Project Proposal

# Problem statement formation

What measures can be implemented by Teleco to reduce customer churn by the end of next quarter.

# Context

Customer retention is an important factor contributing to the revenue of any telecommunications company. Telco is a fictional telco company that provided home phone and Internet services to customers in California in Q3. The company is looking to identify any interesting patterns among the customers left the company in Q3 so that they can implement strategies to retain more customers in the next quarter.

## Criteria for success

Number of customers leaving the company in Q4 is lower than that of Q3.

## Scope of solution space

## Constraints

## Stakeholders

* Top level executives of the company,
* Lead of Data Science department

# Data sources:

Teleco customer churn sample data downloaded from IBM Accelerator catalog.

### Dataset Description:

The churn column indicates whether the customer left within the last month. Other columns include gender, dependents, monthly charges, and many with information about the types of services each customer has.

### Reference link:

<https://community.ibm.com/accelerators/catalog/content/Telco-customer-churn>

# Approach:

Analyse the data to look for any interesting trends among those customers that left the company in the last month.

### Steps:

1. Download the data
2. Perform necessary data cleaning
3. Visualization of various attributes of data, look for outliers, missing values, typos, data type mismatches etc.
4. Create ML model for predicting customer churn label
5. Identify the most important characteristics that affect the customer churn label, the type of correlation of those characteristics with the churn label or churn score column.

# Deliverables

* Reports of each stages of project
* Slide decks
* ML model that predicts customer churn label.