

Telecom Customer Churn Analysis

Reducing Customer Churn in Our Telecom Business
Insights and Practical Steps for Stronger Customer Retention
Presented by: Benson Ouma Amara

Overview

Churn means our customers are leaving us for competitors.

Why Customer Churn Matters?

- ▶ Every lost customer is lost revenue.
- ▶ If we can predict who might leave, we can take action early.

What We Did

- a. Analyzed real customer data to understand who is leaving and why.
- b. Built a simple prediction model to flag at-risk customers.
- c. Visualized key patterns to guide decision-making

Modeling

Four models were tested:

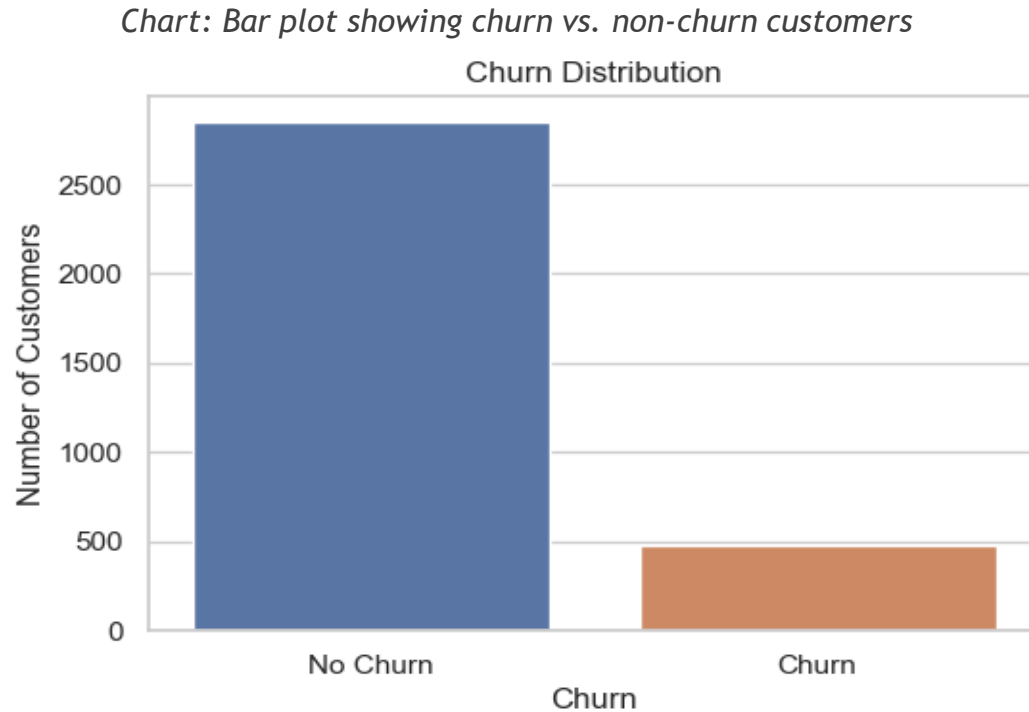
- Logistic Regression
- Random Forest
- Decision Tree
- Support Vector Machine

Features were standardized to improve performance

How Big is the Problem?

1. Churn Distribution

- ✓ Around 14% of our customers have churned.
- ✓ This is a significant number to lose to our competitors—this justifies the need for a predictive model (Even a small improvement in retention can save us significantly)

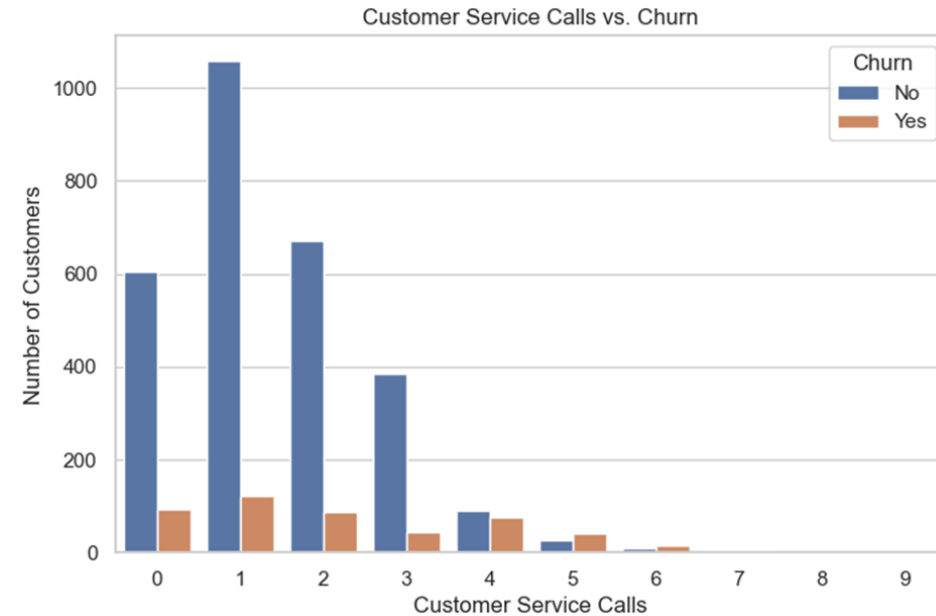


2. Customer Service Calls

- ✓ Customers who made many service calls are more likely to churn, suggesting poor support experiences may drive churn.

Recommendations:

- ✓ Solve problems quickly and efficiently.
- ✓ Flag frequent callers for follow-up

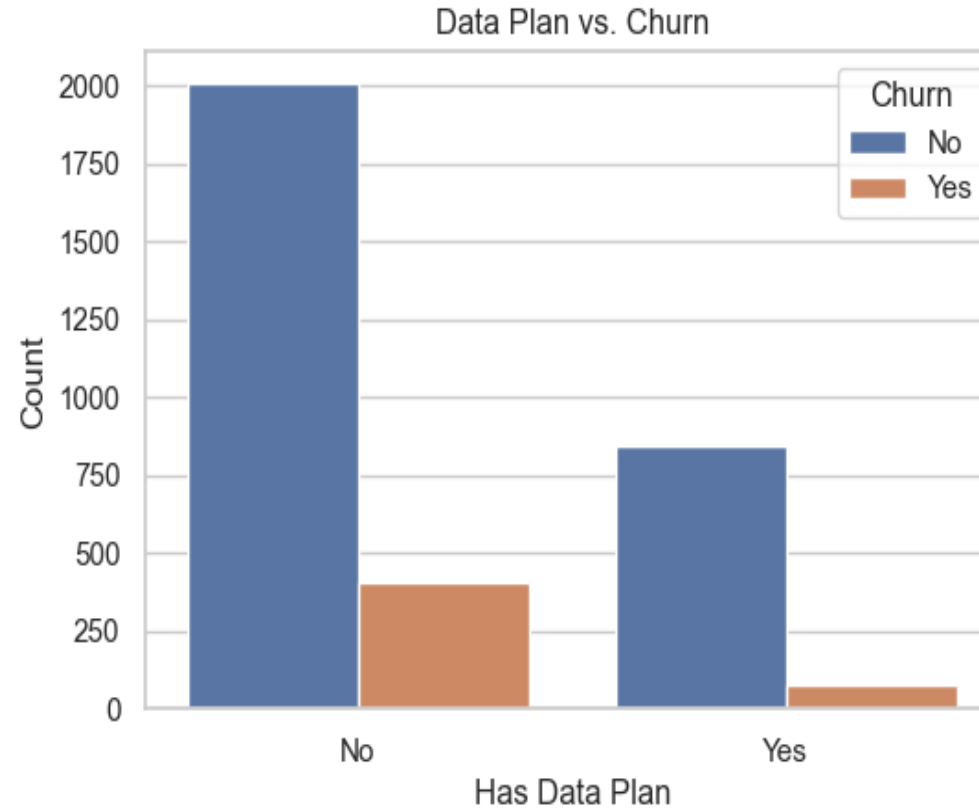


3. Data Plan

- ✓ Customers without data plans are slightly more likely to churn.

Recommendations:

- ✓ Promote affordable, tailored data plans.
- ✓ Communicate clearly why data plans offer better value.

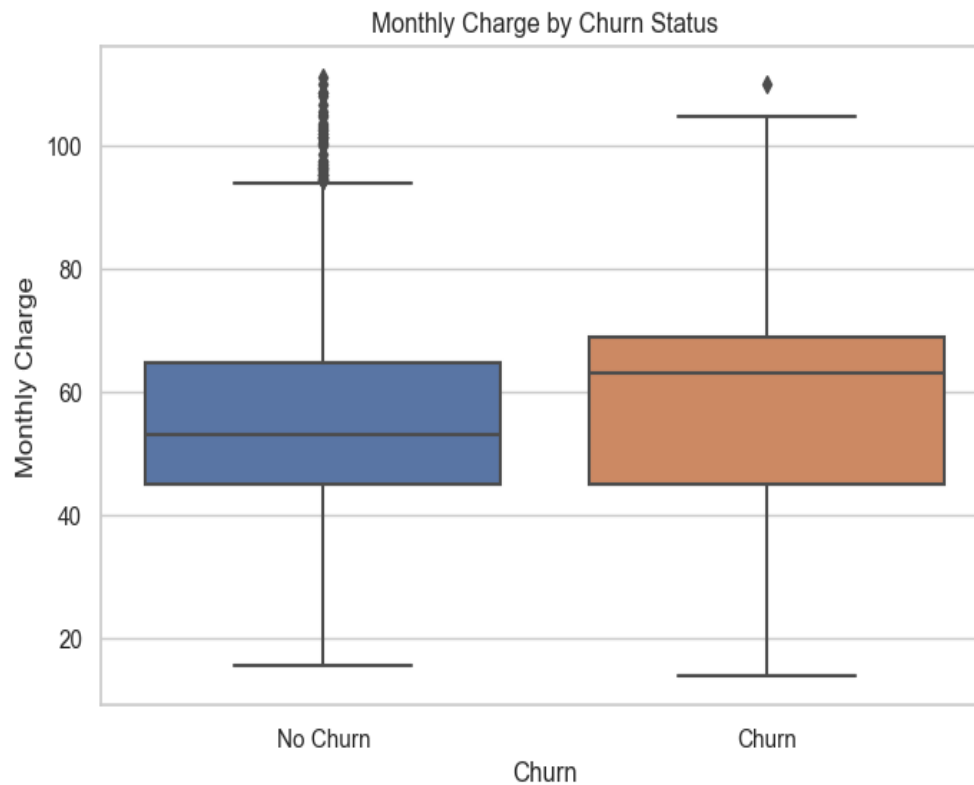


4. Monthly Charge

- ✓ Churning customers tend to have higher monthly charges on average, which likely indicates dissatisfaction with value for money.

Recommendations:

- ✓ Review billing fairness and transparency.
- ✓ Consider loyalty rewards or more flexible plans.



Key Takeaways



- ▶ Keep a close eye on customer service quality.
- ▶ Target customers with no data plan or high bills.
- ▶ Use data to guide proactive outreach.

What We Can Do Next?

- ▶ Set up a dashboard to flag high-risk customers early (Early Warning System).
- ▶ Launch small pilot campaigns to test interventions
- ▶ Monitor and retrain the churn model regularly to adapt to new trends
- ▶ Develop segment-specific approaches using model insights
- ▶ Proactively engage at-risk customers with personalized offers and loyalty perks
- ▶ Use feedback from churned customers to refine retention strategies

Let's Talk:

Questions and Discussion

Thank you

END