Predictive Analytics – Telecom domain Altice

Predicting customer churn

XGBoost, CatBoost

Decision Tree, Random Forest, Logistic Regression

Data wrangling, cleaning

Problem Statement: Identify customers likely to churn in the next 6 months to proactively retain them.

Data: Customer demographics, account info, billing records, usage patterns, service types, engagement metrics etc.

Modeling Approach:

Exploratory data analysis and feature engineering to derive relevant predictive attributes from raw data.

Applying algorithms like XGBoost, random forest, logistic regression for supervised binary classification.

Tuning models and hyperparameters for optimal predictive performance on churn metric.

Comparing models to select the one with best ROC-AUC.

Interpreting model insights to understand drivers of churn.

Implementation:

Operationalize top model and integrate predictions into customer management system.

Target high propensity to churn customers with retention offers - upgrades, discounts etc.

Track impact on churn rate over time and refine model.

Business Impact:

Reduced subscriber attrition by predicting customers likely to churn and taking proactive actions.

Increased customer lifetime value.