## SYRIATEL CUSTOMER CHURN



### **Business Understanding**

#### Introduction:

 Focus on identifying patterns signaling potential service cancellations.

#### Stakeholders:

SyriaTel's management and customer retention teams.

# Business problem



It is less expensive to keep a current customer than acquire a new one.

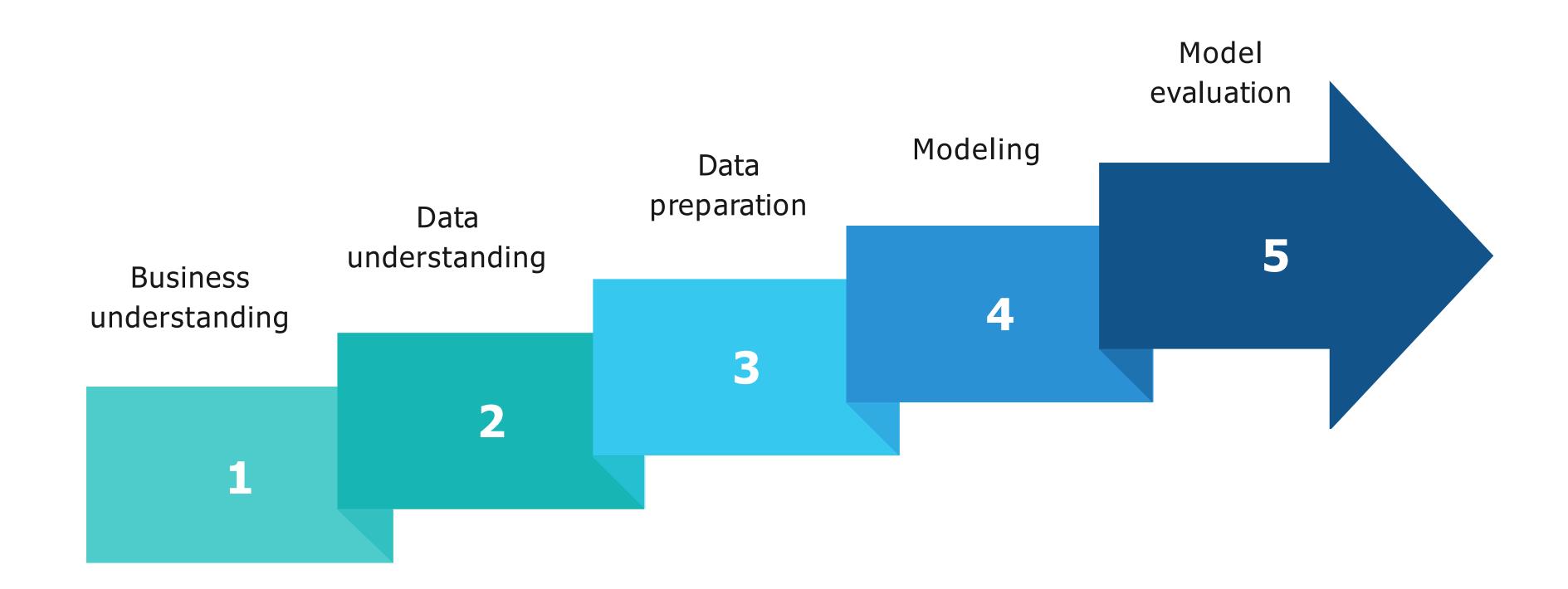


5 times more used in acquiring a new customer.

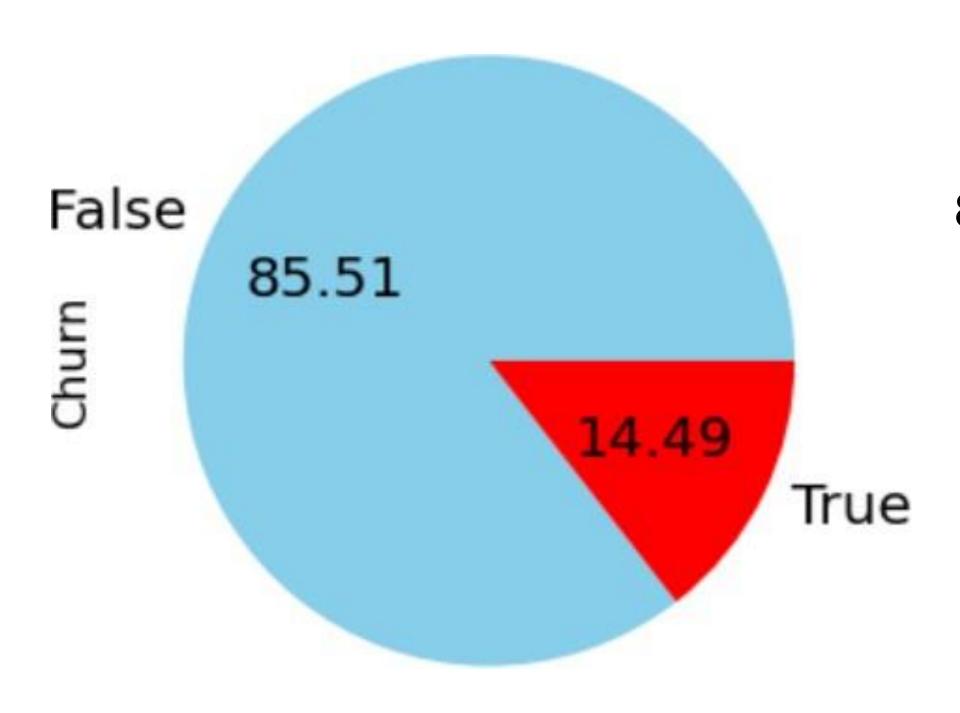


5%increase in customer retention can grow profit by 75%

# Method

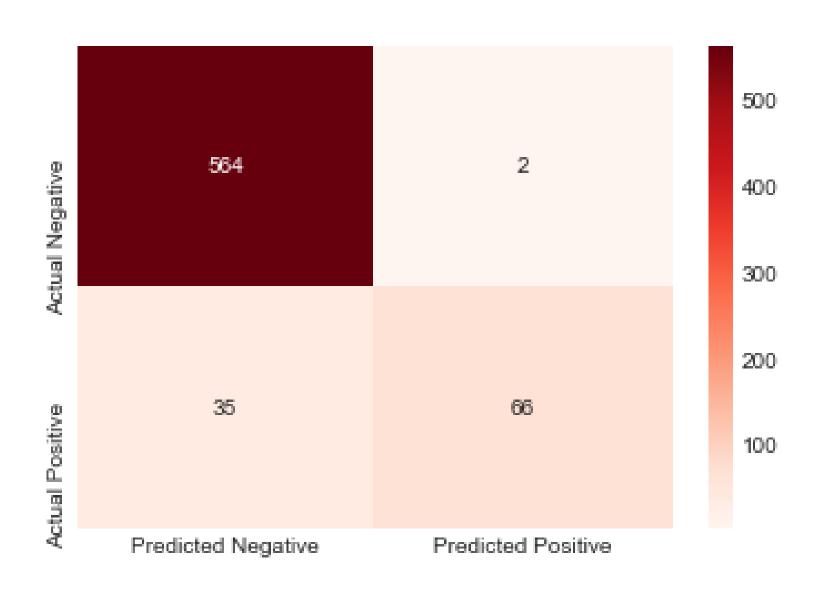


# Analysis of target variable



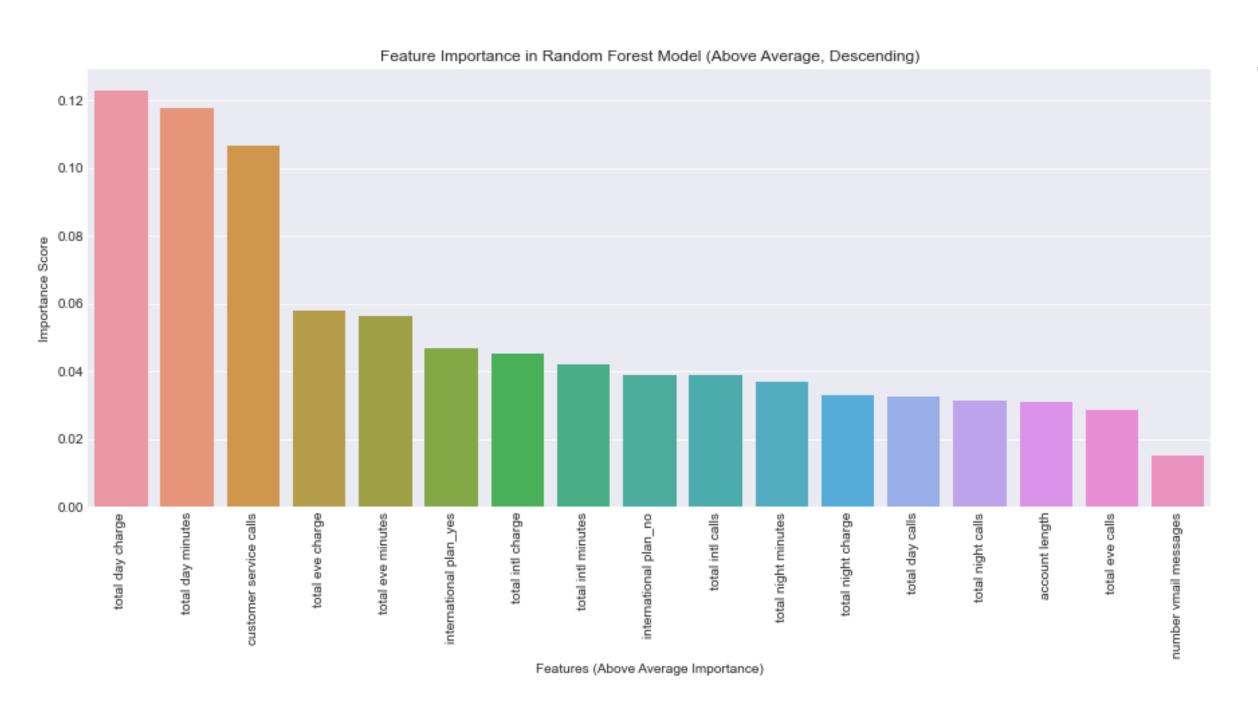
85.51% of the customers have not churned while 14.49% have churned.

# Results



- The model predicted 66 True Positives,
  564 True Negatives, 2 False Positives and
  35 False Negatives.
- The model predicted 66 customers would churn and they did.
- The model predicted that 564
   customers would not churn and they didn't
- The model predicted that 2 customers would churn but they didn't
- The model incorrectly predicted that 35 customers would not churn but they actually churned

# Results



The most important features for predicting customer churn:

- total day minutes
- total evening minutes
- customer service calls
- total international minutes

### Conclusions

#### **Best Model for Churn Prediction:**

#### •Model Choice:

Random Forest outperforms Logistic Regression and Decision Trees

#### •Performance:

Highest accuracy and predictive power for identifying churn.

### Key Predictive Features :

- Total day charges and minutes
- Customer service calls
- Total evening charges and minutes
- Subscription to the international plan

### Implications:

#### •Guidance for Retention:

Use insights to target high-risk customers with proactive retention strategies.

### RECOMMENDATIONS

#### **Improvement Strategies:**

#### •Enhance Call Quality:

 Invest in advanced infrastructure and technology for superior call quality and customer experience.

#### Upgrade Customer Service:

- Shorten response times.
- Improve issue resolution efficiency.
- Offer personalized support.

#### •Tailor Plans for International Subscribers:

Create attractive plans and offers to boost satisfaction and reduce churn.

#### •Implement Retention Measures:

- Use targeted promotions.
- Offer loyalty rewards.
- Personalize communication for at-risk customers.

#### •Continuous Monitoring:

- Regularly analyze customer behavior and churn trends.
- Update models and strategies to adapt to market changes.

