

Customer Churn Prediction

Mathew Kaunda

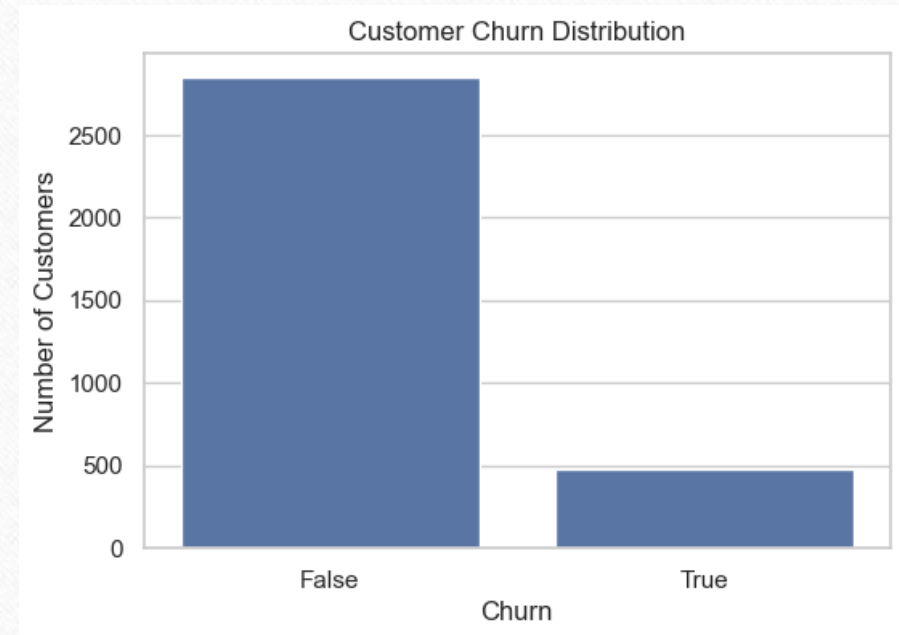
Business Problem

Why Customer Churn Matters

- Customer churn leads to direct revenue loss
- Replacing customers costs more than retaining them
- I focused on identifying churn early so the business can act in advance

Customer Churn Overview

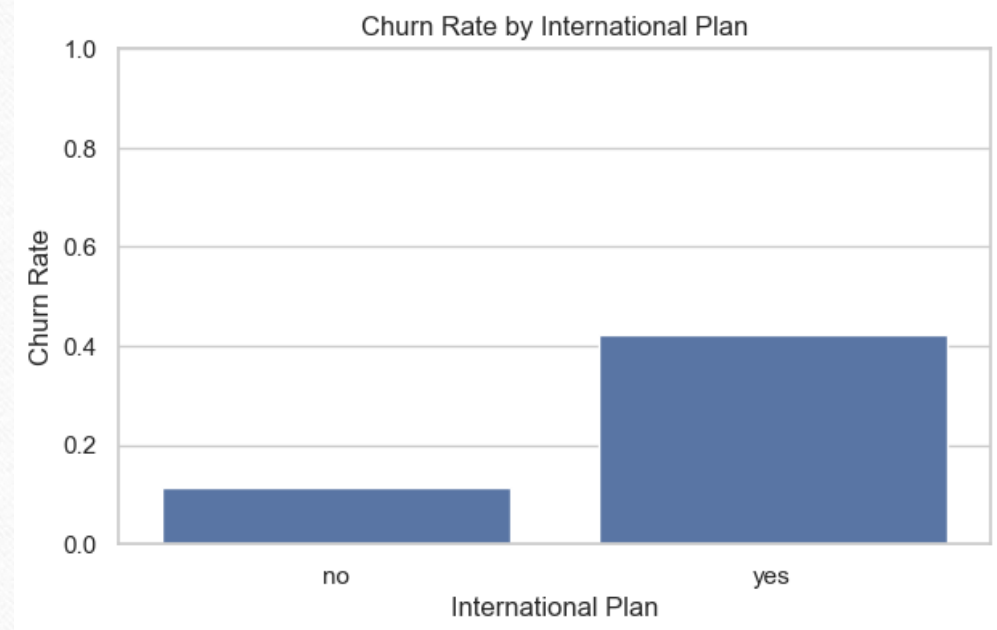
- Most customers remain loyal
- A small group accounts for churn-related losses
- Identifying this group is critical for retention efforts



Risk Factor - International Plan

International Plan and Churn Risk

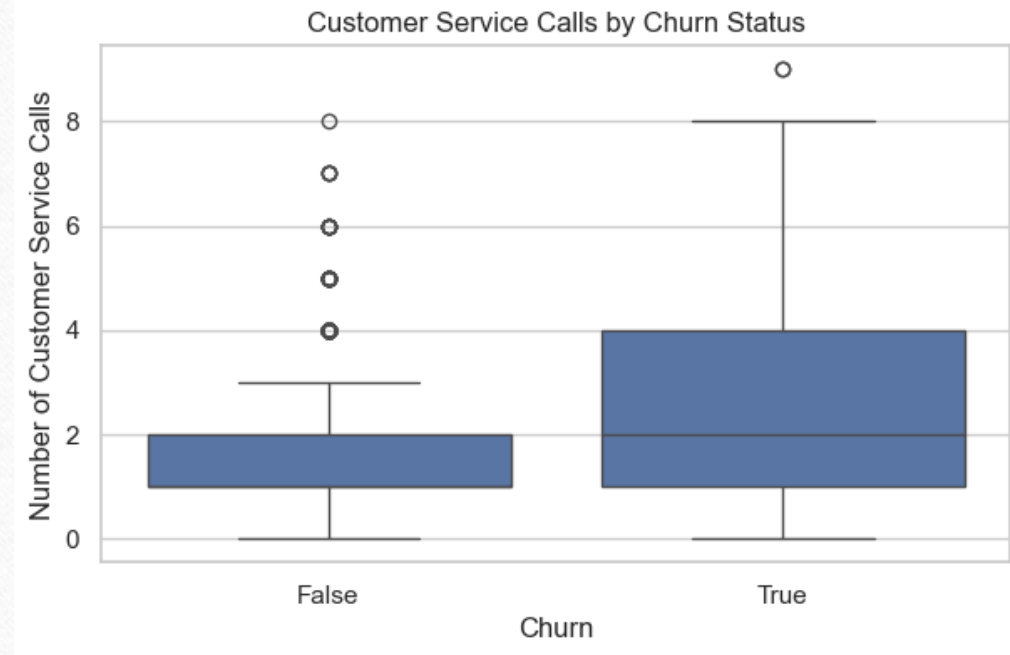
- I found that customers with international plans churn at much higher rates
- This group represents a clear high-risk segment
- Plan structure may contribute to dissatisfaction



Risk Factor - Customer Service

Customer Experience Signals Churn

- Churned customers contact customer service more frequently
- Higher call volume suggests unresolved issues
- I used service interactions as an early warning signal

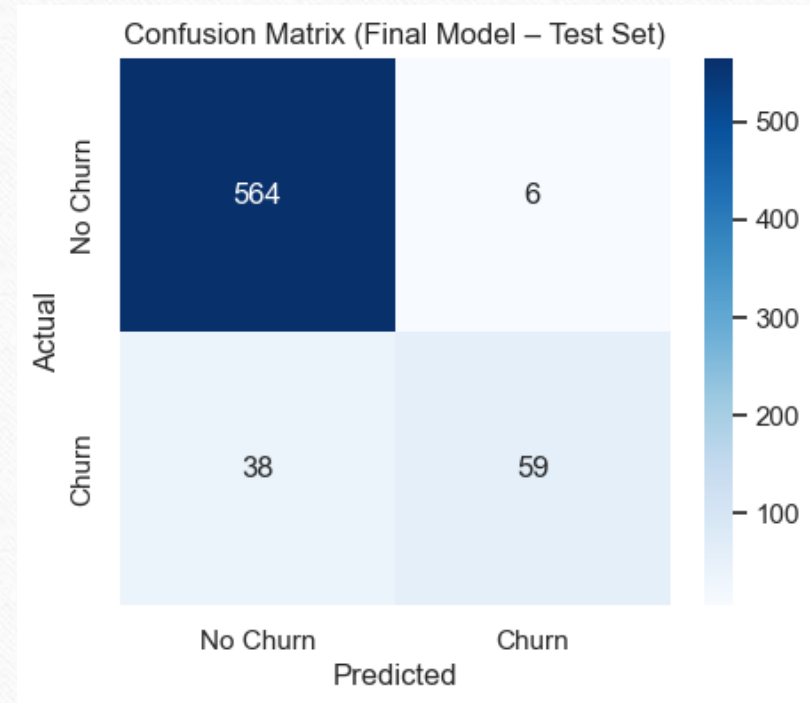


Modeling Approach

- I classified customers as likely to churn or not
- I tested and compared multiple predictive models
- I selected the final model based on business-relevant performance

Model Performance

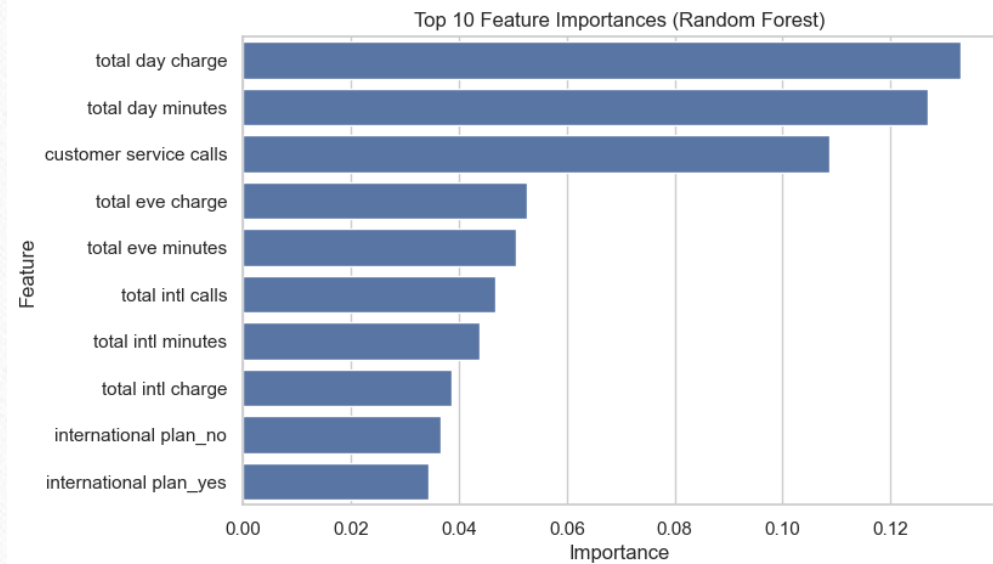
- My model correctly identifies most customers who churn
- Few loyal customers are incorrectly flagged
- This performance supports practical business use



Key Drivers of Churn

What I Found Drives Customer Churn

- High daytime usage and charges are the strongest indicators of churn
- Customers who make more customer service calls are much more likely to leave
- International usage and plan features also contribute to higher churn risk



Business Recommendations

- I recommend using the model to identify customers at high risk of churn early
- I would prioritize customers with frequent customer service calls for proactive outreach
- I suggest reviewing pricing and usage patterns for high-charge, high-usage customers
- I recommend targeted retention offers for customers on international plans
- I would focus resources on prevention rather than reacting after customers leave

Next Steps & Thank You

What I Would Do Next

- Deploy the model to support retention campaigns
- Test targeted offers and service interventions
- Monitor churn patterns and update the model over time

Thank You...