Syriatel Customer Churn Analysis.

BY GROUP 6.

Syriatel Telecommunication

From Churn to Retention

Introduction

- Syriatel is a leading telecom provider of voice and data services.
- Like its competitors, the company's goal is profit maximization.
- A key challenge is customer churn , when subscribers cancel and move to competitors.
- This project uses data-driven methods to understand churn and propose solutions.

Data Understanding.

- We used the Syriatel customer Churn dataset available on Kaggle.

- The datset covers information of customer's location, usage, charges and whether they left or stayed.

- It is important because it helps usidentify patterns in customer behaviour.

Approach

1.Extract the zipped csv files

2.importing relevant libraries and loading the dataset.

3.Preparing the data: checking for missing values, checking for duplicates,outliers

4.EDA:Analysis and Visualizations.

5.Modeling: Logistic regression and the Decision Tree Classifier

6.Evaluation

Churn at a Glance

- Percentage of customers who churn are 14%
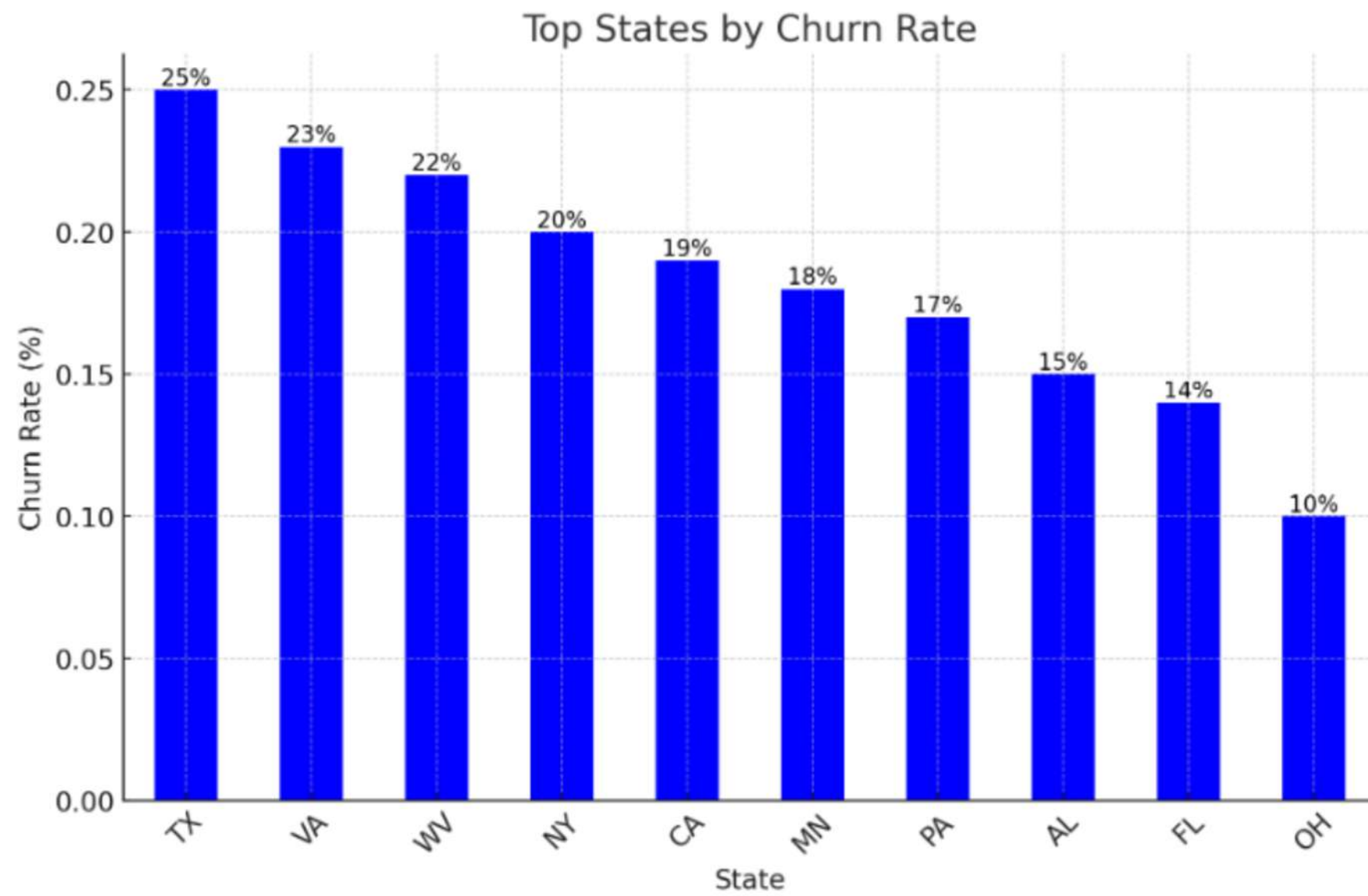
Bar Chart Showing State by Charges
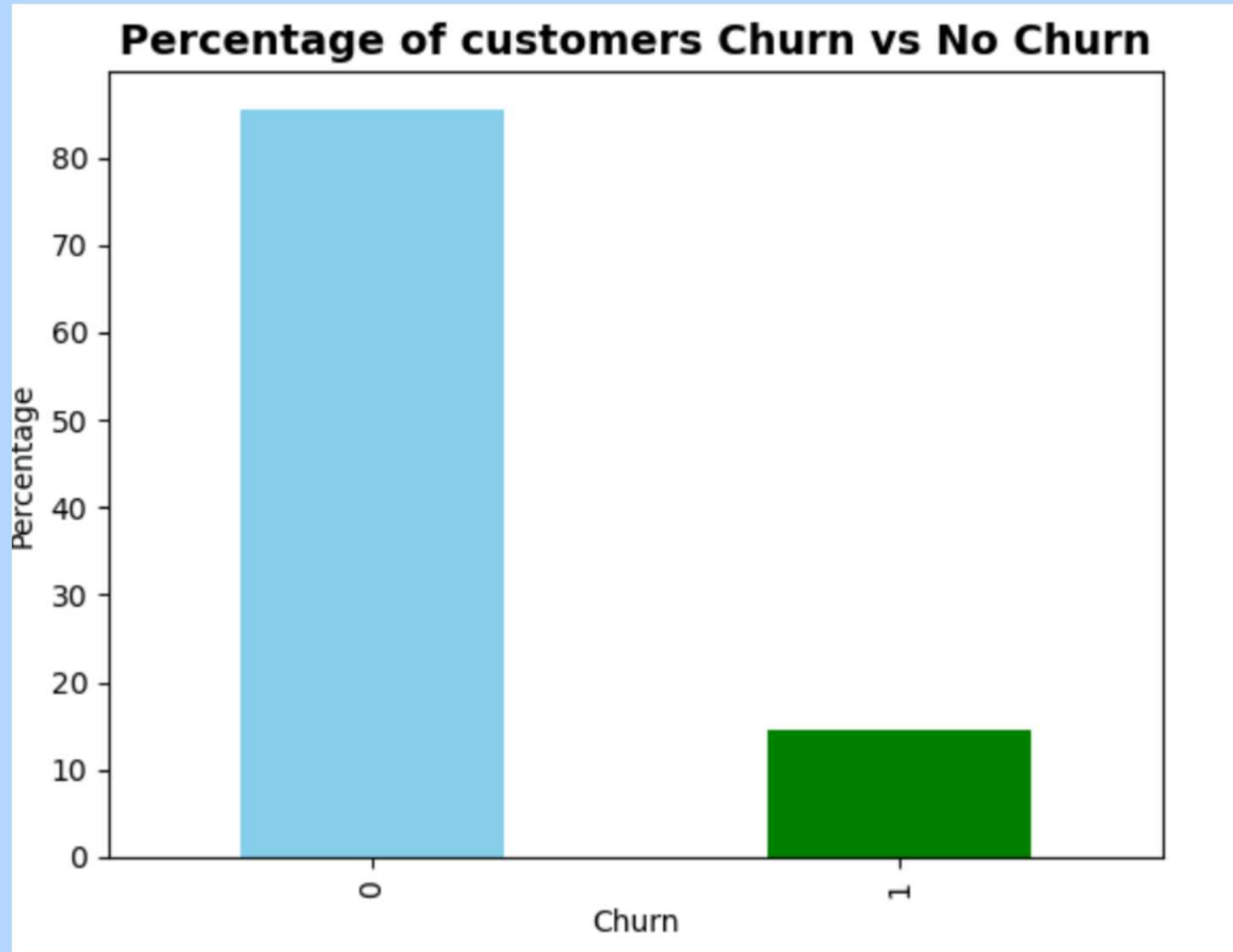
States with the highest charges
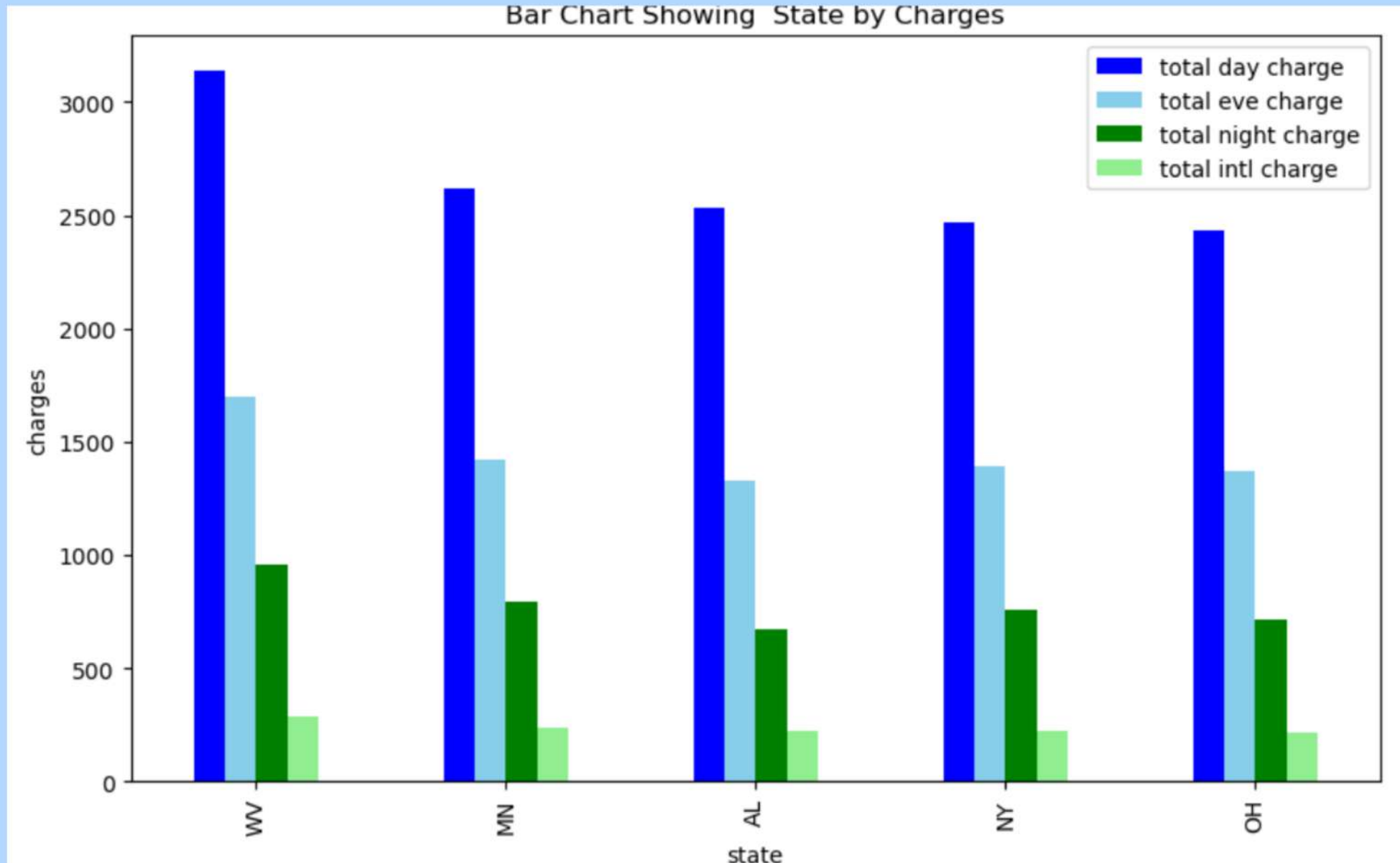
- West Virginia has the highest overall charges
- Minnesota has the second highest overall charges.

Which State has the highest Churn Rate

Top States by Churn Rate

- The States with the highest churn are Texas, Virginia and West Virginia

Density of Total Minutes by Churn Status

Usage distribution of total minutes.

- The green curve is wider and lower, while the blue curve is taller and more concentrated indicating higher usage among customers who stayed.
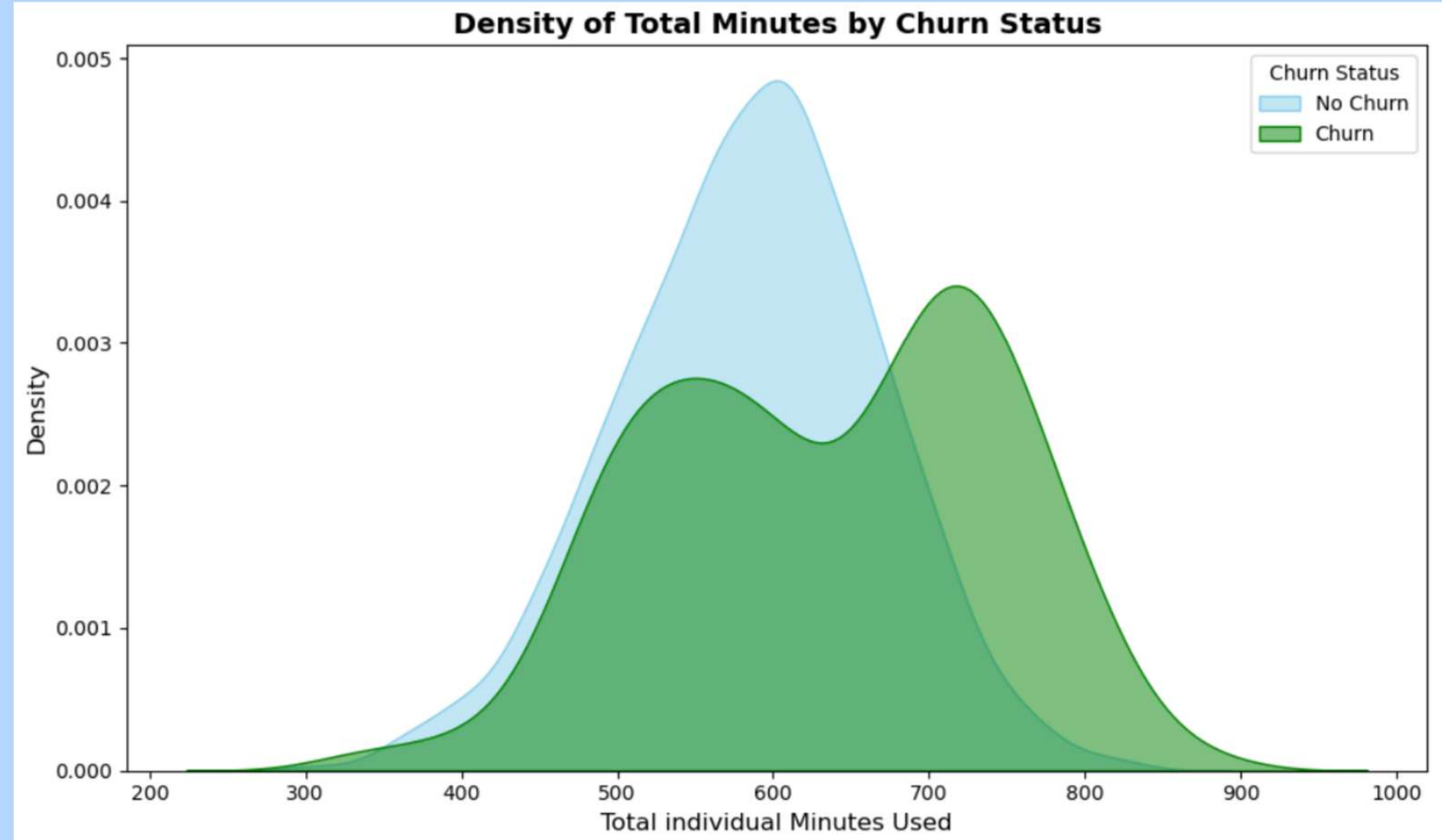
Key Findings:

- High Charges Drive Churn: States with higher day and evening call charges (like West Virginia) tend to experience more customer churn.

- Customer engagement reduces churn: highly active users are more loyal, while low-usage customers are more likely to leave.

- About 14% of SyriaTel's customers have churned, a sizeable share that poses a serious risk to revenue if left unaddressed.

Recommendations:

RETAIN HIGH USAGE CUSTOMERS

- Create targeted retention programs (loyalty points, discounted packages, or "VIP customer" care) to reduce churn.

ADDRESS HIGH CHURN STATES

- Focus retention campaigns in states with the highest churn (e.g., Texas, West Virginia).
- Provide localized offers or customer support initiatives.

REVIEW PRICING STRATEGY

- Reassess day and evening call charges in high-cost states.
- Introduce loyalty discounts or bundled packages to reduce cost-driven churn.

Next Steps

- Deploy the churn prediction model → integrate it into SyriaTel's customer system.

- Act on predictions → target at-risk customers with loyalty offers and discounts.

- Monitor performance → track churn monthly to see if interventions work.

THANK YOU!