



CUSTOMER CHURN

ANALYSIS REPORT

Customer Churn rate presentation

Business Understanding

Churn is a critical business problem for companies, especially those telecommunications and other industries with recurring customer interactions. Below are the common impact

- **High Impact on Businesses** – Common in telecom, banking, and subscription industries.
- **Cost of Acquisition vs. Retention** – Retaining customers is cheaper than acquiring new ones.



Objective

- The goal of this churn rate prediction model is to identify customers who are at risk of leaving the service (churning),
- enabling the business to take proactive actions such as targeted marketing or personalized offers to retain them.



Key Metrics to Track:

Churn Rate: Percentage of customers who leave in a given period.

Customer Lifetime Value (CLV): How valuable a customer is over the long term.

Retention Rate: The percentage of customers retained over a given period.



DATA UNDERSTANDING

INSIGHTS ON CHURN ANALYSIS

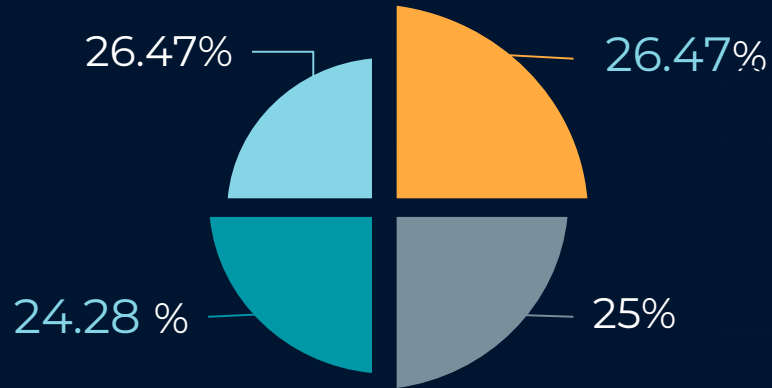




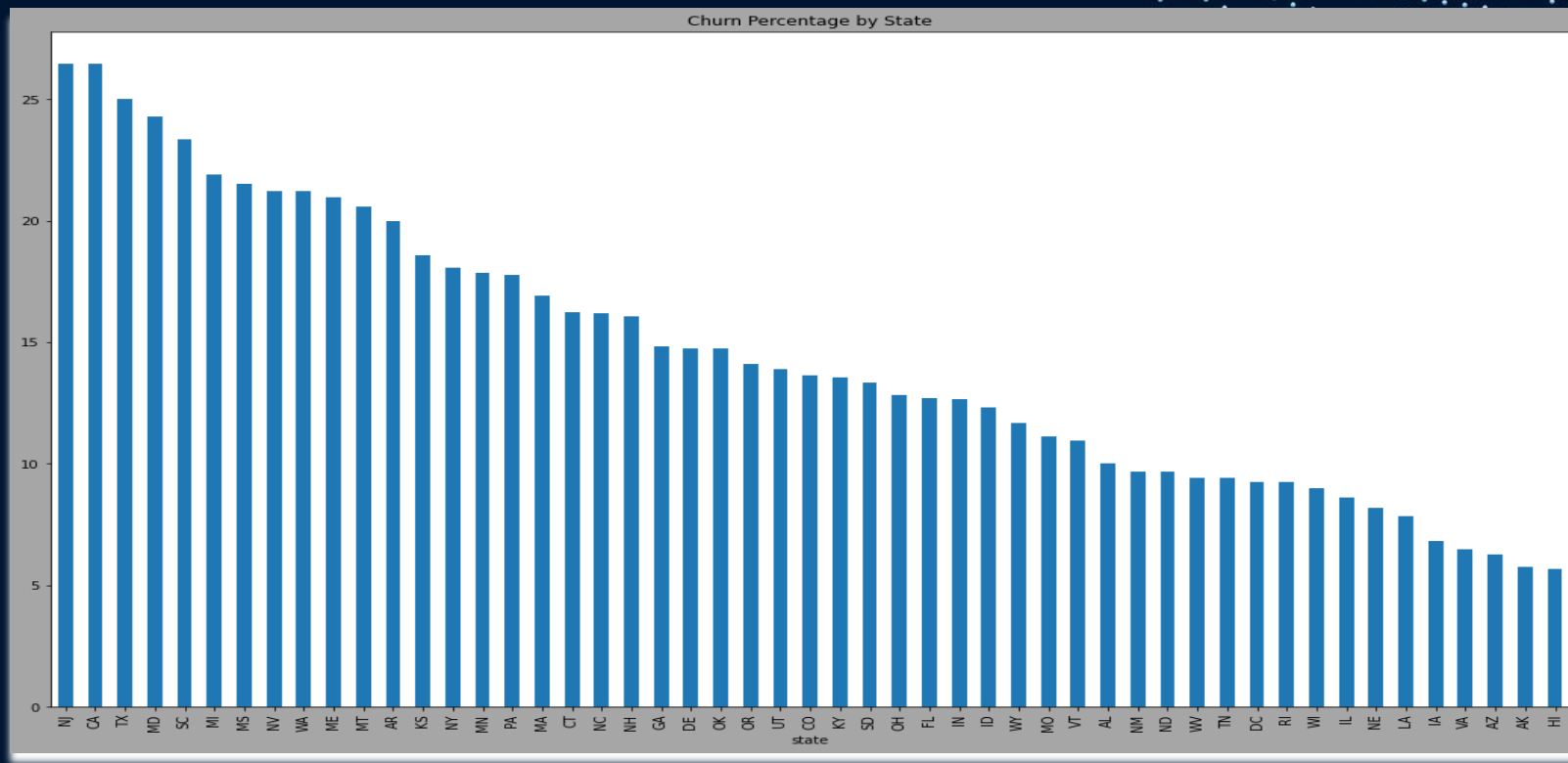
14.49%

TOTAL CHURN RATE

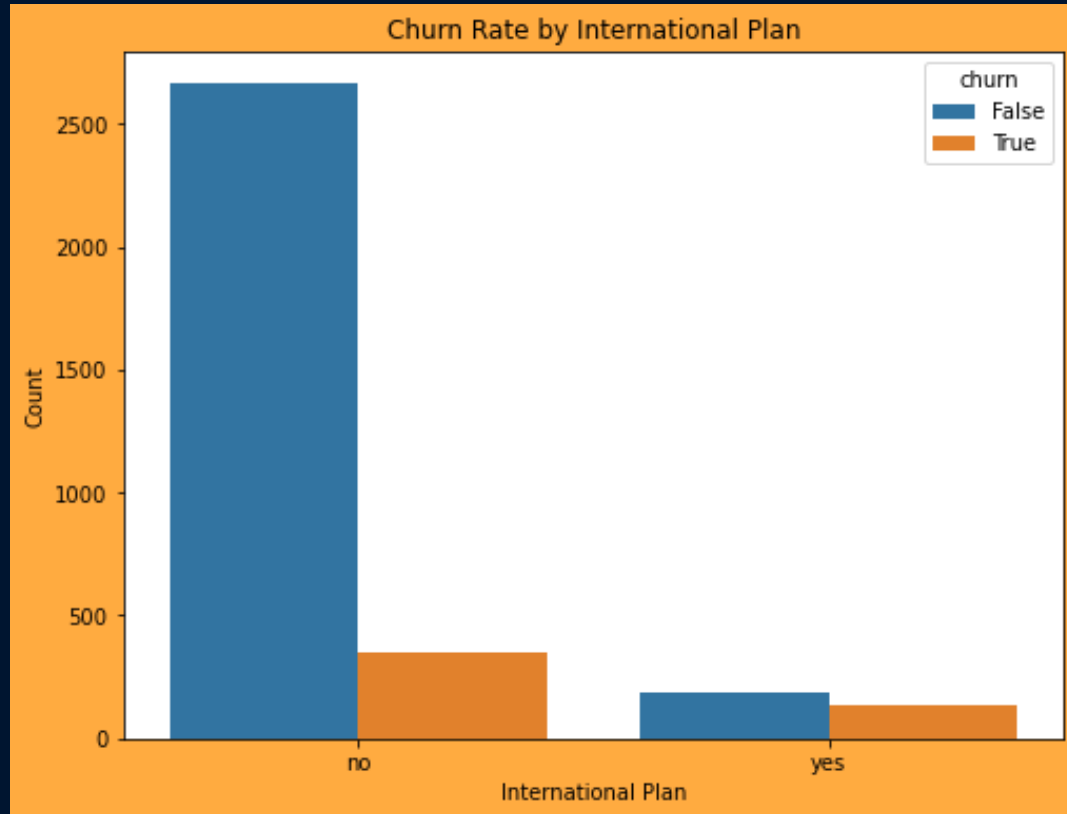
TOP 4 STATE WITH HIGHEST CHURN RATE



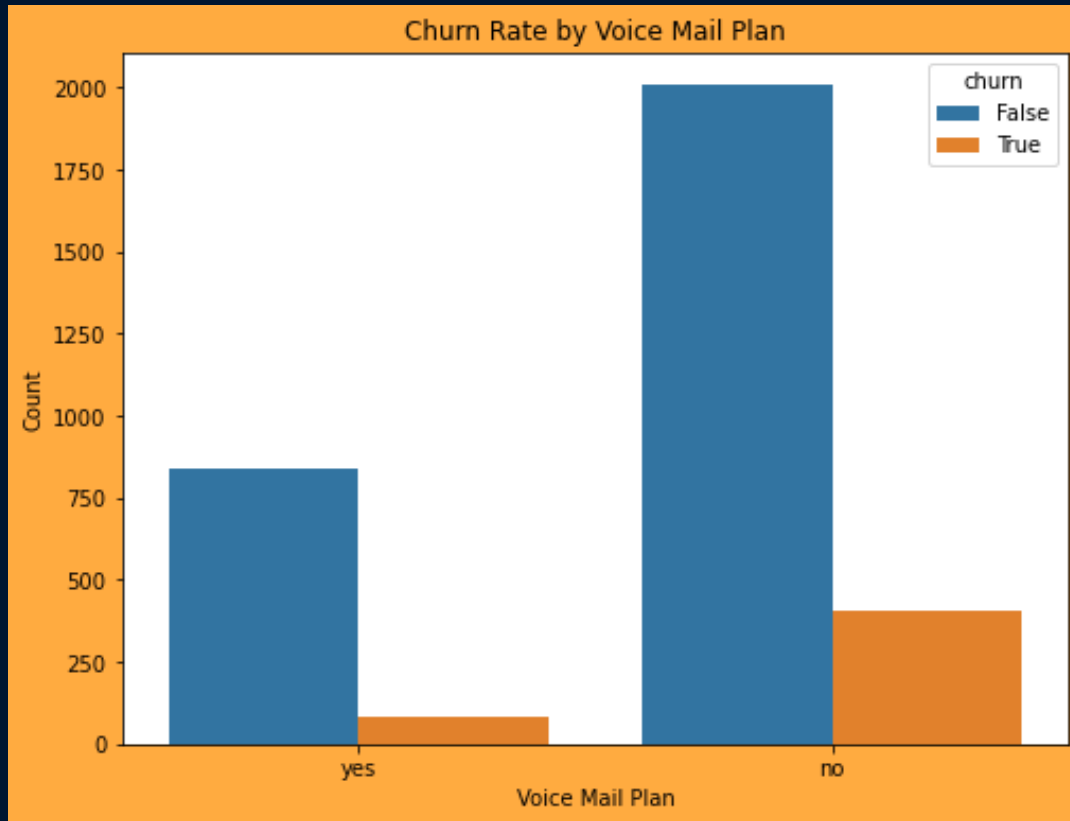
Churn rate by state



CHURN RATE BY INTERNATIONAL PLAN



CHURN RATE BY VOICE MAIL PLAN



HIGHEST CORRELATION WITH CHURN

20.51%

Total Day
Charge

20.87%

Customer Service
Calls

20.51%

Total Day
Minutes



67.92%

Customer Lifetime Value

18.97%

Churn Rate Percentage for High
Spenders

10.02%

Churn Rate Percentage for Lowest
Spenders

SUMMARY

Business implication summary

- 1. Customer service calls are the biggest churn predictor.
- 2. Customers with high day-minute usage are more likely to churn
- 3. International call users are slightly more loyal.
- 4. Voicemail users are less likely to churn.

Recommendations:

1. **Focus on Customer Service:** Since customer service calls are a significant predictor of churn, improving customer service quality and reducing the number of calls can help in retaining customers. Implementing proactive customer service measures can address issues before they lead to churn.

2. **Targeted Marketing:** Use the churn prediction model to identify high-risk customers and implement targeted marketing strategies, such as personalized offers and discounts, to retain them.

3. **Monitor High Usage Customers:** Customers with high day-minute usage and total charges are more likely to churn. Monitoring these customers and providing them with tailored plans or incentives can help in reducing churn.



Recommendations:

4. **Continuous Model Improvement:** Regularly update and retrain the model with new data to ensure its accuracy and effectiveness. Incorporate feedback from marketing and customer service teams to refine the model further.

5. **Customer Feedback:** Collect and analyze customer feedback to identify common pain points and address them promptly. This can help in improving customer satisfaction and reducing churn.

