

# **CUSTOMER CHURN**

## **PREDICTIVE CLASSIFICATION MODEL**

**PREPARED FOR TELCO CO.**  
**APRIL 21, 2021**

# TODAY'S MODEL REVIEW

- Business Objective
- Churn Model Solution
- Model Feature Importance
- Future Customer Data
- Next Steps

# PREVENTING CUSTOMER CHURN

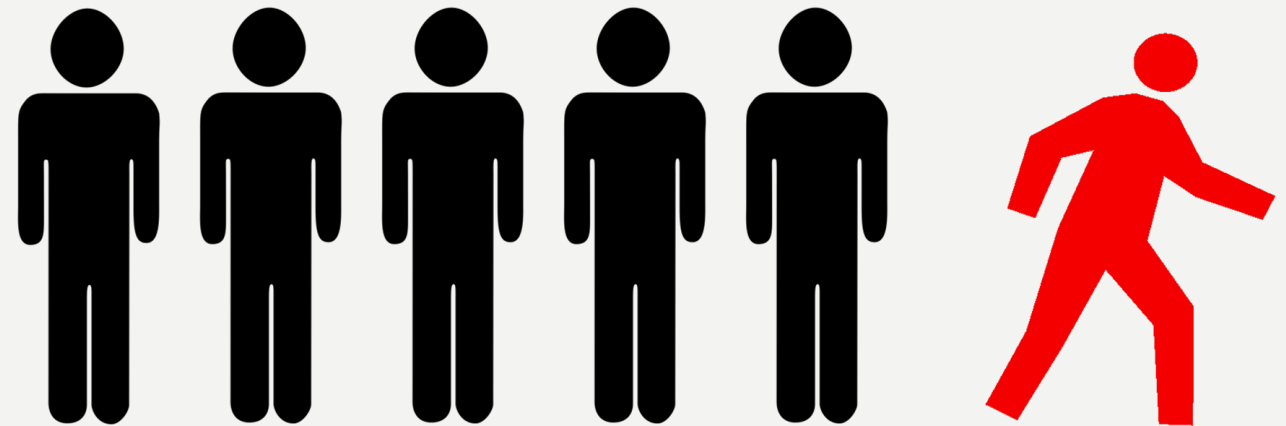
Business  
Objective

**Business Objective: Telco Co. wants to deploy customer retention strategies across systems and business processes to reduce customer churn**

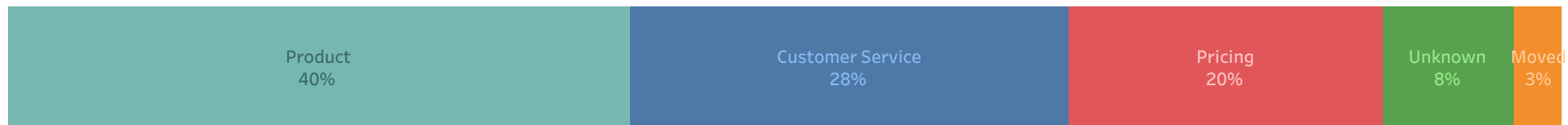
## Requirements

1. Develop predictive model to classify customer churn risk
2. Explain relative influence that each predictor has on overall model predictions
3. Suggest potential solutions to reducing customer churn

**Current Churn Rate: 26.7%**

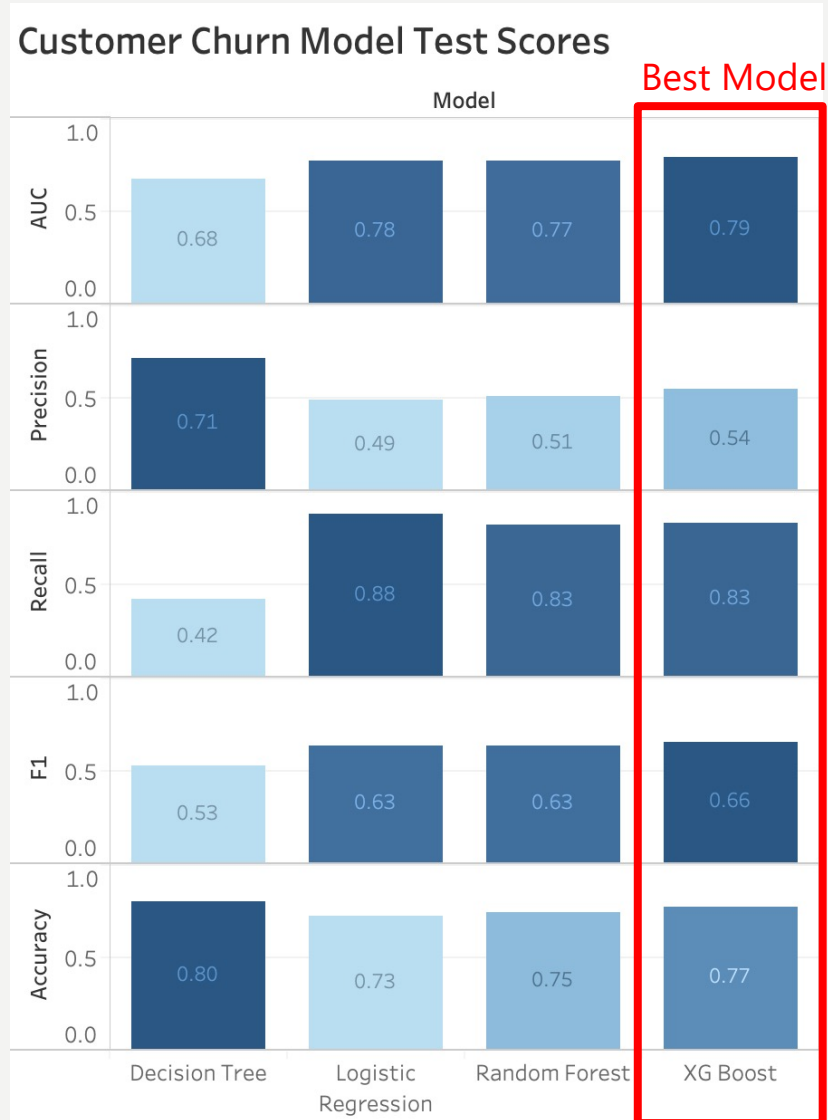


## Reason Given by Churned Customer



# ACTIONS TO REDUCE CUSTOMER CHURN

Model  
Summary



## 3-Tier Approach Based On Score Confidence

1

Confidence: **High** (84% certain on 18% of churn)  
Action: Proactive discount or free add-on service

2

Confidence: **Moderate** (71% certain on 26% of churn)  
Action: Empower customer service retention options

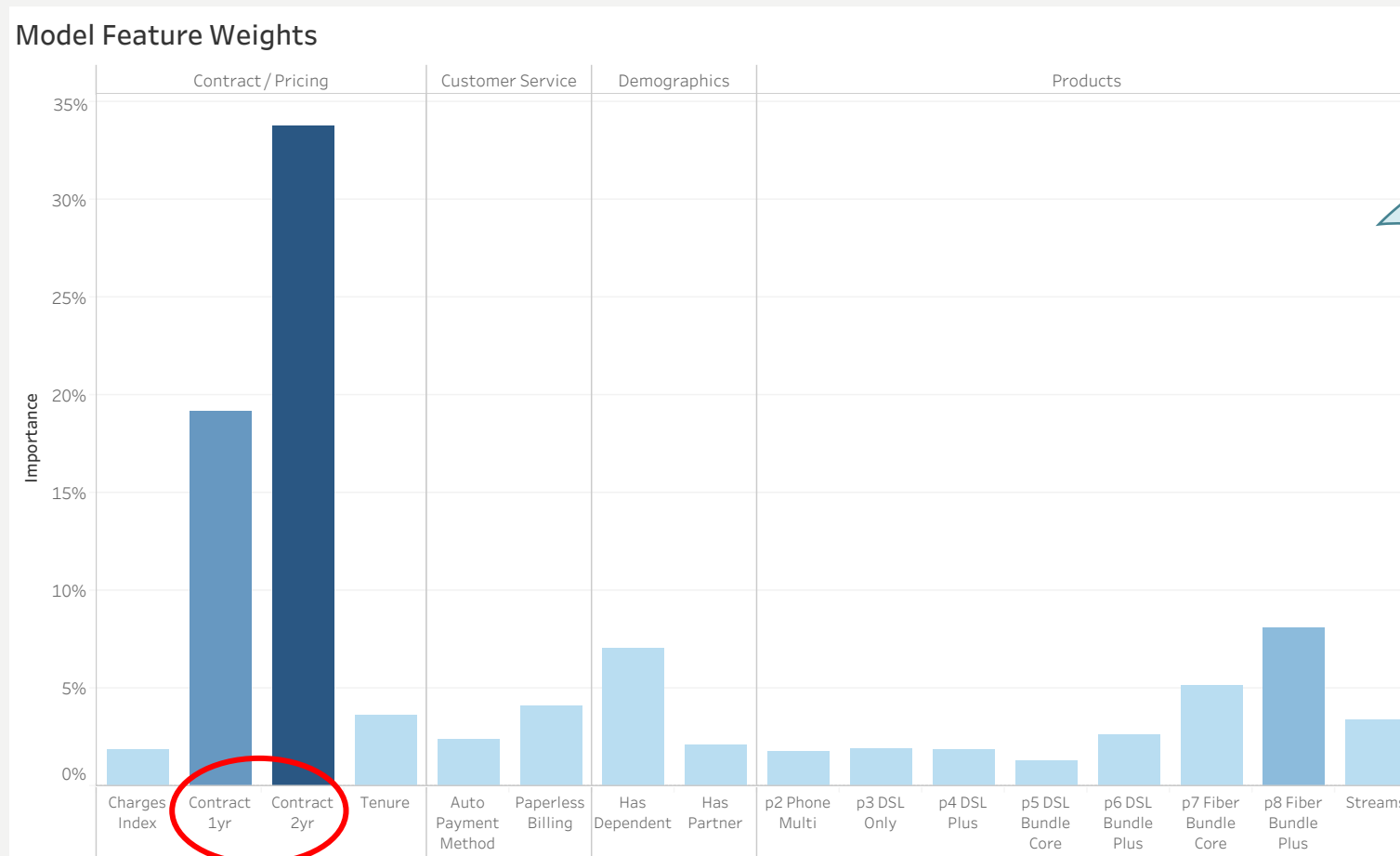
3

Confidence: **Low** (49% certain on 19% of churn)  
Action: Add to watch list, communication stream

*\*\* 3 scenarios combined address 63% of churn*

# RELATIVE FEATURE IMPORTANCE

Factors



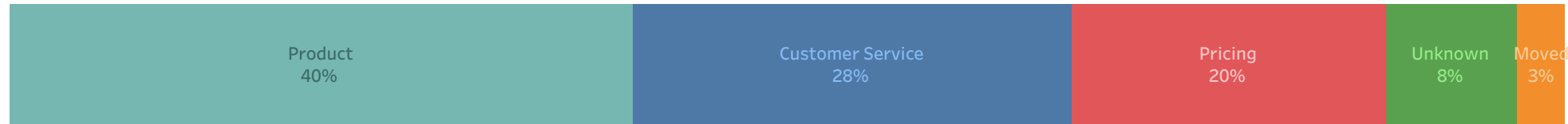
## Predicting Churn

- **Strong Impact**
  - Annual contracts not M-T-M
- **Moderate Impact**
  - Internet-based service
  - Has dependents
- **Minor Impact**
  - Paperless billing
  - Has partner
  - Customer tenure
  - Auto payments
  - Relative charges

# FUTURE CUSTOMER DATA POSSIBILITIES

Future Data

Reason Given by Churned Customer



**Predictive capabilities may be expanded with broader customer data profiles. Explore potential data such as:**

- **Product** – Service Utilization, Quality & SLA, Devices, Competitor Coverage
- **Customer Service** – Contacts/Call/Emails, Tickets, Portal/App Usage, Sentiment Analysis
- **Marketing** – Relative Price Point, Value Received, Pending Contract Renewal, Marketing Engagement
- **Demographics** – Credit Score, Income, Home Ownership, Household Size, Persona/Lifecycle, Time at Address
- **Geographic** – Block/Neighborhood Linkage

# NEXT STEPS

Next Steps

1. Technical workshop to finalize solution requirements
  2. Continue iterating model for improvements
  3. Brainstorming session for future data possibilities and insights into products and processes
- Questions?

*"In God we trust, all others bring data." – Edward Deming*

Insight Consulting Group is a boutique consulting firm specializing in analytics, business intelligence, strategy, data visualization, and data warehousing for Fortune 500 client accounts.

Visit [www.insightconsultinggrp.com](http://www.insightconsultinggrp.com) for more information.

Please contact us at:

Chuck Utterback, Principal 770.298.3169  
[chuck.utterback@insightconsultinggrp.com](mailto:chuck.utterback@insightconsultinggrp.com)

<https://github.com/cutterback>  
<https://www.linkedin.com/in/chuckutterback/>

# THANKS