

# Intelligent Customer Retention: Using Machine Learning For Enhanced Prediction of Telecom Customer Churn.

## Define Problem/Problem Understanding

### Business Requirements

Customer Retention is one of the primary growth pillars for products with a subscription. The business requirements for a machine learning model to predict whether the customer will churn or not on customer information, to minimise the number of false positives (customer that predicted as loyal but churn) and false negatives (customer predicted to be churn which could have stayed loyal). Provide an explanation for the model's decision, for better decision making in order to gain more profitability. The purpose of business requirements is to define a project's business need, as well as the criteria of its Success. Business requirements describe why a project is needed, whom it will benefit, when and where it will take place, and what standards will be used to evaluate it. Business requirements generally do not define how a project is to be implemented; the requirements of the business need do not encompass a project's implementation details. Investing in customer retention is mandatory for every business! Unfortunately, companies are mostly interested in attracting new customers rather than building a strong connection with already existing ones.

Establishing a well-recognized and profitable brand in a competitive field sometimes looks impossible. The Businesses need to use all the resources they have, to reach their goal. Investing in the quality of the products and spending more money on digital marketing are some of the common practices. Yet, reaching new customers will not bring additional income if your relationship with the existing ones is not at the highest level. The new buyers will be interested only in one-time purchases just like the existing ones, and your business will continue to stagnate.

