

Churn Predictor

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Outline



Business
Understanding



Analysis



Modeling



Recommendations

Business Understanding



- A telco company that has a lot of its customers who don't remain for long thus the company incurs great losses. They need a model that will help them see patterns and predict customers who are about to stop using their services and thus mitigate it.

Problem Statement

- The Sales and Marketing department faces challenges such as:
- High churn of customers in the company.
- Inadequate data on consumer behaviour so as to realise customer retention.

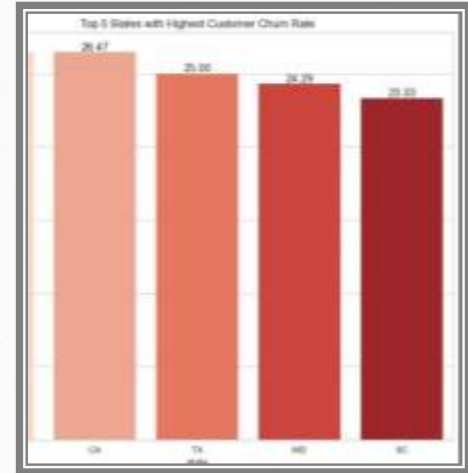
Main Objectives

- Reduce churn and increase profitability by retaining customers.
- Having data driven insights will enhance efficiency.
- Increase relevance in the market.

Analysis

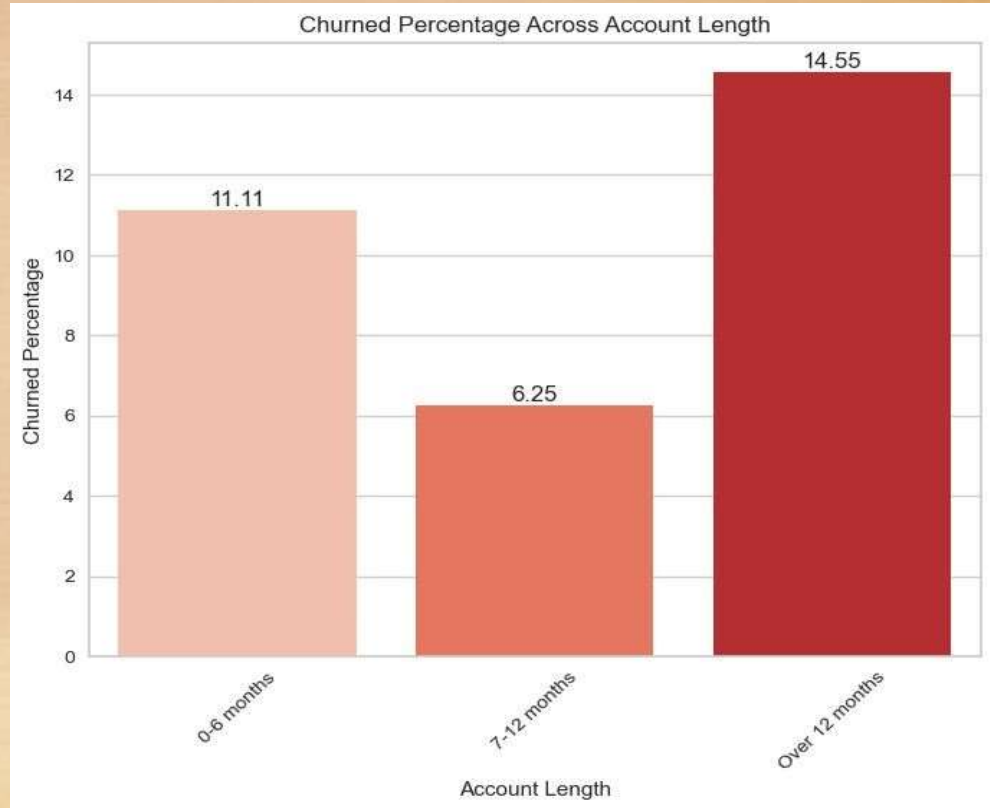
Findings : Top 5 States with Highest Customer Churn

- The following states have the highest customer churn in order:
 - 1. NJ: New Jersey
 - 2.CA: California 3.TX: Texas
 - 4.MD: Maryland
 - 5.SC: South Carolina



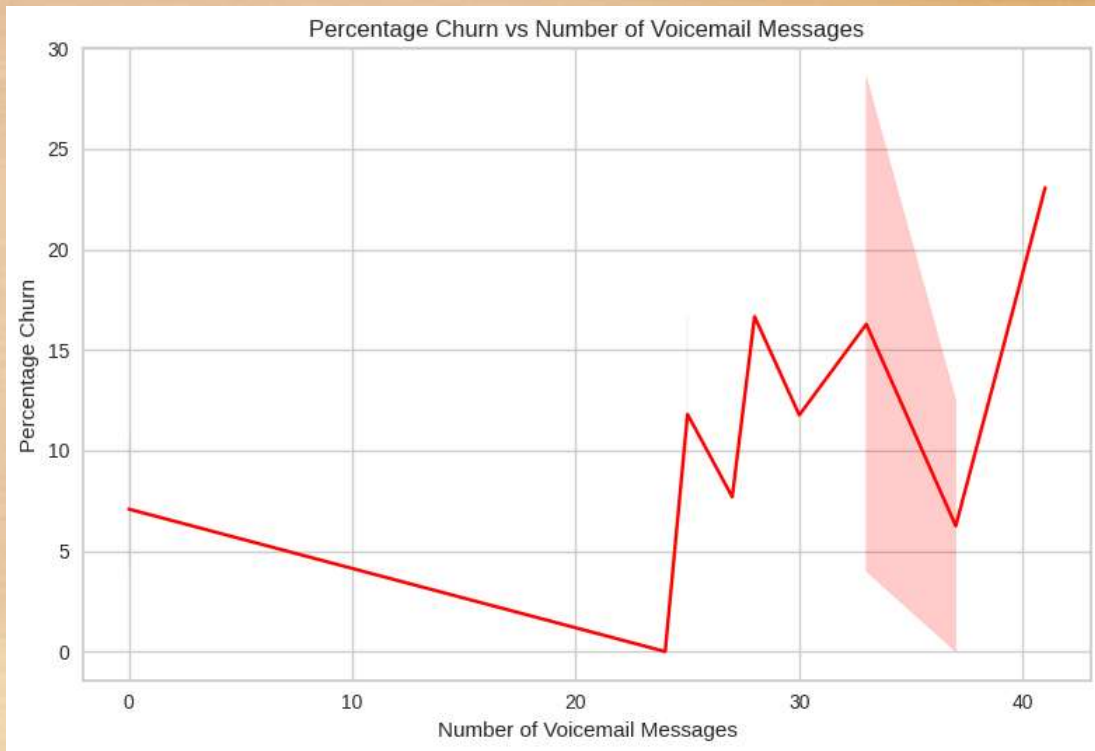
Findings: Account Length Churn

- There's a need to try and come up with ways to encourage new customers to keep using the company's services.
- Due to the high percentage of churning there needs to be measures put in place to ensure customer retention.



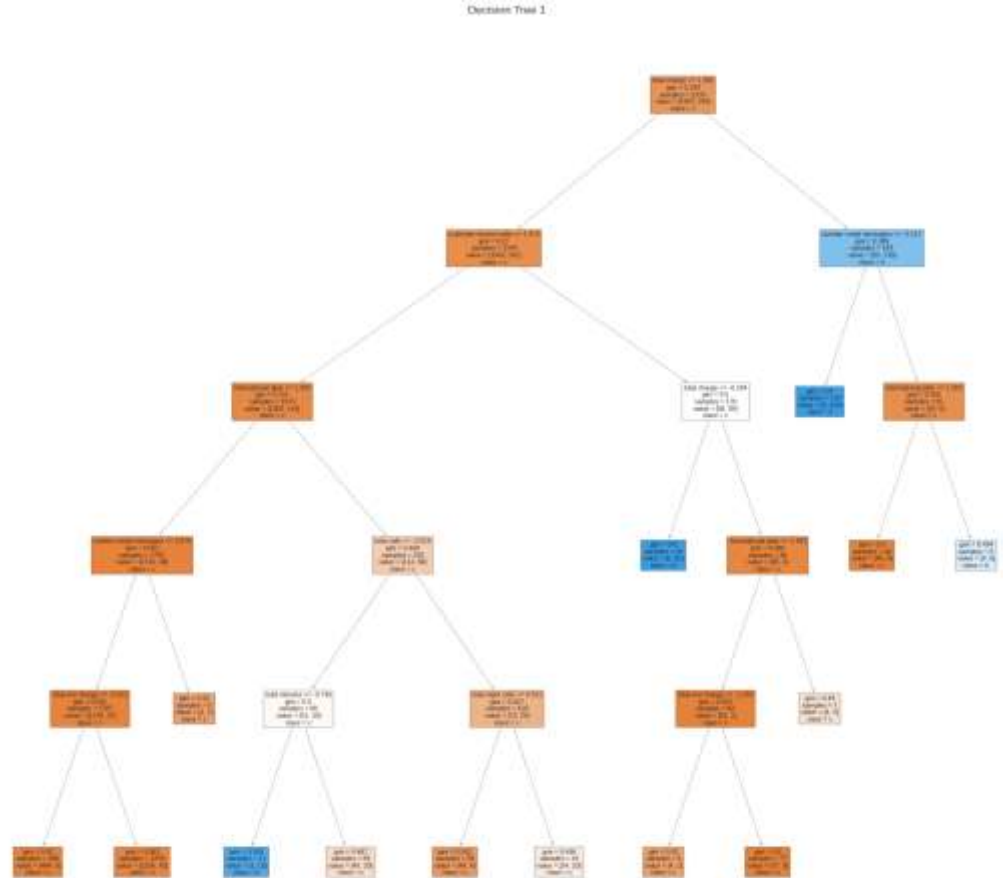
Findings : Distribution of Number of Voicemail Messages

The higher the number of voicemail messages shows an increase in customers churning; this could translate to maybe bad network coverage thus the voicemail messages thus deeming the telco service unreliable.



Modelling

The algorithms **Decision Trees** and **XGBClassifier** chosen met the following criterias necessary to create a reliable, and sensible model that will execute the task of predicting churn prone customers effectively and efficiently, the criteria were as follows:



Recommendations

1. Give more attention to customers subscribed to international and voice mail plan by giving promotions and discounts.

2. Implementing targeted customer retention programs so as to reduce churn rates. This can be designing international plan packages that cater to different economic classes.
3. Engaging with customers through feedback mechanisms, such as incentivized surveys, will assist in better pricing, better international plan experiences.

A top-down view of a wooden-framed blackboard resting on a rustic wooden surface. The blackboard has the words "Thank You" written in a white, typewriter-style font. To the bottom left is a portion of a vintage orange rotary telephone. To the top right is a green leaf and a portion of a vintage typewriter. On the far right edge, there is a vertical white line and a horizontal grey bar on an orange background.

Thank
You