

Telecom Churn Prediction using Machine Learning

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Abstract: *Telecom customer competition forecasting is an important task for telecom companies to retain customers. Churn is when a customer cancels their subscription or service from a communications company. Predicting customer churn helps telemarketing companies take steps to retain customers by identifying potential churn and providing effective retention strategies for them. This summary explains the context of the communication problem using machine learning. Contacts for problem prediction may include analysis of a customer's historical data, including demographic data, usage patterns, payment details, and service history, to predict whether a customer will leave in the future. Machine learning algorithms are used to learn patterns and relationships from this data and make predictions based on new, unseen data. Telecommunications customer churn prediction using machine learning involves processing customer history data, architectural design, selecting appropriate machine learning algorithms, effectively evaluating performance models using multiple metrics, and using best practices in a production environment. By using these methods, communications companies can reduce customer turnover and increase customer satisfaction.*

Keywords: Machine Learning, Random Forest, Decision Tree, XGBoost, Prediction, Churn