Project Overview And Introduction

Telecom Company Customer Churn Prediction.

Business Problem And Understanding

- A telecommunications company is facing a significant challenge with customer churn. The company is losing valuable customers to competitors, which is negatively impacting revenue and market share. The business needs to identify customers who are likely to churn in the near future so that they can proactively implement targeted retention strategies. By predicting potential churners, the company aims to reduce customer attrition, increase customer lifetime value, and ultimately improve profitability.

Objectives And Approach

Objectives:

- Develop a predictive model to identify customers at high risk of churning.
- Understand the key factors contributing to customer churn.
- Provide actionable insights to the business for developing effective retention strategies.

Approach:

Data Collection and Exploration

Data Preprocessing

Feature Engineering

Model Development

Model Evaluation

Generate Insights

OUTCOMES

- 1. Predictive Model: Developed a Random Forest Classifier that can predict customer churn with high accuracy (AUC score of X.XX).

- 2.Churn Factors: Identified key factors contributing to churn, including [list top factors, e.g., high total day charges, low customer service call resolution, etc.].

- 3. Risk Profiles: Created customer risk profiles, allowing the business to segment customers based on their likelihood to churn.

- 4.Actionable Insights: Provided recommendations for targeted retention strategies based on the identified churn factors and customer segments.

BUSINESS IMPACT

- Enabled proactive retention efforts by identifying high-risk customers before they churn.

- Provided a data-driven approach to allocate retention resources more efficiently.

- Offered insights for improving services and customer experience based on identified churn factors.

- Potential for significant cost savings and revenue protection through reduced customer attrition.

RECOMMENDATIONS

1. Implement the model in the company's customer management system for real-time churn risk assessment.

2. Develop and test targeted retention campaigns based on the model's insights.

3. Continuously monitor and update the model with new data to maintain its predictive accuracy.

4. Expand the analysis to include additional data sources (e.g., customer feedback, social media sentiment) for more comprehensive churn prediction.