



SyriaTel Company

CUSTOMER CHURN

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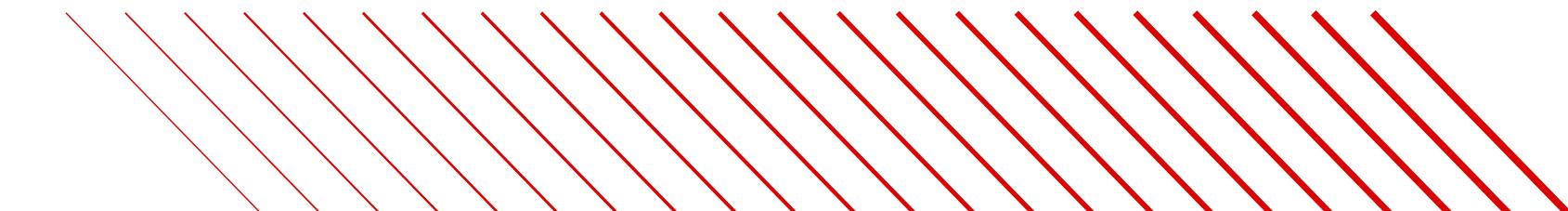


TABLE OF CONTENTS

The areas that will be tackled in this presentation:-

- Problem Statement
- Data & Stakeholders
- The process
- Data Understanding
- Evaluation



PROBLEM STATEMENT

- The area of focus is customer churn in Syria Tel company.
- The aim is to reduce financial impact of customer churn by implementing proactive retention strategies.
- The research questions are;
 - **Predictors**
What are the indicators of customer churn?
 - **Duration**
How does the calls duration affect Churn?
 - **Customer service**
Is there need to review SyriaTel's customer service?
 - **State**
Which state has the highest churn rate?
 - **Calls Charge**
Does the calls charge affect Churn?
 - **International calls.**
Do we need a review of the International calls service?

DATA & STAKEHOLDERS

- The individuals for whom the research was carried out is the telecom business.
- The data presented to us for analysis had the following characteristics:-

States

SyriaTel serves customers spread across 51 states.

Calls data

The data provided contains calls duration and charge for day, evening and night.

Churn

The state of the customer churn is also provided. Therefore of all calls we are told whether the customer is active or not.

THE PROCESS

- The researcher employed various techniques to analyse the data.
- The process has been outlined as follows:-



- 1 Data Exploration**
This involves taking time to understand the business , understand the data and finally prepare the data for analysis.
- 2 Data modelling**
This involves carrying out various analytical procedures to gain insights from the data.
- 3 Results Evaluation**
This involves outlining the insights analytics gained from the data.

CURRENT CHURN RATE

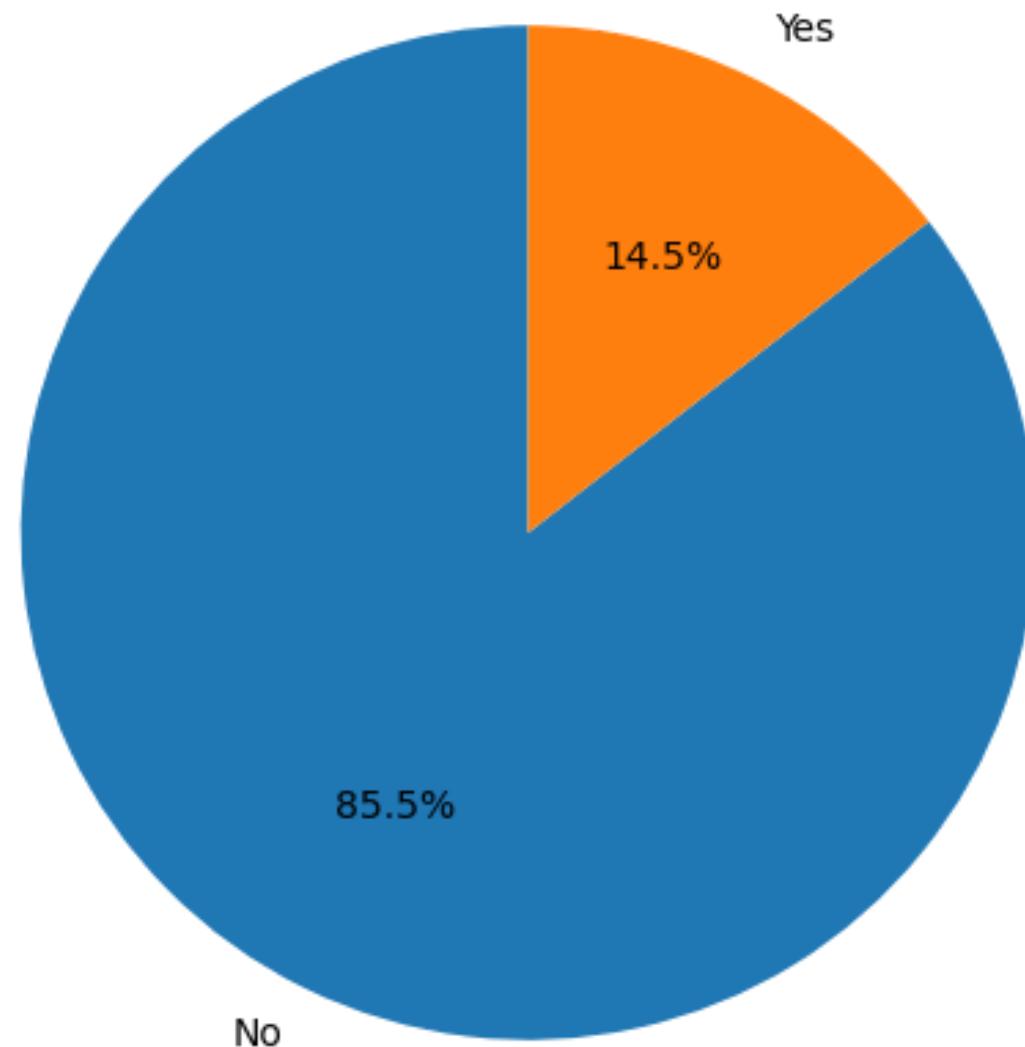
3,333

Total client sample used to carry out the analysis

14.5%

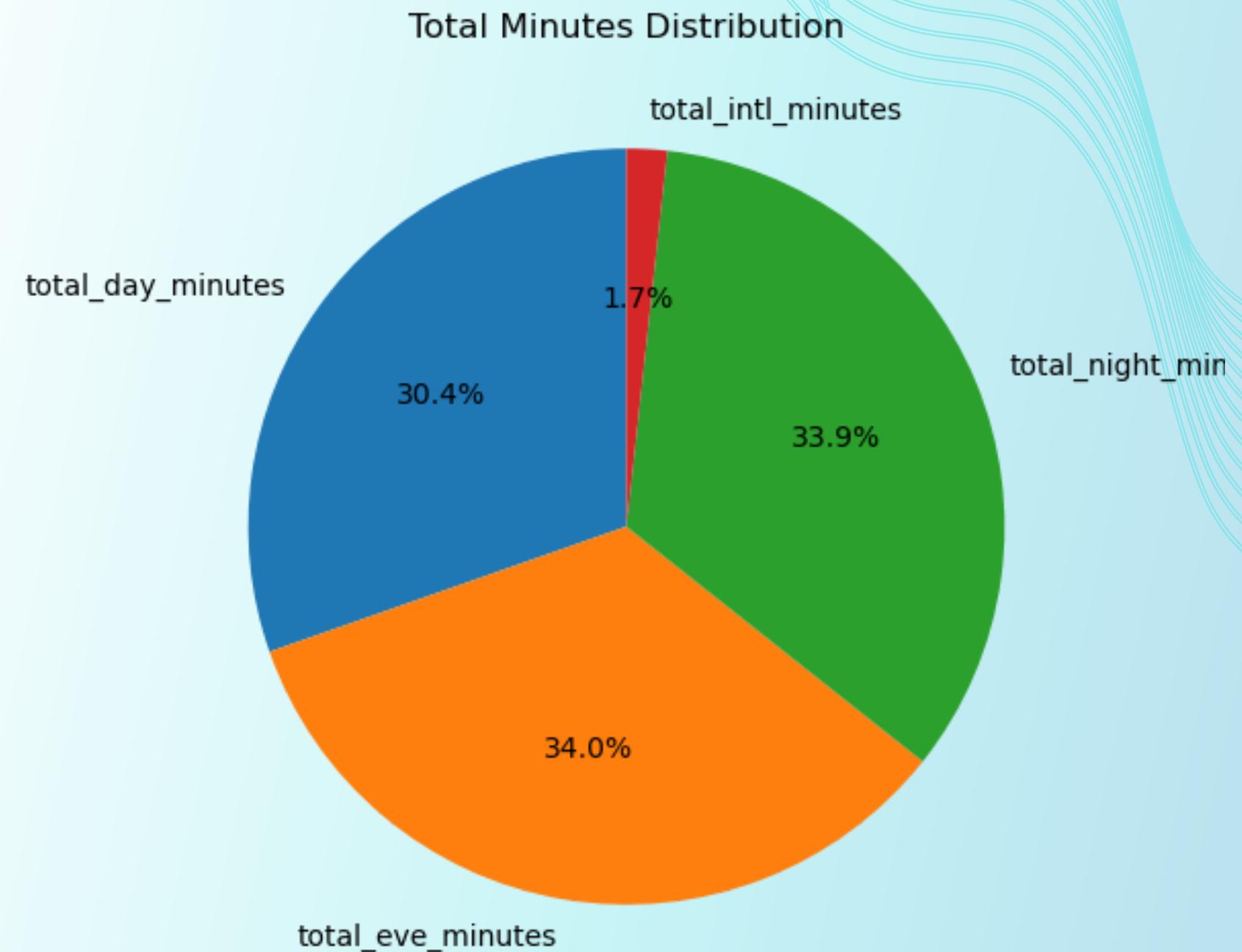
Churn rate percentage from the client sample.

Churn Distribution



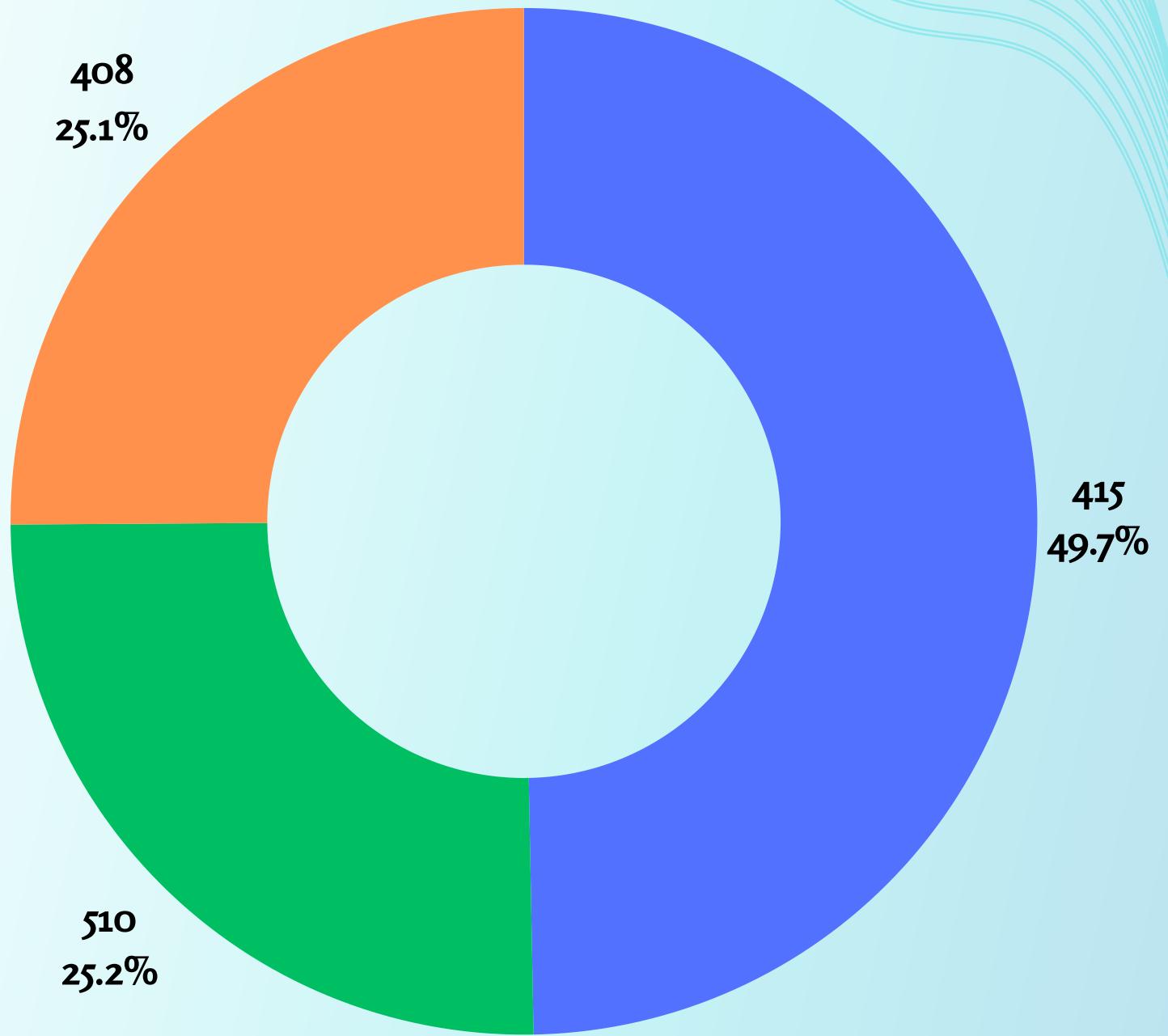
CALLS DISTRIBUTION

- The calls distribution data is evenly distributed between the day, night, and evening.
- The chart shows the potential for growth of the international business.

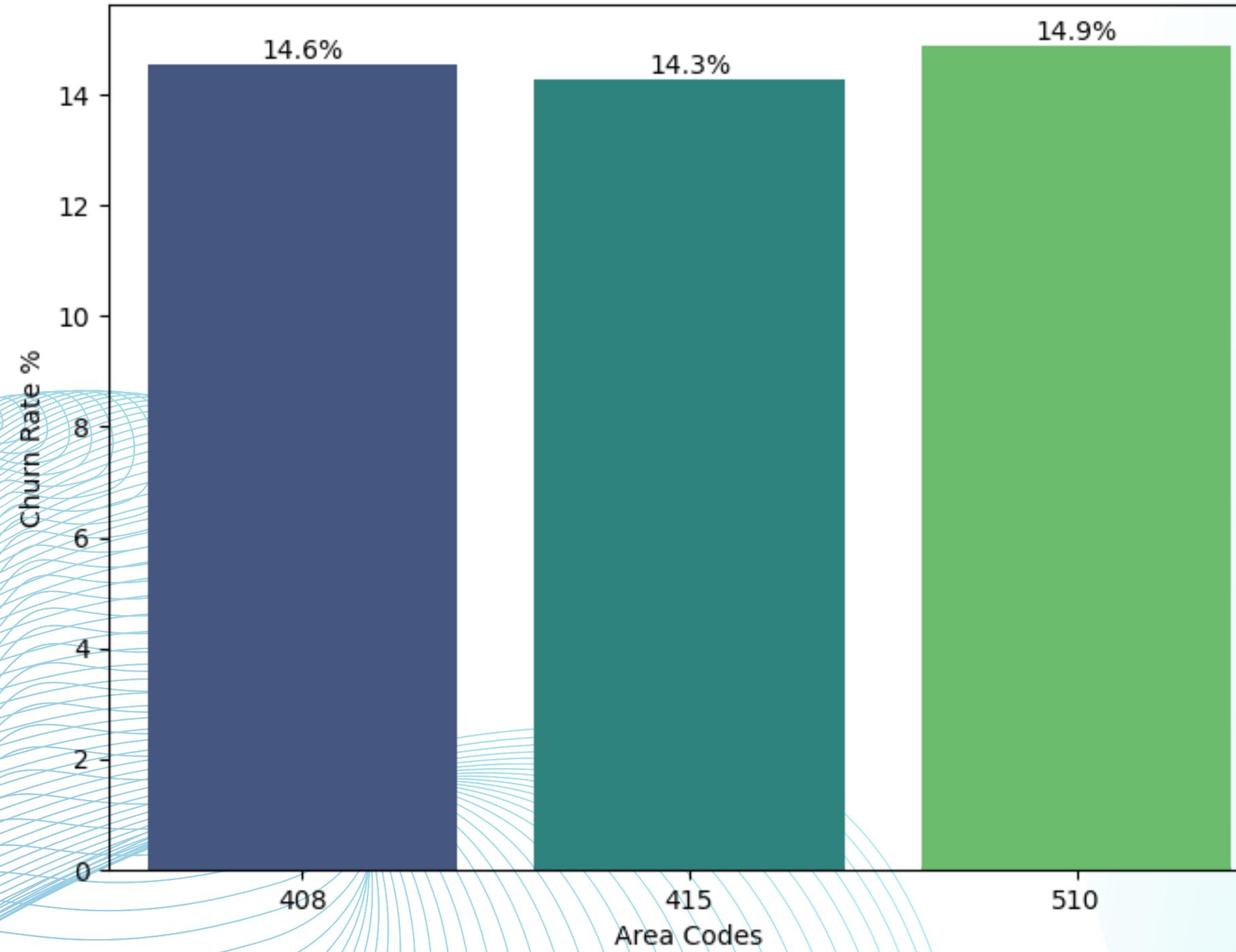


AREA CODE DISTRIBUTION

- The majority of customers are from the 415 area code with 49.7% originating from there.
- The remaining two area codes, 408 and 510 have almost similar distribution of 25.1% and 25.2% respectively.



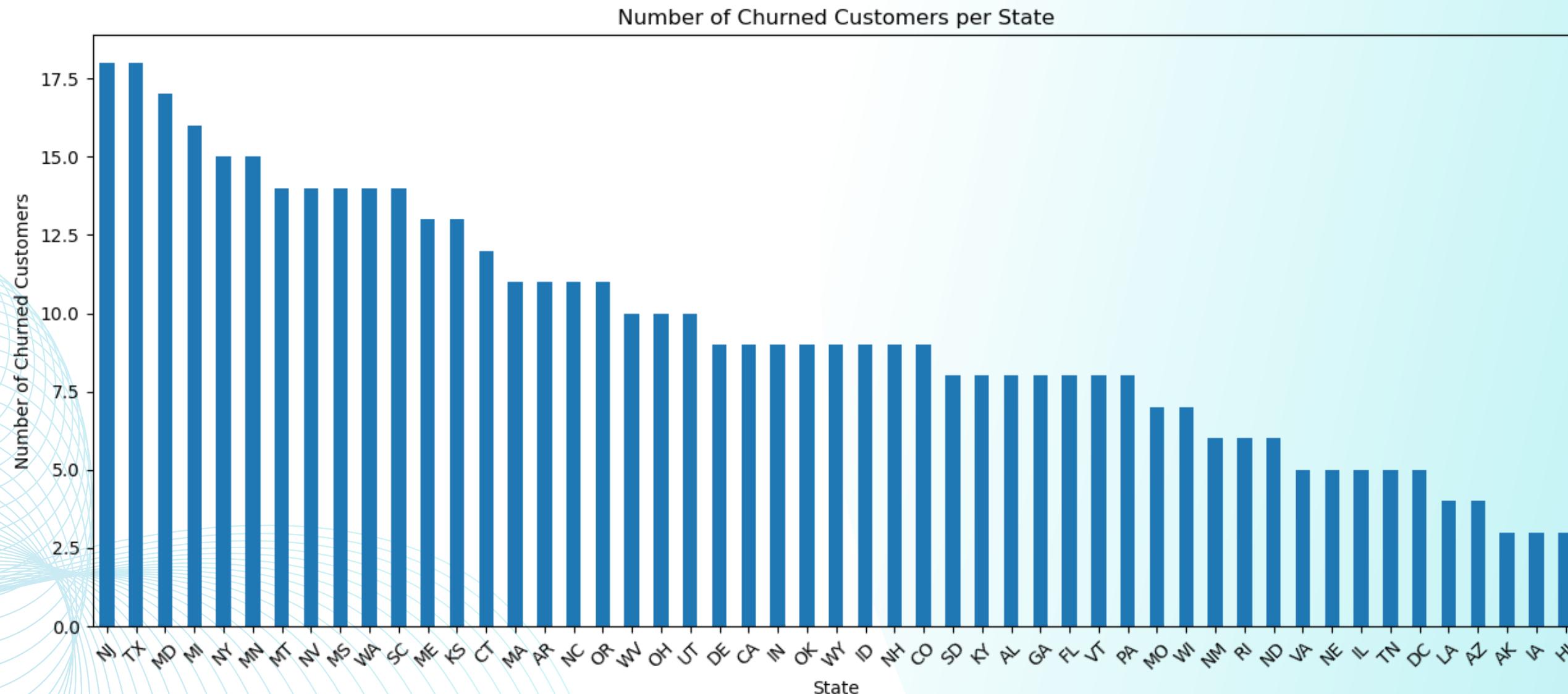
CHURN DISTRIBUTION BY AREA CODES



Area code 510 had the highest churn rate (14.9%).

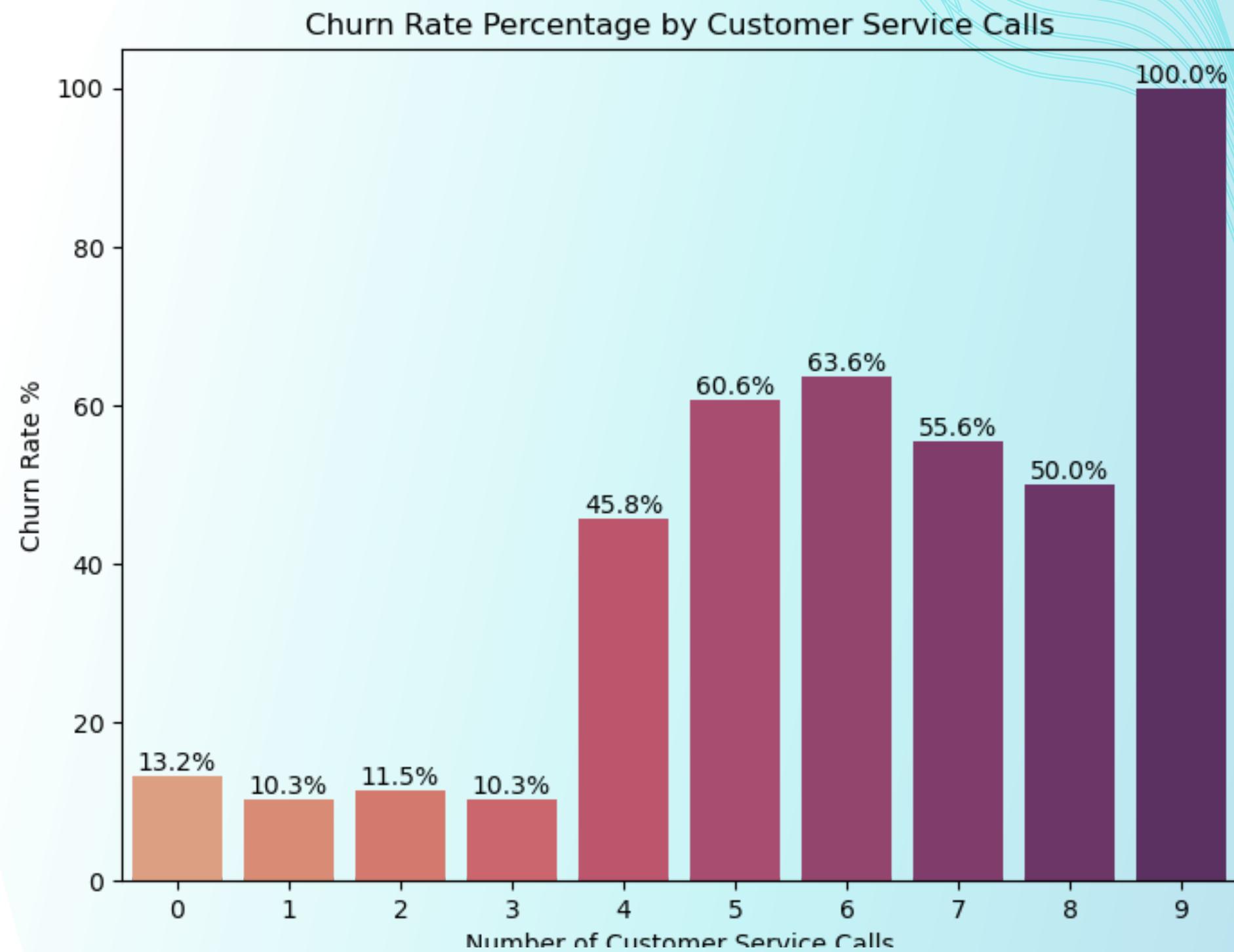
CHURN DISTRIBUTION BY STATE

- West Virginia had the highest customer retention rate at (90.6%) followed by Alabama at 90%.
- The graph below shows that the highest churn rate was in New Jersey (NJ) at 26.4% followed by Texas(TX) (25%) then Maryland(MD) (24.3%).



CUSTOMER SERVICE AGAINST CHURN

- The bar graph shows an increase in churn rate versus the number of customer service calls.
- An increase in customer service calls is an opportunity for the business to retain the client before they exit.



EVALUATION

- The analytics carried out revealed the following:-



The top predictors of customer churn are;

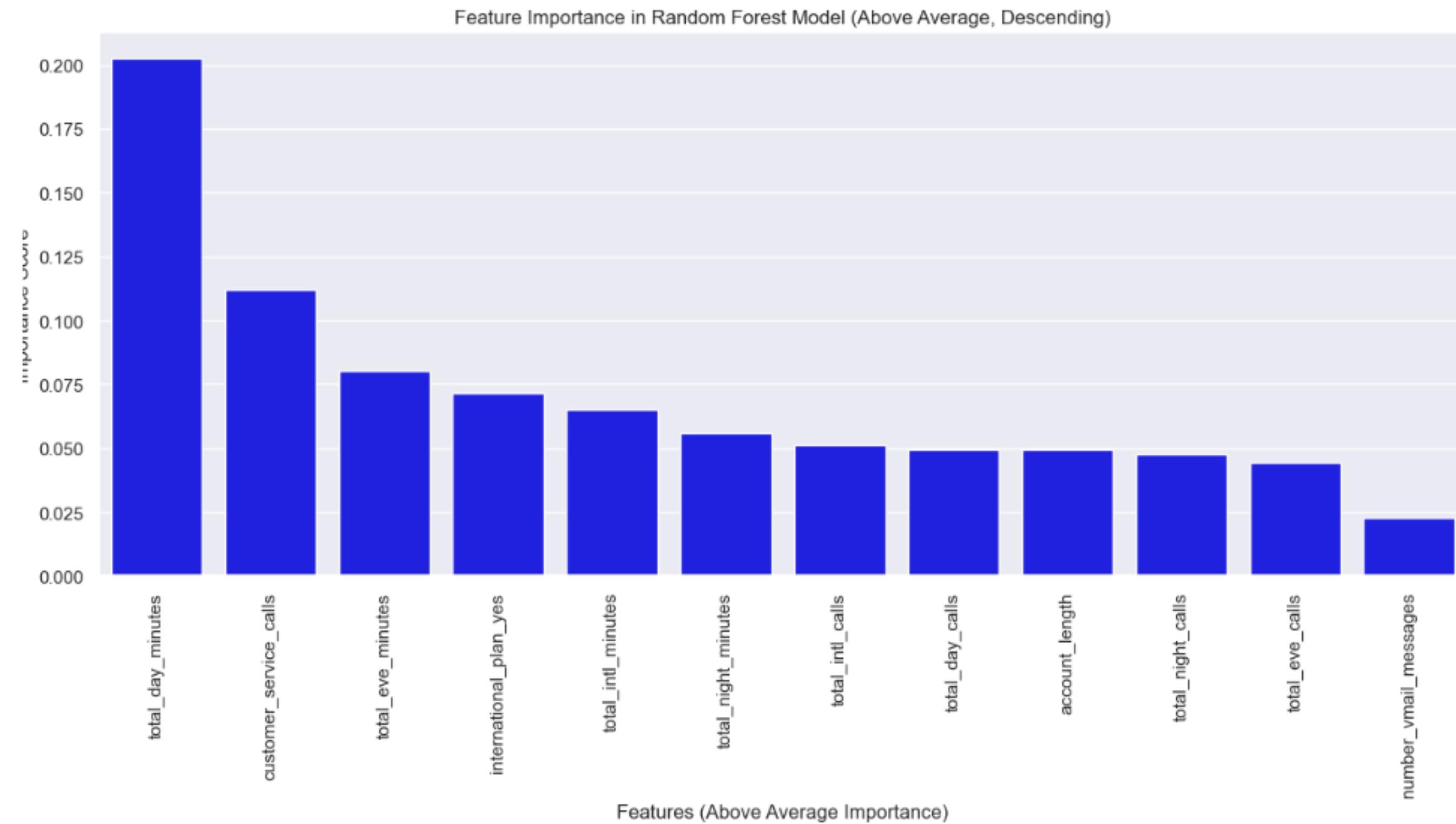
- Calls duration - day.
- Customer service calls.
- Calls duration - evening.



The model built is able to predict instances of churn or no churn by customers to an accuracy of 92%.

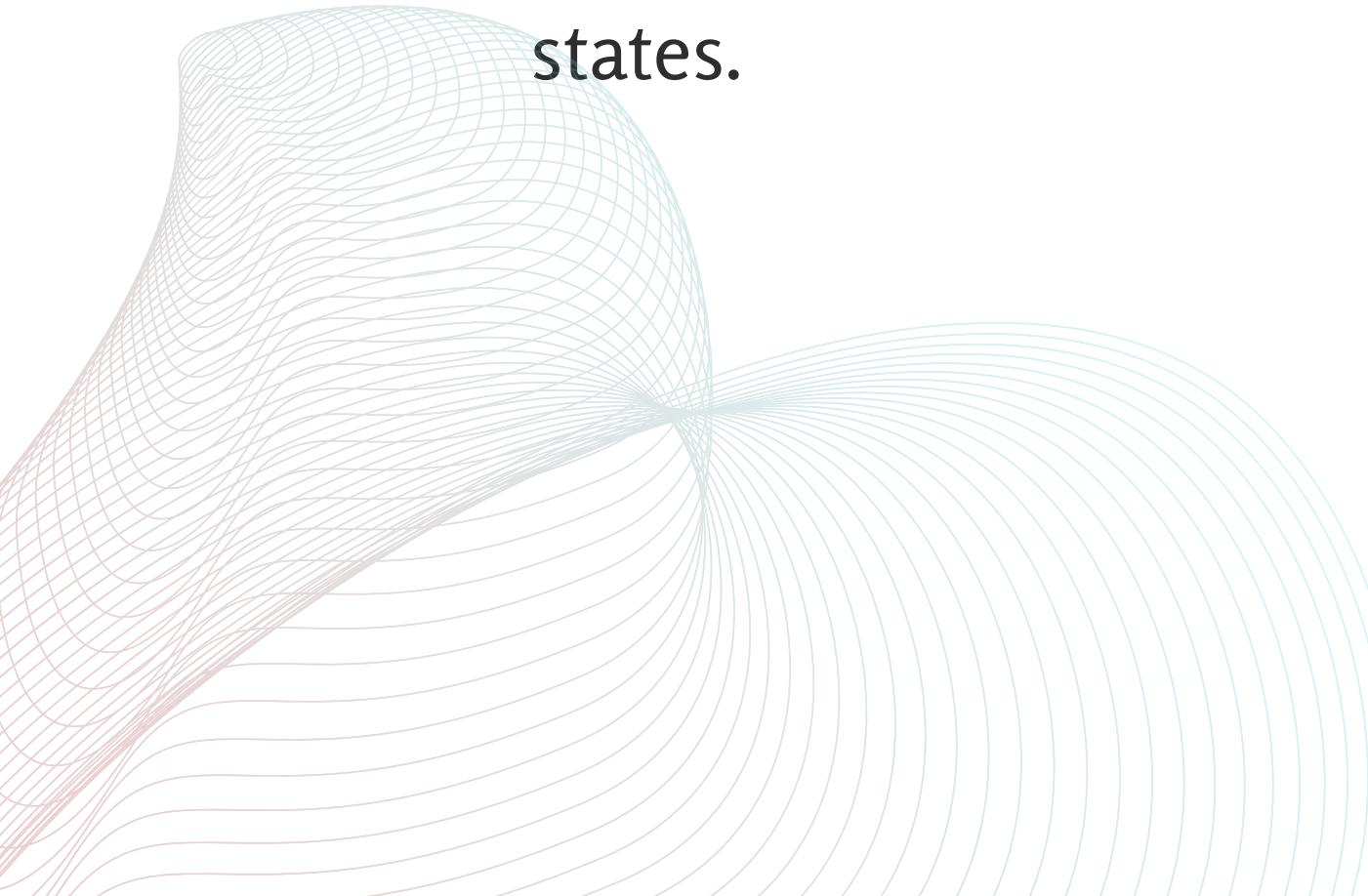
EVALUATION CONTD.

- What is the order of feature importances.
- What are the areas of key focus.



RECOMMENDATIONS

- Improve call quality during the day as this has proved to be the most important indicator of churn.
- Improve customer care services for better customer experience.
- Offer better rates or packages for customers with international plan.
- For the data we recommend inclusion of date for better analytics on trends.
- Observe the business practises in states with lowest churn and replicate struggling states.





Thank you

