# Customer Retention Model

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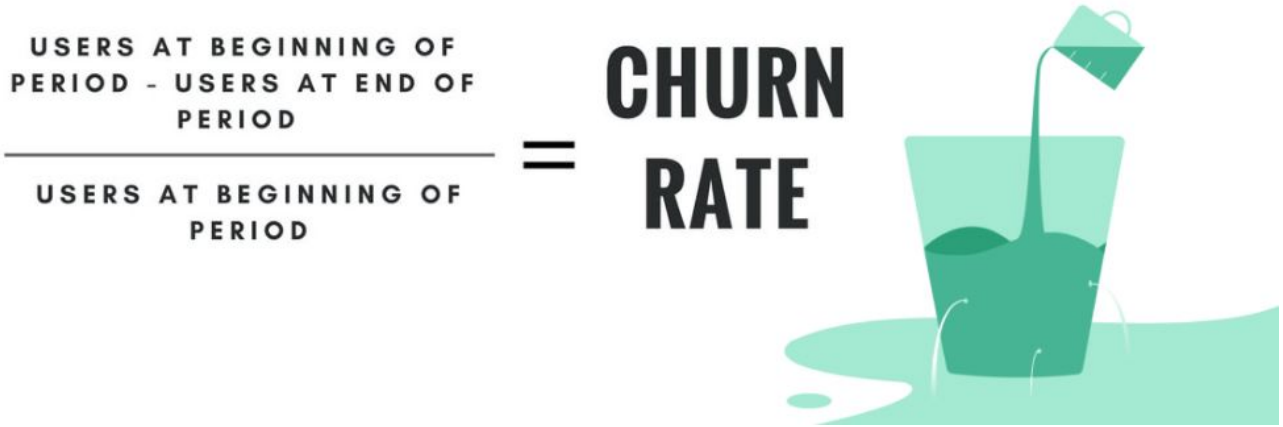
Image Credit

Image Credit




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

- Profitability
- Customer Satisfaction
- Customer Retention

# Customer Data (IBM Cognos 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

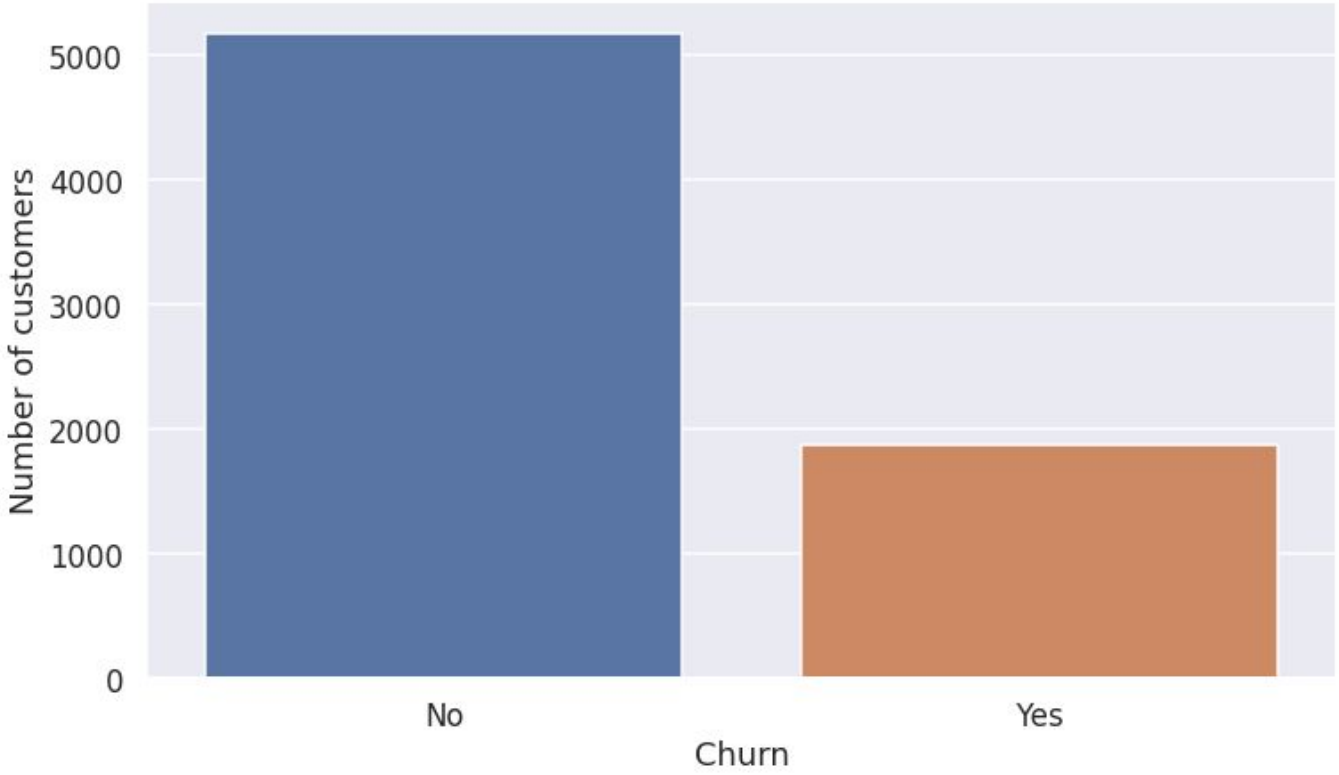
Image Credit

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

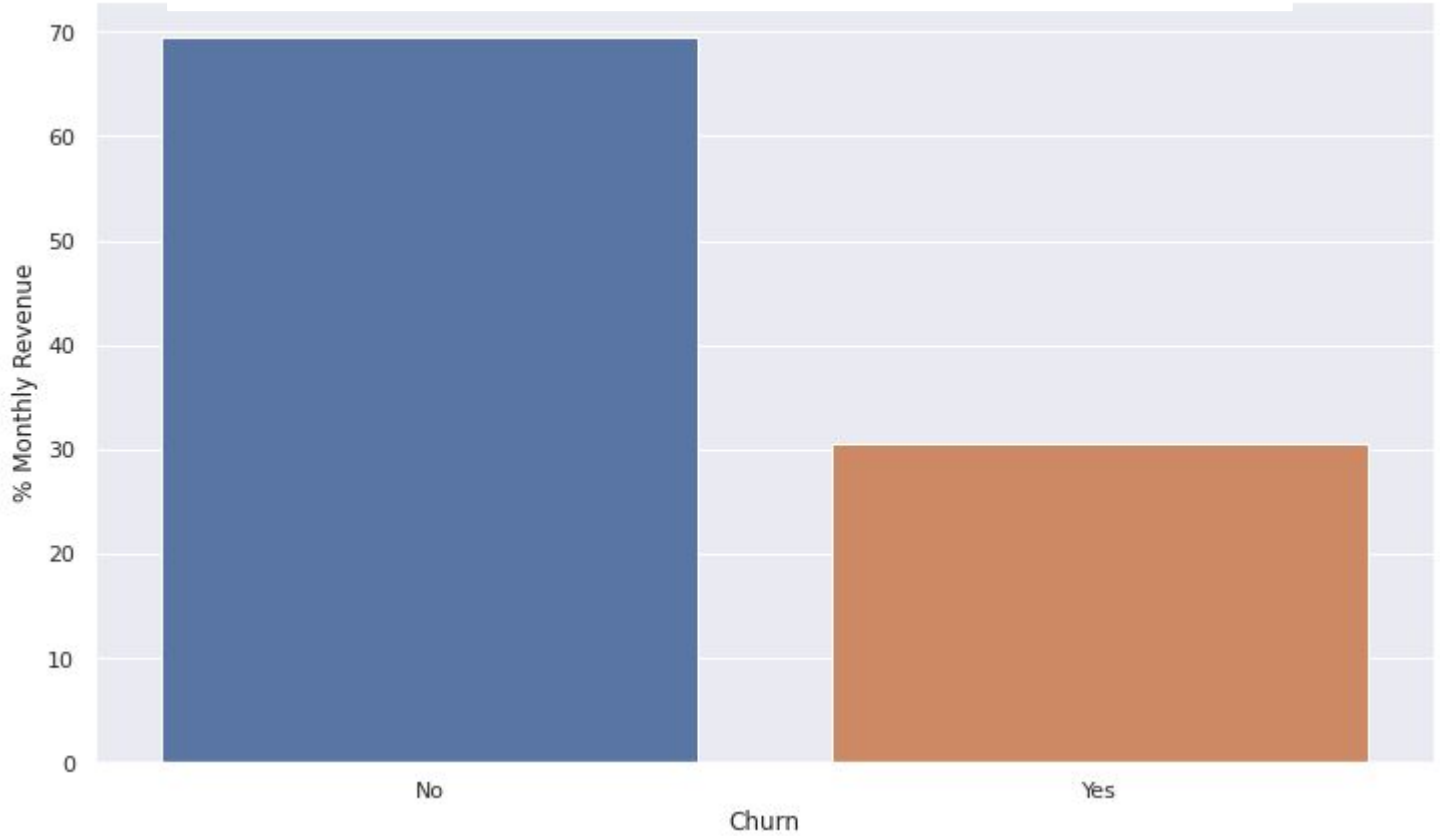
- **Target**
  - Churn Status
  - Churn Reason

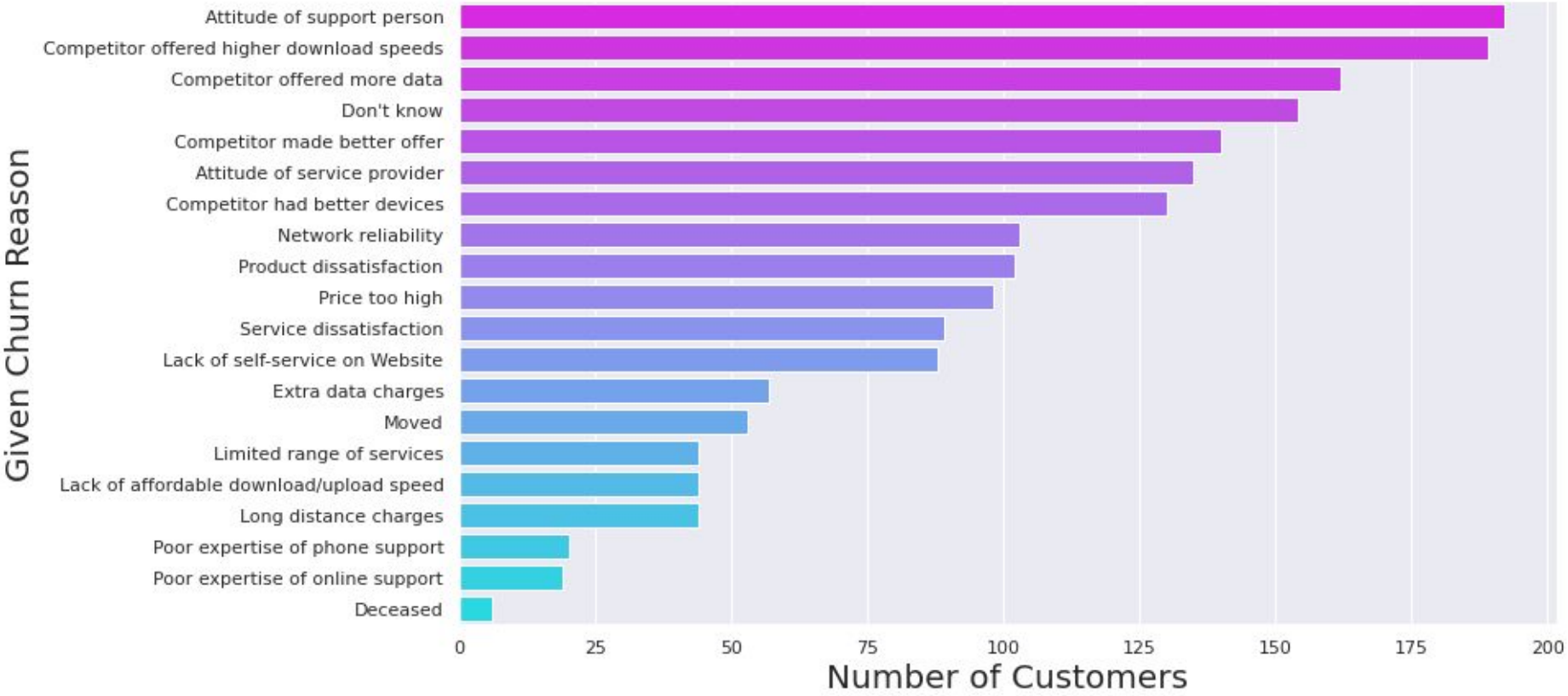
# Current State of Affairs

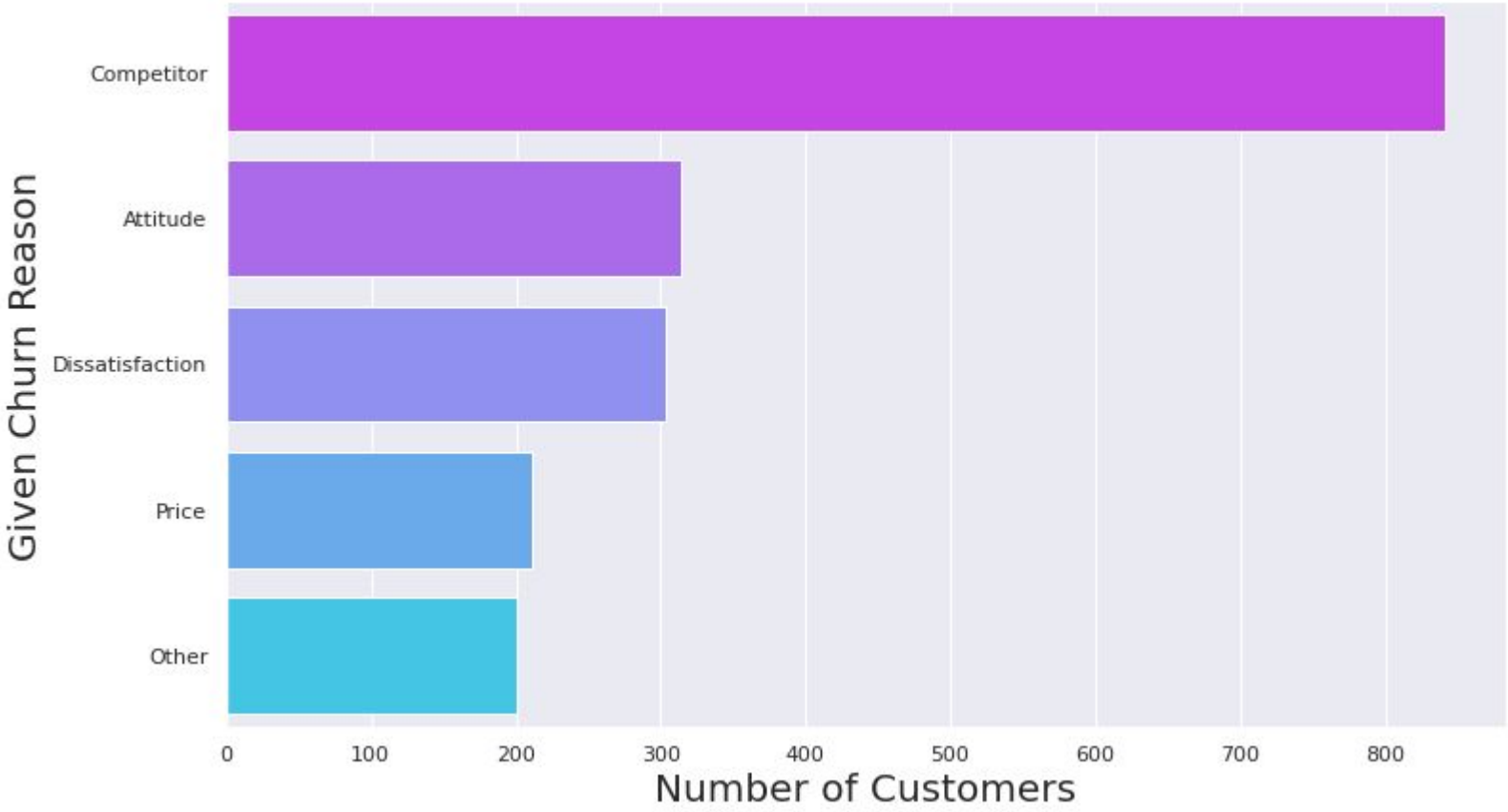
27% Churn Rate

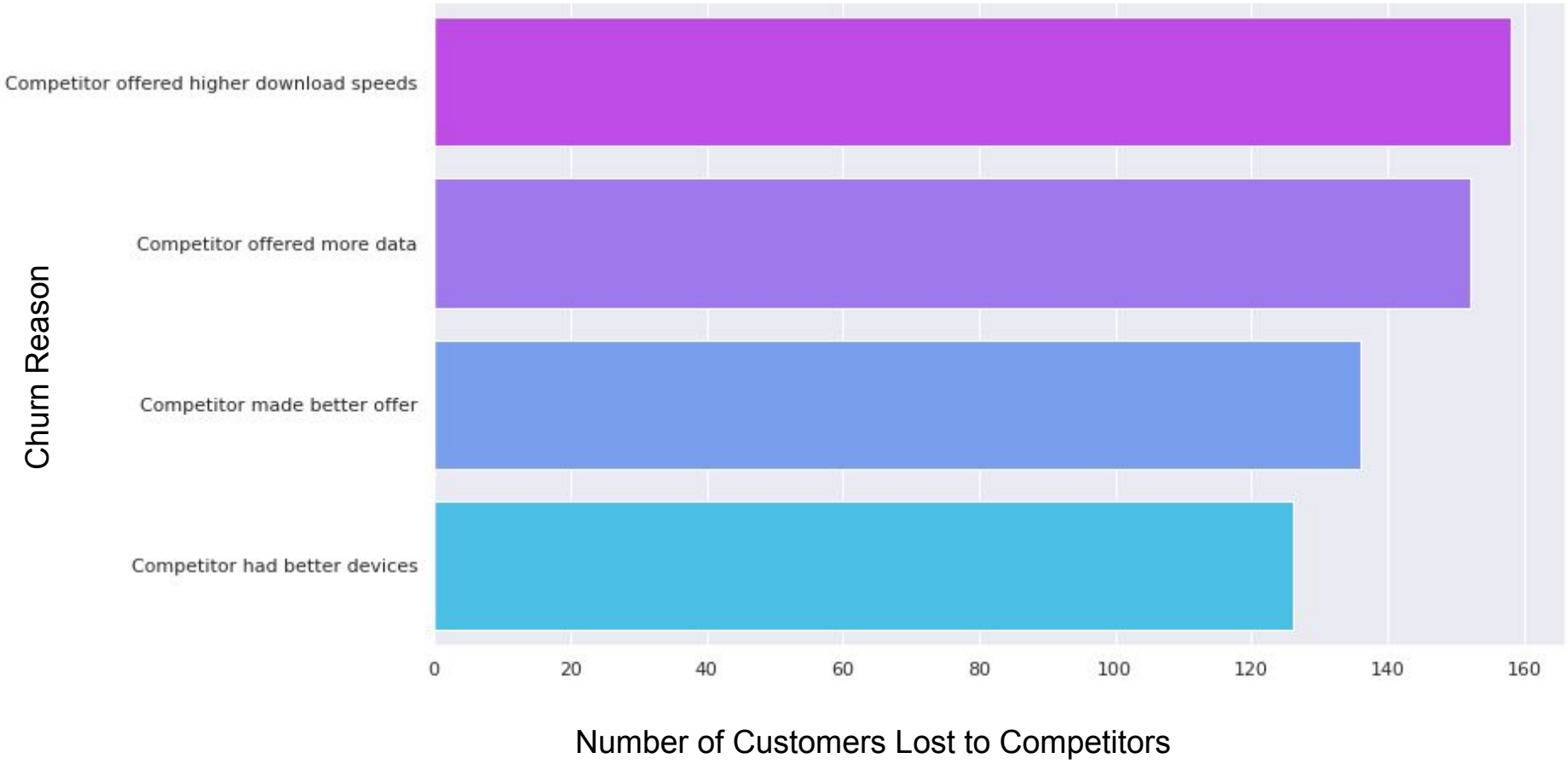


31% of monthly revenue is lost by churned customers.

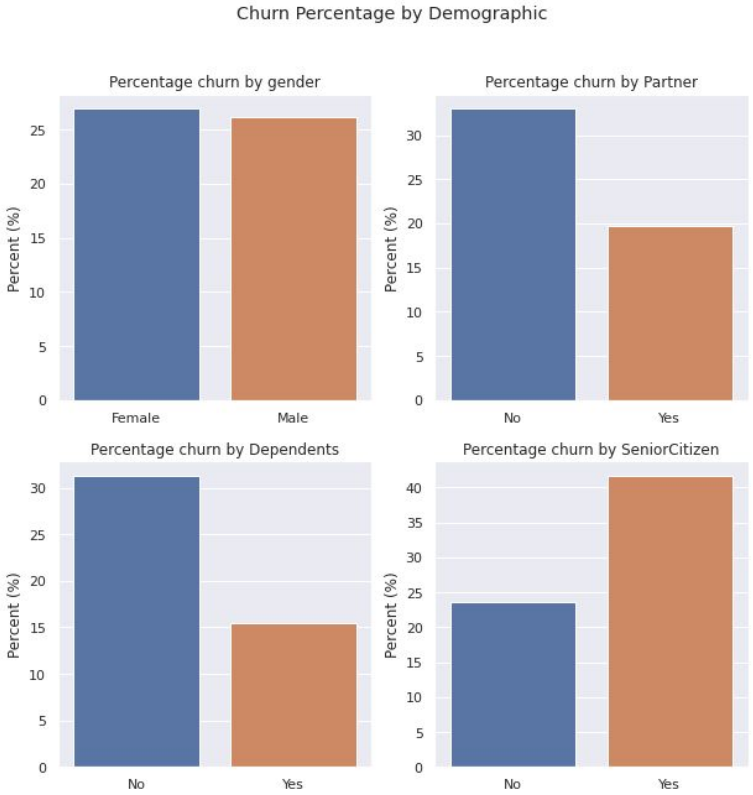


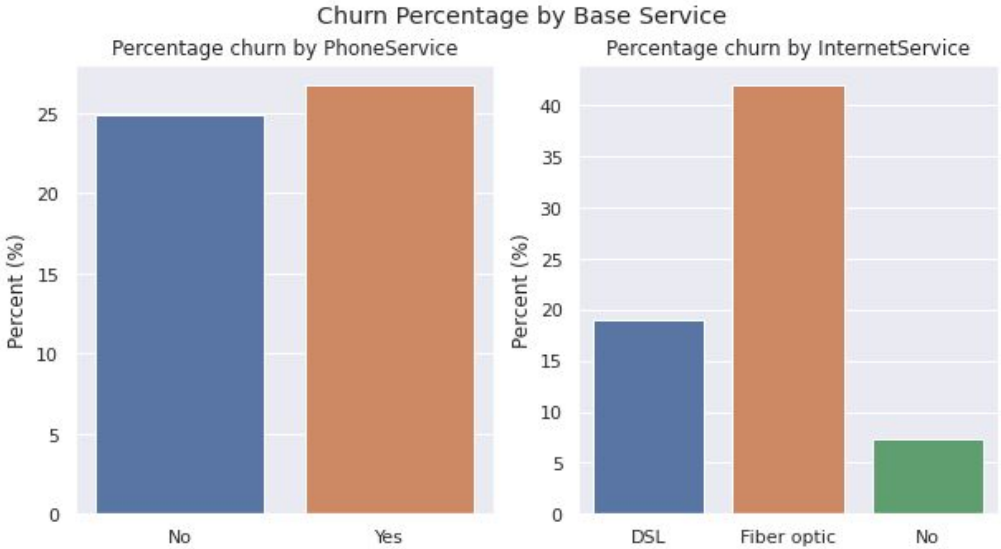

Attitude of support person
Competitor offered higher download speeds
Competitor offered more data
Don't know
Competitor made better offer
Attitude of service provider
Competitor had better devices
Network reliability
Product dissatisfaction
Price too high
Service dissatisfaction
Lack of self-service on Website
Extra data charges
Moved
Limited range of services
Lack of affordable download/upload speed
Long distance charges
Poor expertise of phone support
Poor expertise of online support
Deceased
Given Churn Reason
0
25
50
75
100
125
150
175
200
Number of Customers

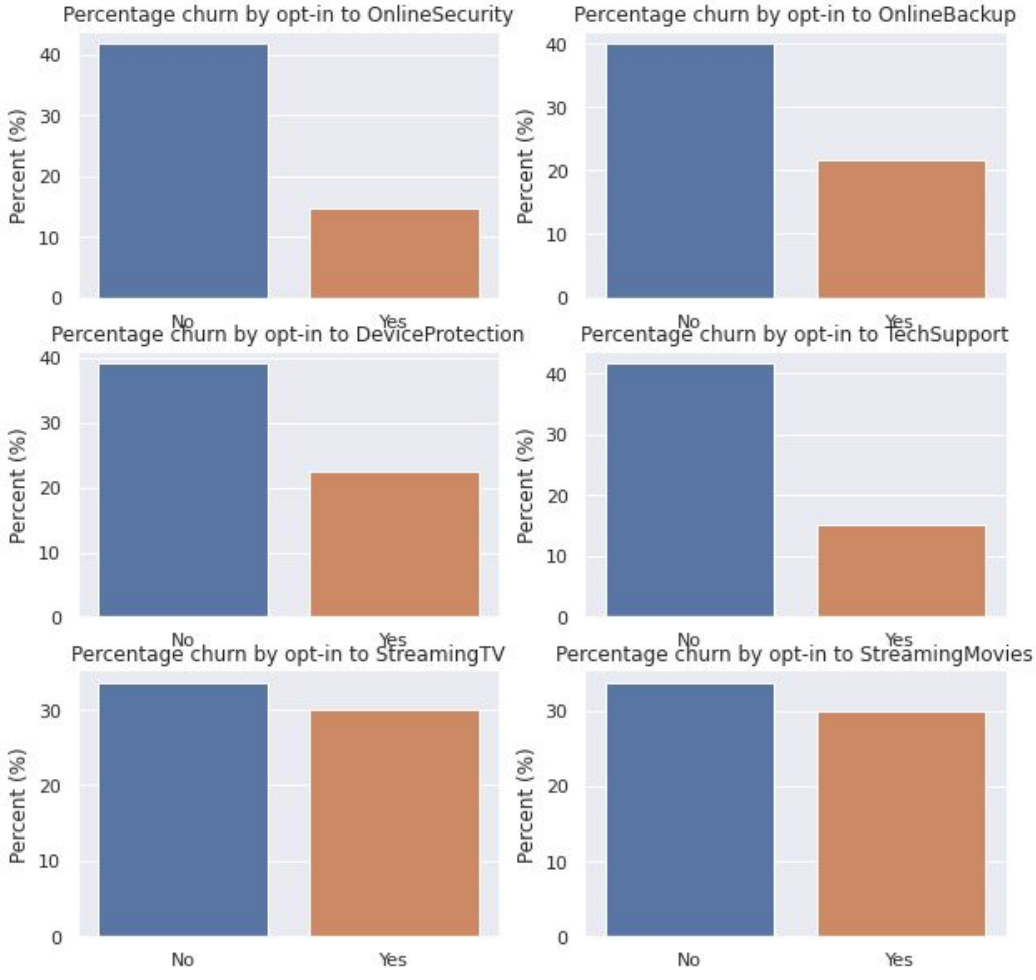

Given Churn Reason
Competitor
Attitude
Dissatisfaction
Price
Other
0
100
200
300
400
500
600
700
800
Number of Customers


Churn Reason
Competitor offered higher download speeds
Competitor offered more data
Competitor made better offer
Competitor had better devices
0
20
40
60
80
100
120
140
160
Number of Customers Lost to Competitors

# Highest Churn Correlations




Churn Percentage by all Internet Customers
Percentage churn by opt-in to OnlineSecurity
Percentage churn by opt-in to OnlineBackup
Percentage churn by opt-in to DeviceProtection
Percentage churn by opt-in to TechSupport
Percentage churn by opt-in to StreamingTV
Percentage churn by opt-in to StreamingMovies
Percent (%)
No
Yes

# 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, upgrade/renewal offers
- Develop a 2-pronged outreach approach to those who are at risk of churning
  - 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

"Your most unhappy customers are your greatest source of learning."

- Bill Gates

Apptentive