

## Part A

- **DOMAIN:** Telecom
- **CONTEXT:** A telecom company wants to use their historical customer data to predict behaviour to retain customers. You can analyse all relevant customer data and develop focused customer retention programs.
- **DATA DESCRIPTION:** Each row represents a customer, each column contains customer's attributes described on the column Metadata. The data set includes information about:
  - Customers who left within the last month – the column is called Churn
  - Services that each customer has signed up for – phone, multiple lines, internet, online security, online backup, device protection, tech support, and streaming TV and movies
  - Customer account information – how long they've been a customer, contract, payment method, paperless billing, monthly charges, and total charges
  - Demographic info about customers – gender, age range, and if they have partners and Dependents
- **PROJECT OBJECTIVE:** To Build a model that will help to identify the potential customers who have a higher probability to churn. This helps the company to understand the pinpoints and patterns of customer churn and will increase the focus on strategizing customer retention.

## Part B

- **DOMAIN:** IT
- **CONTEXT:** The purpose is to build a machine learning workflow that will work autonomously irrespective of Data and users can save efforts involved in building workflows for each dataset
- **PROJECT OBJECTIVE:** Build a machine learning workflow that will run autonomously with the csv file and return best performing model.
  1. Build a simple ML workflow which will accept a single '.csv' file as input and return

a trained base model that can be used for predictions. You can use 1 Dataset from Part 1 (single/merged).

2. Create separate functions for various purposes.
3. Various base models should be trained to select the best performing model.
4. Pickle file should be saved for the best performing model.