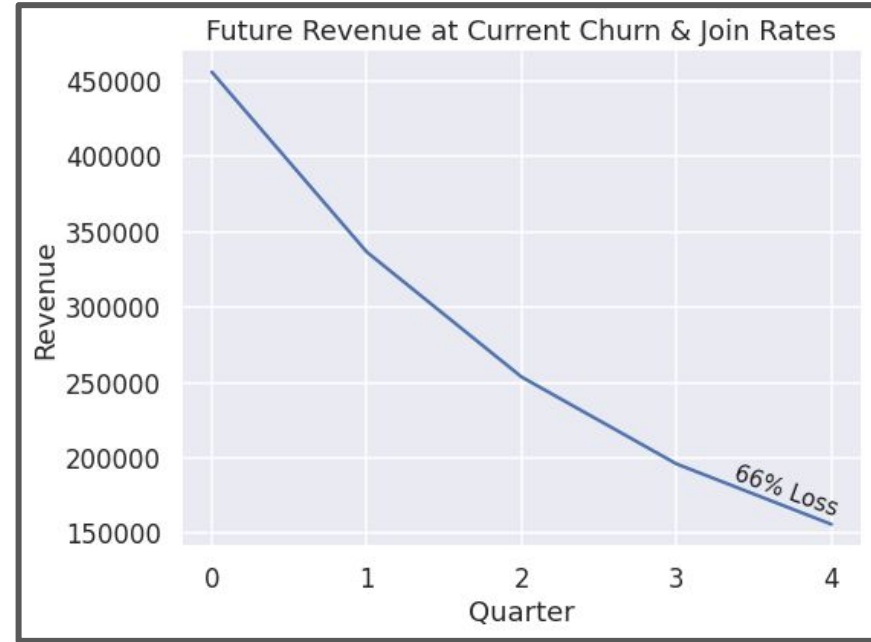


Customer Retention Model

Alexis Deviney



27% Churn Rate



Business Objective: Deploy customer retention strategies based on predictive insights to reduce customer churn.

Customer Data (IBM Cognito Analytics)

- **Demographic information**

- Gender
- Senior Citizen
- Partnered/Single
- Dependents
- Location (Zip Code, lat/long)

- **Account information**

- Account Tenure
- Contract Length
- Paperless Billing
- Payment Method
- Monthly Charges
- Total Charges

- **Services**

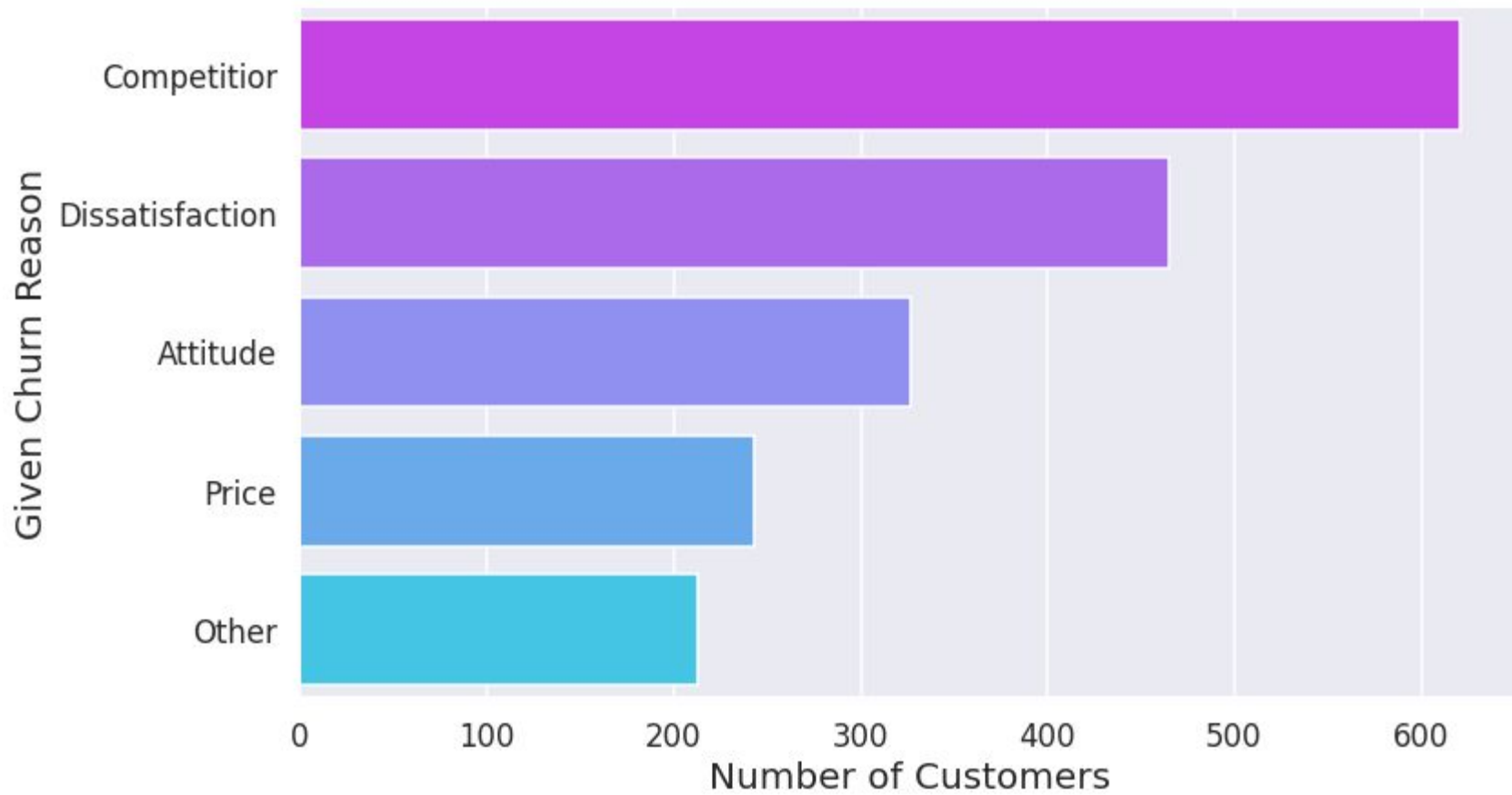
- Core
 - Phone Service
 - Internet Service
- Add-ons
 - Multiple Lines
 - Online Security, Online Backup
 - Device Protection, Tech Support
- TV Streaming, Movie Streaming

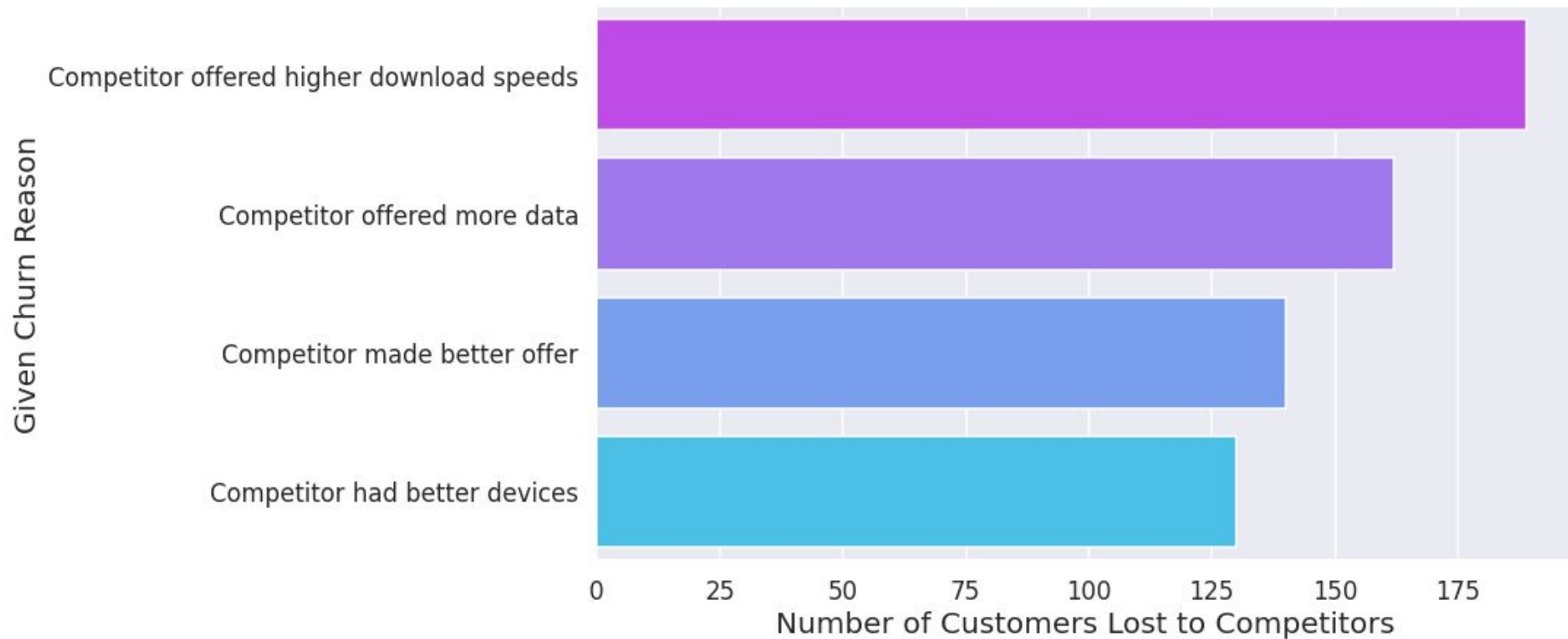


[Image Credit](#)

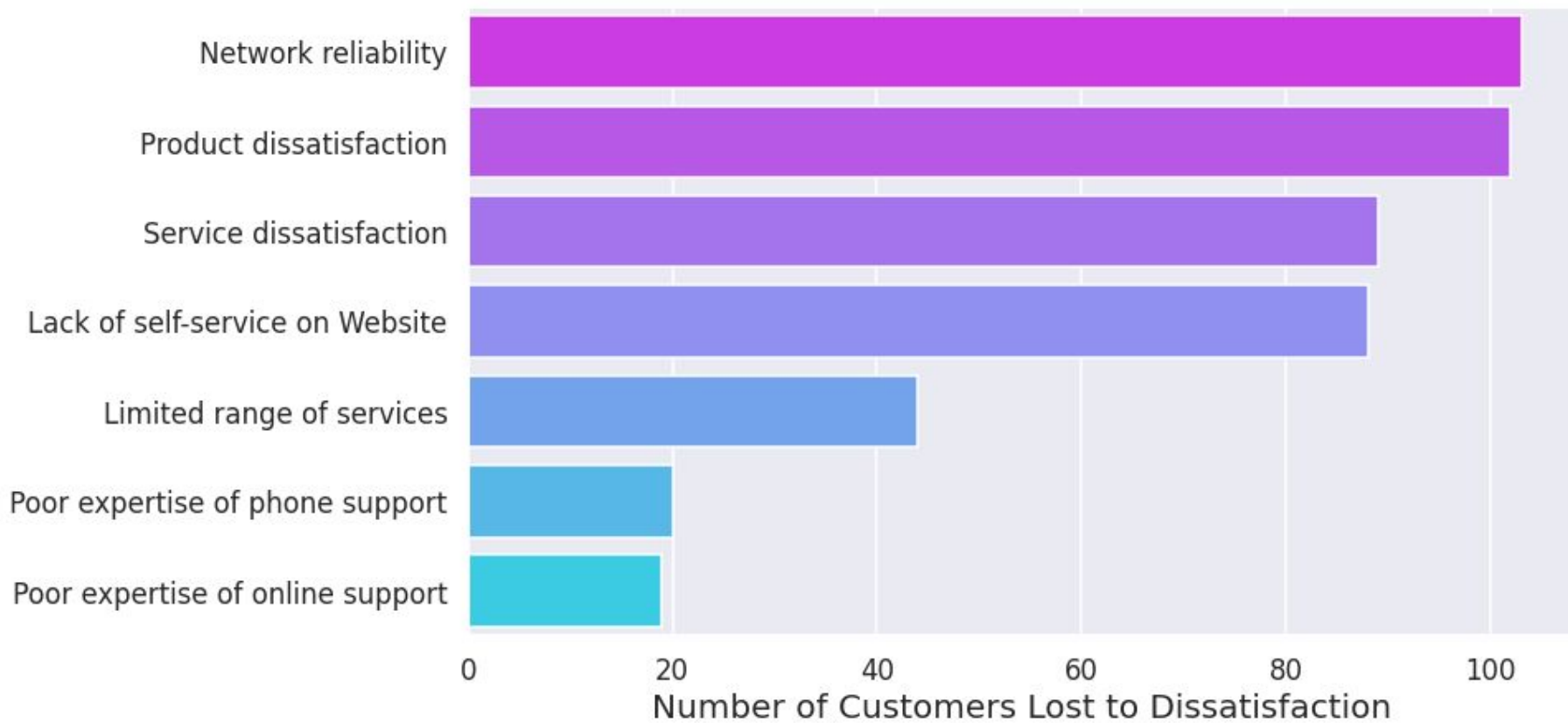
- **Target**

- Churn Status
- Churn Reason

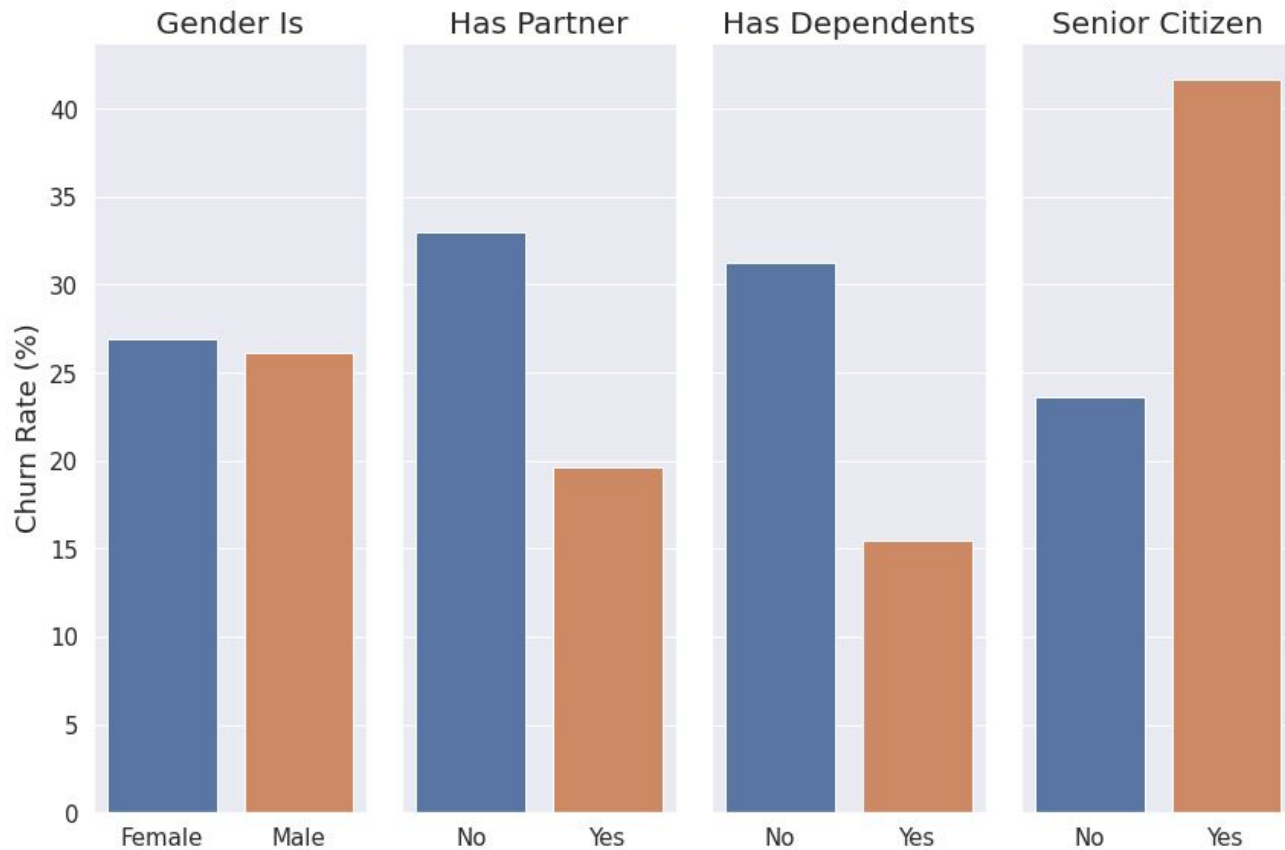


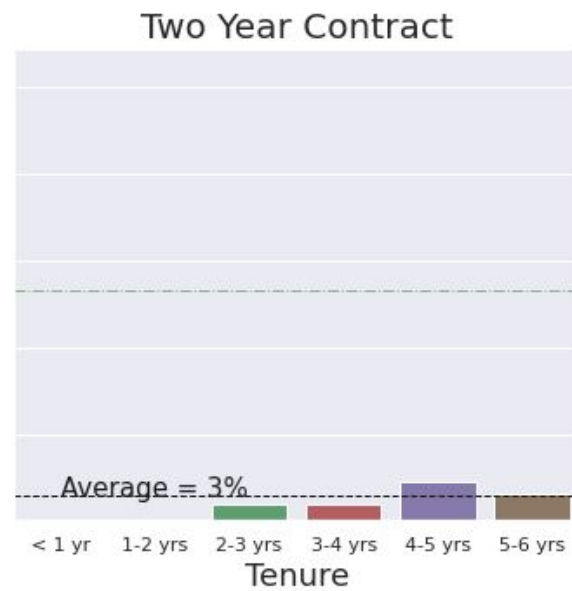
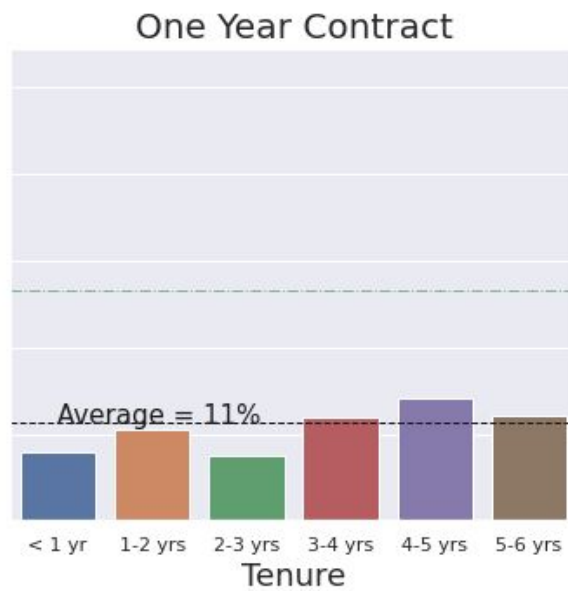
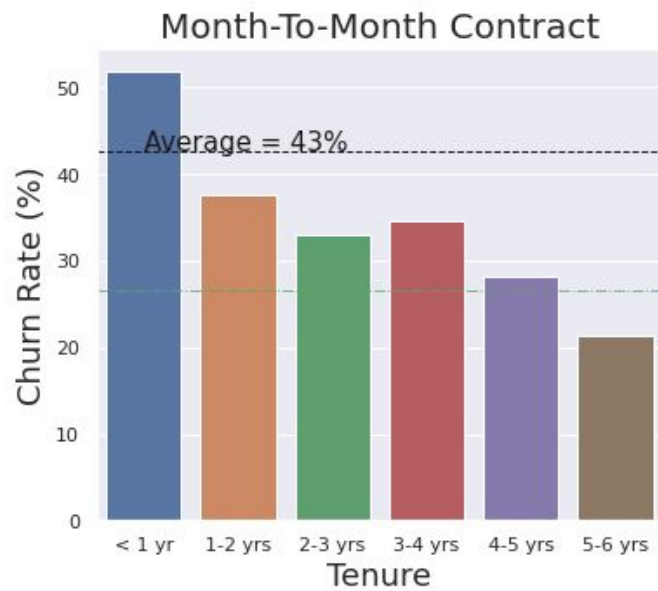


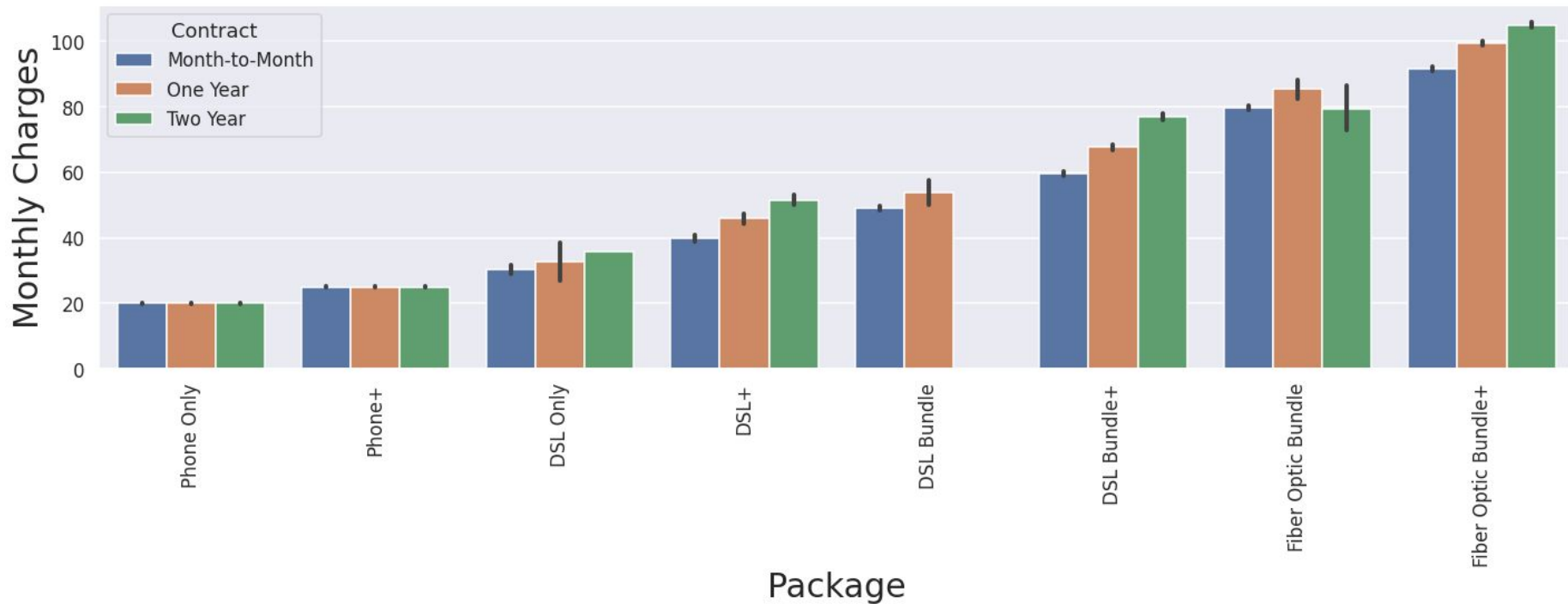
Given Churn Reason



Demographic Insights

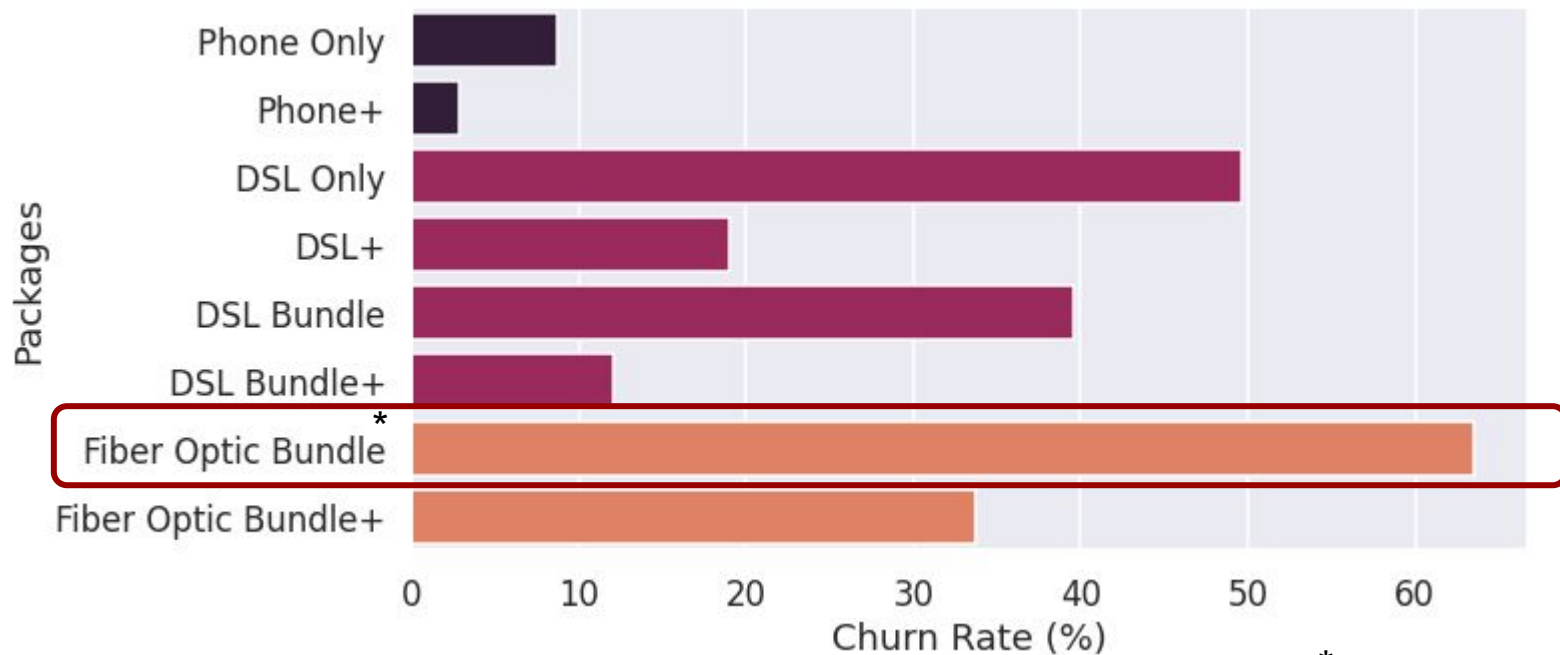






Package Definitions

+	Subscription to one or more premium services Phone: <i>Multiple Lines</i> Internet: <i>Online Security, Online Backup, Device Protection, or Tech Support</i>
Bundle	Phone + Internet



* Telco fiber optic Internet packages must be bundled with phone service.

Package Definitions

+	Subscription to one or more premium services Phone: <i>Multiple Lines</i> Internet: <i>Online Security, Online Backup, Device Protection, or Tech Support</i>
Bundle	Phone + Internet

Production Model Metrics

Depending on the application...

Model Number	Out of all churned customers, how many does the model actually predict?	Out of all predicted customers to churn, how many will actually churn?	Overall Accuracy	Possible Application
1	83.3%	53%	75.5%	General, low-cost approaches
2	58%	68%	81.3%	Aggressive outreach

Final Recommendations

- Expand Data Collection
 - Service Utilization, Devices, Customer Service Tickets
 - Demographics - Home Ownership, Income
 - Customer Lifetime Value and Engagement
- Competition Analysis
 - Download speeds, data, device offerings, new-customer offers, location coverage
- Invest in network reliability and new products
- Discourage month-to-month contracts
- Advertise premium services
- 2-pronged approach for customers predicted to churn
 - General retention outreach with customers who have been predicted by wide-net model
 - Offer proactive discounts or add-on services to most-likely-to-churn customers predicted by a precise model

Thank you!

“Your most unhappy customers are your
greatest source of learning.”

- Bill Gates