Business problem

Customer churn is a fundamental problem for companies and it is defined as the loss of customers because they move out to competitors. **Being able to predict customer churning behaviour in advance, gives an institution a high valuable insight in order to retain and increase their customer base**

Churn Prediction Model is **a predictive model that calculates, on an individual customer basis, the likelihood (or susceptibility) that a customer will stop doing business with the company**. It gives you an indication, for each customer at any given time, of how high the risk is that you will lose them in the future.

The problem is binary classification problem to understand whether the customer is going to churn or not.

Dataset

The dataset is labelled and is provided for assignment, containing 7043 rows and 21 columns consisting of customer data containing ID, demographics, type of connection, and payment for multiple users.

Approach

- Load the data
- Clean the data
- Explore and describe the data
- Feature selection
- Try different models and do fine tuning
- Analyse the results

Results:

Model	Accuracy
logistic regression	80
Random Forest	80
Support Vector Machine	82
ADA Boost	81
XG Boost	80