

Predicting Customer Churn: A Strategic Imperative for SyriaTel

Welcome! Today, we'll explore how classification modelling can help us understand and predict customer churn at SyriaTel, a telecommunications company, allowing us to build stronger, more lasting customer relationships. This presentation will cover our approach, key findings, and actionable recommendations.

Business Managers

Seek actionable insights to design retention strategies.

Customer Service Teams

Need lists of high-risk customers for targeted outreach.

Data Science Team

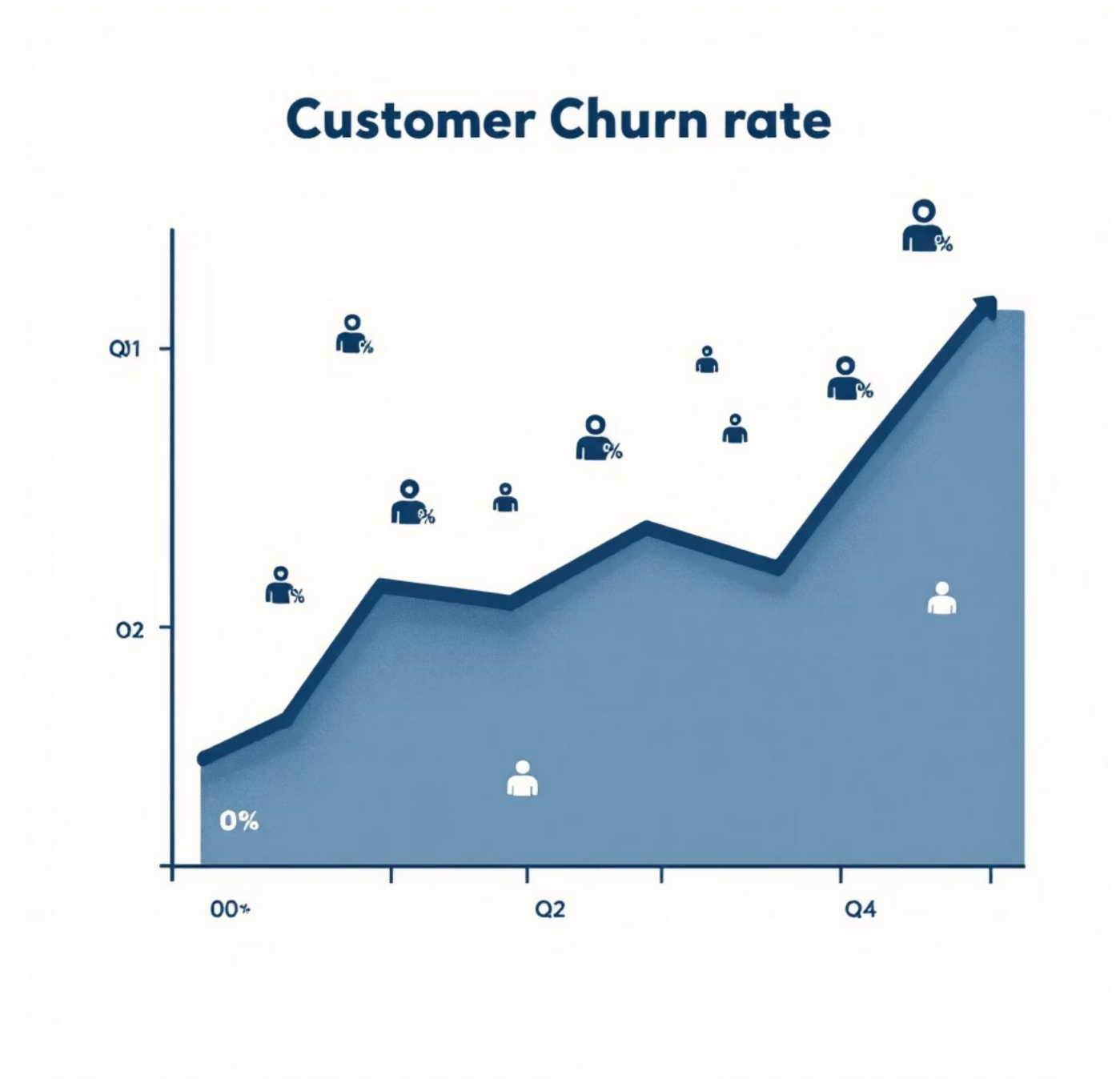
Interested in model performance and feature importance.



Understanding the Churn Challenge

Why is churn a problem?

- Lost revenue from departing customers.
- Higher costs to acquire new customers.
- Damaged brand reputation and negative word-of-mouth.
- Reduced growth potential and market share.



Laying the Groundwork: Data Preparation



Data Collection

Gathering comprehensive customer data from various sources (e.g., usage, billing, demographics).



Data Cleaning

Addressing missing values and inconsistencies to ensure data quality and accuracy.



Exploratory Analysis

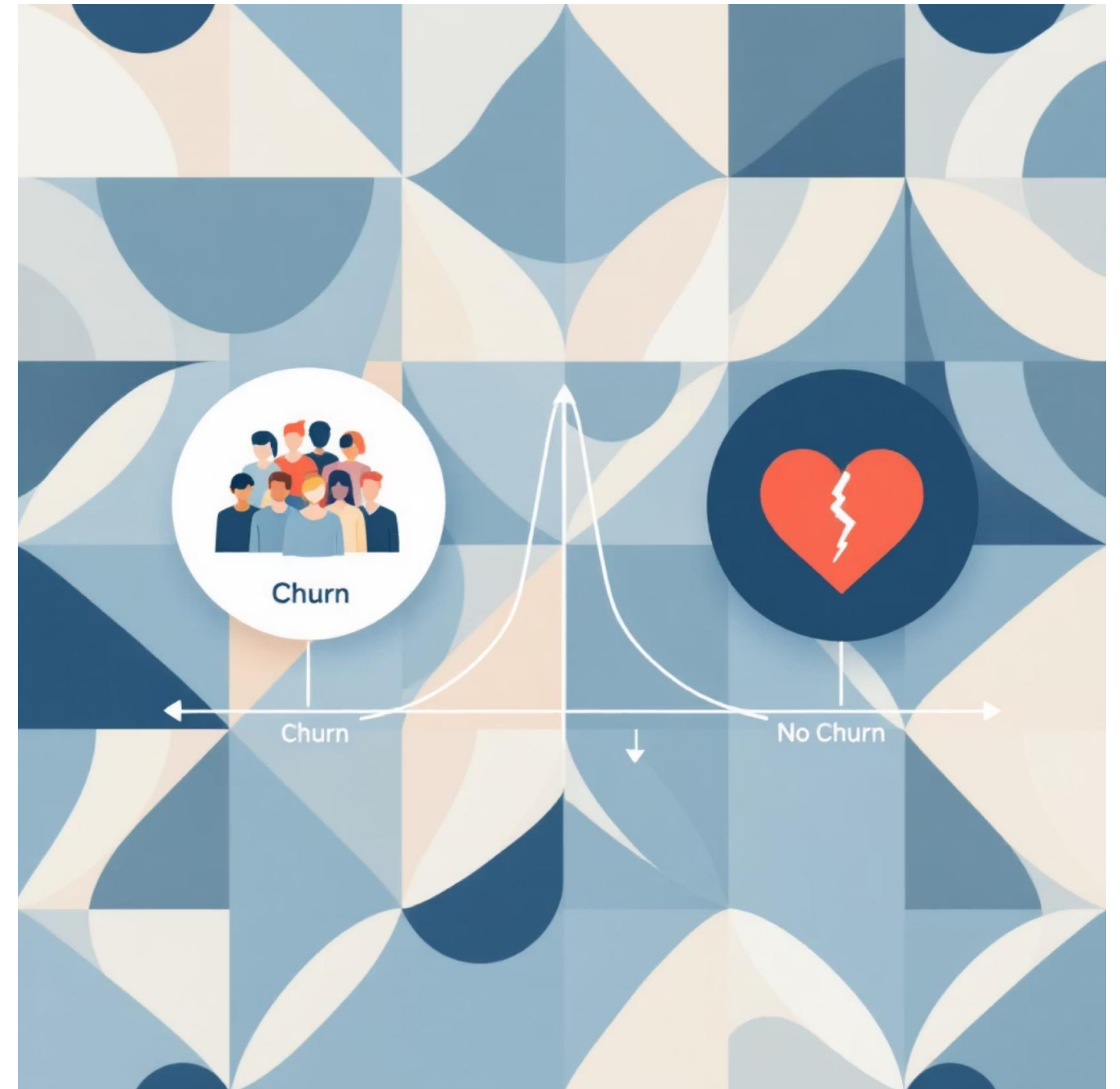
Uncovering patterns and relationships within the data to inform our modelling approach.

Our initial phase involved robust data gathering and preparation to ensure the accuracy and reliability of our insights. This foundational work is critical for effective predictive modelling.

Predicting Churn with Classification Modelling

Classification modelling is like teaching a computer to make a "yes" or "no" decision based on patterns it learns from past data. In our case, it's about predicting if a customer will "churn" (leave) or "not churn" (stay).

The model learns from historical customer data, including those who churned and those who stayed, to identify the characteristics that lead to each outcome.



Evaluating Model Performance

To trust our predictions, we need to know how well our model performs. Here are the key metrics we used:



Accuracy

The overall percentage of correct predictions (both churners and non-churners).



Precision

When the model predicts churn, how often is it correct? This avoids false alarms.



Recall

Of all actual churners, how many did the model correctly identify? This ensures we don't miss at-risk customers.

Key Drivers of Customer Churn

Our model highlighted the most influential factors in predicting whether a customer will churn. Understanding these allows us to target our retention efforts effectively.



Monthly Charges

Customers with higher monthly bills are more likely to churn, indicating price sensitivity.



Contract Type

Customers on month-to-month contracts have a significantly higher churn rate than those on long-term agreements.



Customer Service

The presence of technical support and online security services reduces churn risk.

Recommendations for Retention

Based on our findings, we propose the following strategies to reduce customer churn:



Targeted Offers

Implement special promotions or discounts for customers identified with high monthly charges, addressing their price sensitivity directly.



Contract Incentives

Encourage customers on month-to-month contracts to transition to longer-term agreements by offering appealing benefits and incentives.



Enhanced Support

Actively promote and continuously improve customer support services, particularly technical assistance and online security, to boost customer satisfaction.



Proactive Outreach

Utilize the churn prediction model to identify at-risk customers early, enabling timely and personalized retention campaigns.

Next Steps and Thank You

Our path forward focuses on operationalizing these insights to create tangible impact on customer retention. Here's our implementation plan:

Model Integration

Seamlessly embed the churn prediction model within our CRM system for real-time application and accessibility.

Automated Alerts

Develop automated notifications to promptly identify and flag customers at high risk of churning for targeted interventions.

Monitor Campaigns

Continuously monitor the effectiveness of retention campaigns and adjust strategies based on performance data.

Regular Model Updates

Establish a routine for retraining and updating the model with fresh data to maintain its predictive accuracy and relevance.

Thank you for your time and attention. We are confident that these insights and recommendations will significantly improve our customer retention efforts.

