Customer Churn:

Keeping Customers in Your Network

Motivation

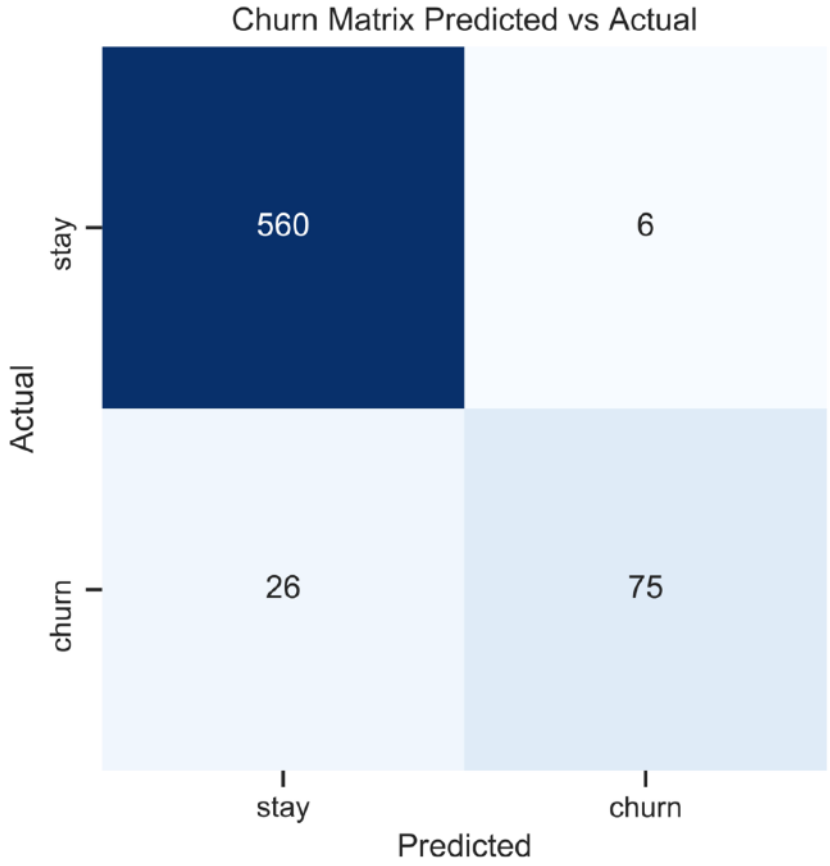
- Cost for companies & customers
- Opportunity to engage
- Improve customer satisfaction

Predictable?

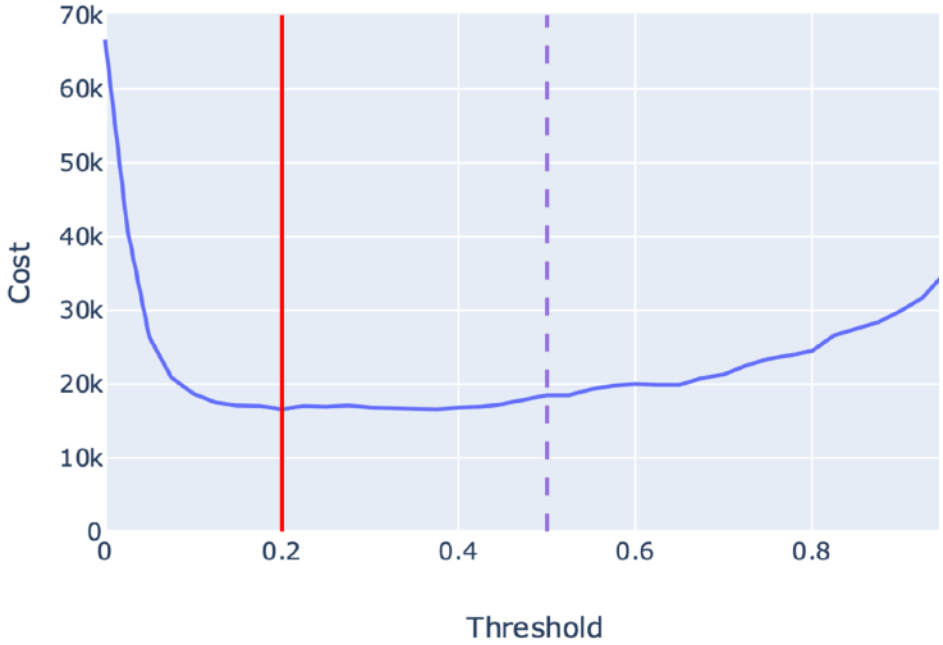
- Dataset: 3300 Obs. 19 Features
- Test several models
- Random Forest & XGBoost

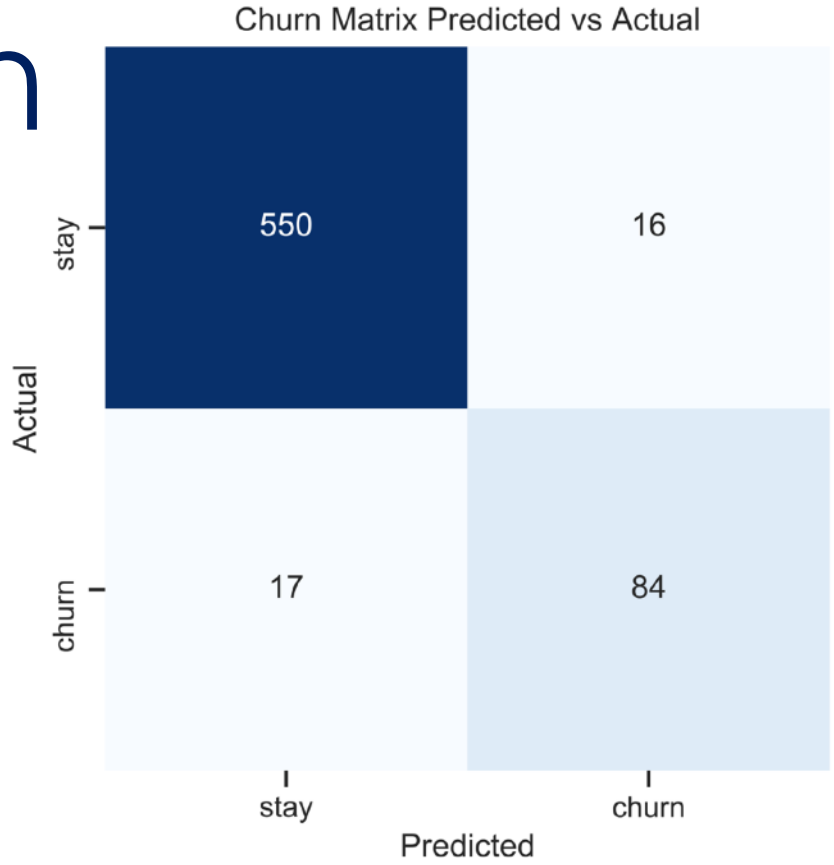
Results

- Recall 74%,
- 75 out of 101 correctly predicted with test data

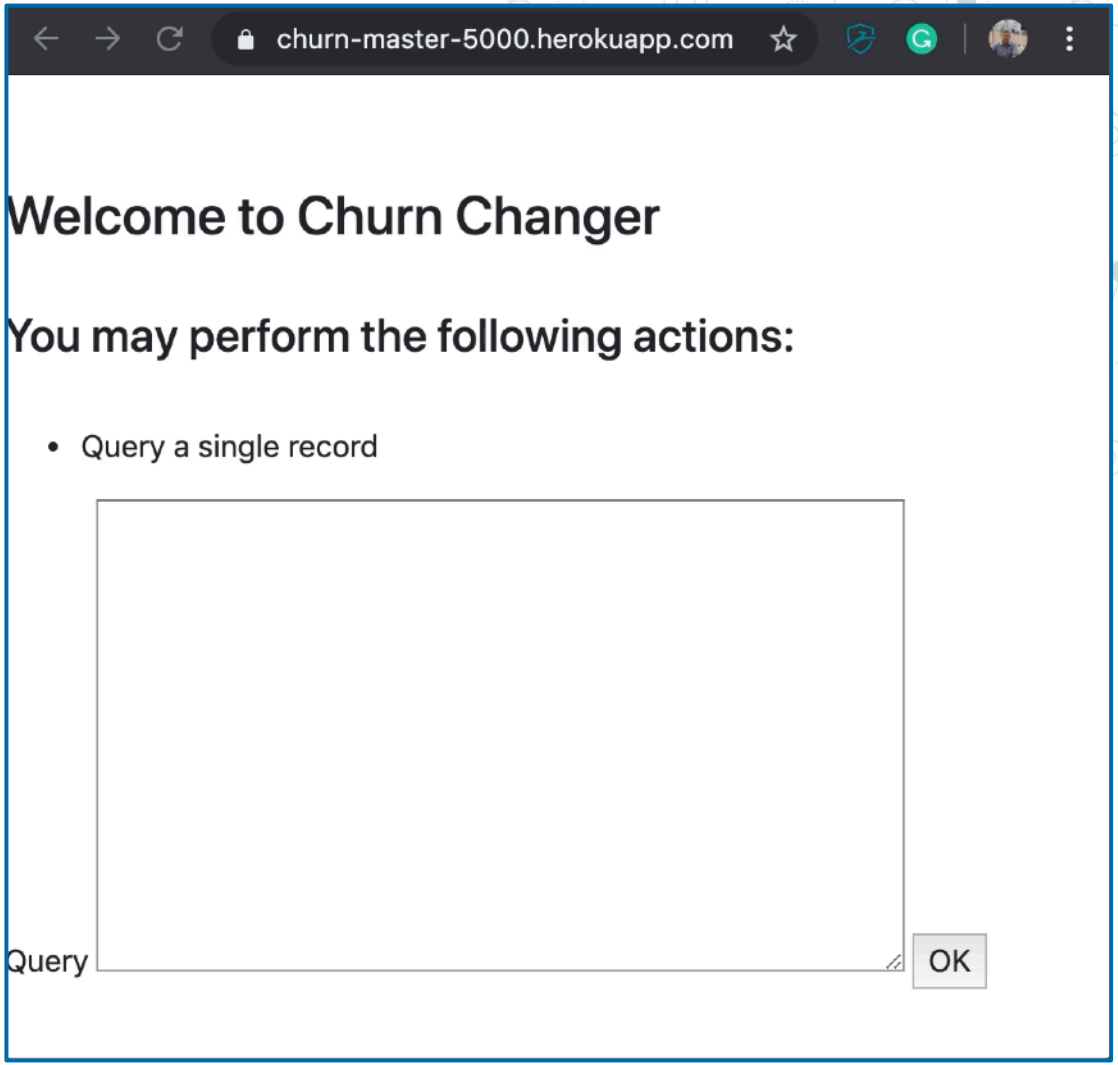


Cost Function





Demo


churn-master-5000.herokuapp.com
Welcome to Churn Changer
You may perform the following actions:
Query a single record
Query
OK

Conclusion

- Churn is predicable
- Do nothing: $193,000
- Customer incentive: $81,000
- Potential savings: $112,000

Next Steps

- Improved Dataset
- Improving model
- Enhance Web Interface
- Integrate with a database

Thank you

Questions?