

# Predicting Customer Churn in Telecommunication Industry using Machine Learning

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Abstract/Objectives:

This project aims to develop a machine learning model to predict customer churn in the telecommunication industry. By analyzing historical customer data, the model will identify customers at high risk of churning, enabling the company to implement proactive retention strategies.

Novelty and Expected Outcomes:

The novelty of this project lies in applying machine learning techniques to predict customer churn in the telecommunication sector. By leveraging customer demographics, usage patterns, contract details, and service interactions, the model will provide actionable insights to enhance retention efforts.

Expected outcomes include:

Selection: Exploring and comparing various algorithms to identify the best-performing model. Model Training and Validation: Training and validating the selected model for accuracy and generalizability. Churn Prediction: Using the trained model to predict customer churn and offer preventive measures. Visualization: Presenting insights and factors contributing to churn through visualizations.



In conclusion, this practical machine learning solution aims to improve customer retention in the telecommunication industry, leading to enhanced customer satisfaction and overall business performance.