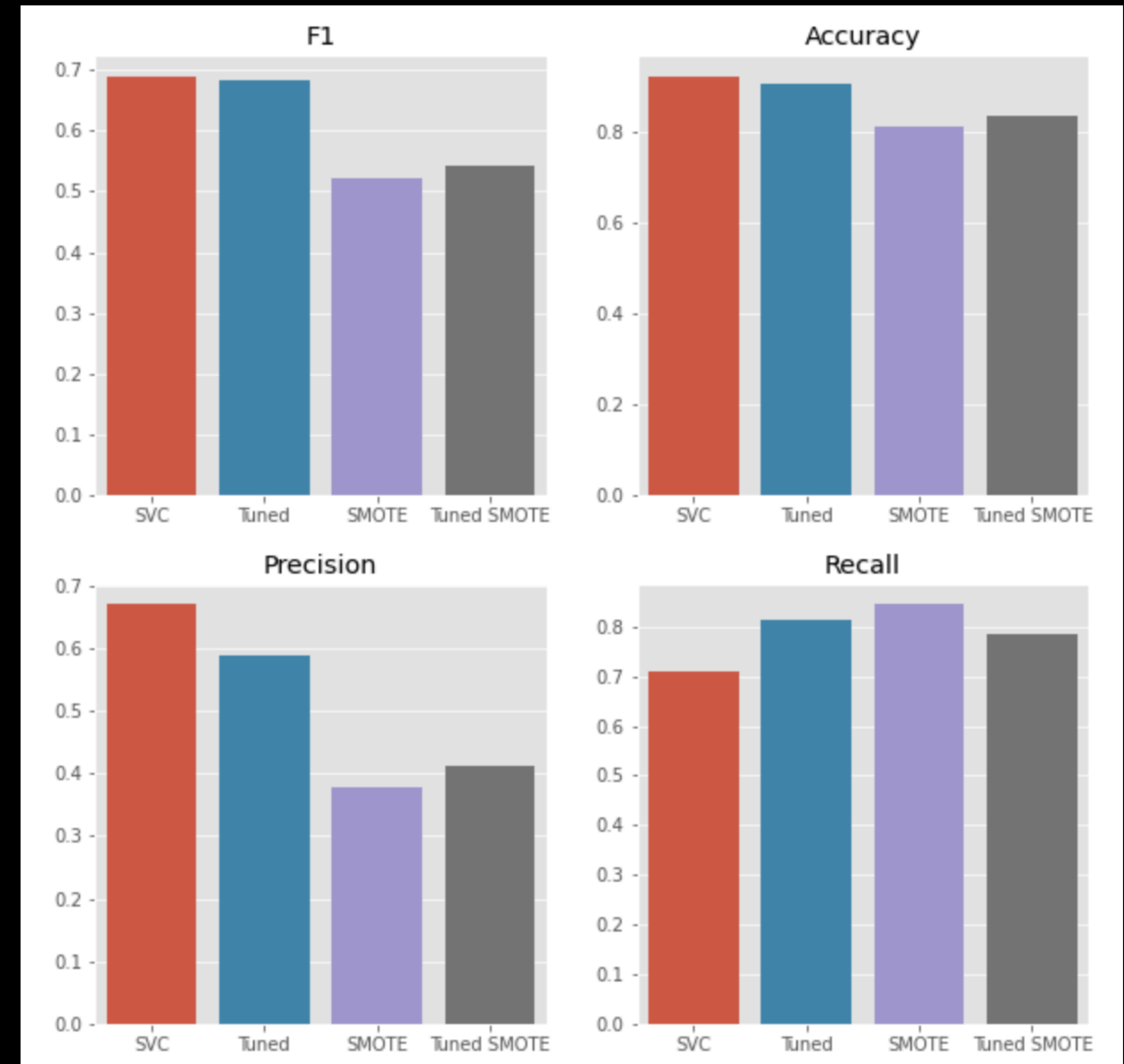
Investigating Usage and billing

- More usage is more expensive for churn customers.
- Less usage is more expensive for non-churn customers.



Classifying churn customers

- Support vector classification algorithms are the best choice for classifying churn customers.
- Further tuning the model allows it to improve how many people are classified as churn customers correctly.



Limitations of data

- Small dataset.
- Outdated dataset.
- Lack of explanation for columns.

Further research

- Adding data on mobile internet usage.
- Adding data on sms usage.

Conclusion

- Churn customers are paying more than non-churn customers.
- Any single variable alone cannot be used to predict churn.
- More relevant data should be able to increase performance of our model and allow for retention procedures.

Questions