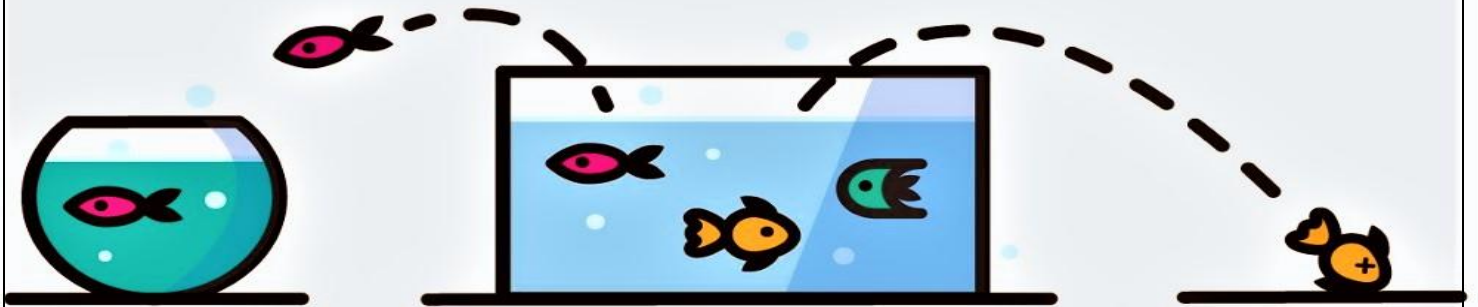CUSTOMER CHURN

What is Churn rate?

Churn rate is the percentage of customers who ceased their relationship with a company

Why Churn analysis?

Acquiring a new customer is anywhere from five to 25 times more expensive than retaining an existing one. So, the goal of this project is to analyse all relevant customer data and develop focused customer retention programs for the Telecom company

Data Overview

It is a data with the following information for 3,333 customers:

- **Churn** = 1 if customer cancelled service, 0 if not
- **Account Weeks** = number of weeks the customer has had active account
- **Contract Renewal** = 1 if customer recently renewed contract, 0 if not
- **Data Plan** = 1 if customer has data plan, 0 if not

- **Data Usage** = gigabytes of monthly data usage

- **Customer Service Calls** = number of calls into customer service

- **Day Mins** = average daytime minutes per month

- **Day Calls** = average number of daytime calls

- **Monthly Charge** = average monthly bill

- **Overage Fee** = largest overage fee in last 12 months

- **Roam Mins** = average number of roaming minutes

Approach

- Detailed Exploratory Data Analysis report of the dataset along with the missing value treatment
- Multi-collinearity check and summarization of problem statement for business stakeholders
- Logistic Regression Model: creation and interpretation of the results
- Comparing the model performances using confusion matrix
- Actionable Insights for the business stakeholders

Results

Who churned and why?

- Churned customers have used very minimal data

- Higher the Customer Service calls and Daytime calls, higher is the Churn rate. This is needs to be looked in detail.

- Customers who have renewed their contract do not seem to churn

- As the Defendant variable is Binary in nature, we can go ahead and try out   Logistic Regression of model building

Business Recommendations

- Customer Service Support Calls to be addressed &improved. Customer centric measures to be taken to provide FCR(First Call Resolution)

- Improved Training & Transaction calls monitoring to be improved to understand why customer are calling repeatedly

- Self-help Options can be introduced for customer to limit wait time in service operation calls & addressed through IVR or Customer Portal to reduce Churn

- Overage Fees to be rechecked by Business teams along with market trend & initiate the survey along with Customers of expectations and revision

- Proactive Customer Offers to be included to customers with the tenurity and usage pattern of the services
- Non-Data plans customers should be clustered and attractive data plans to be introduced with combo-plans for them to start off

- Customer using reduced data plans again to be targeted by rationalising the Data and call plans

- To Summarize attracting calling plans & improved calling(reception) Improved Customer centric measures like Quick resolution, Improved CSAT would make the churn rate under control