**CHURN PREDICTION DATASET**

**## Objective:**

Primary Goal: Develop a predictive model to accurately identify customers who are at risk of churning.

Secondary Goals:

Analyze historical customer data to identify key factors influencing churn.

Provide actionable insights to help the business reduce churn rates.

Suggest personalized retention strategies for high-risk customers.

**# Key Questions to Address:**

**# Who is likely to churn?**

Customers with shorter tenure are more likely to Churn than those with longer tenure.

Payment method – Electronic check payment may indicate higher Churn

Monthly Charges- Higher charges in the internet service may lead customers to migrate to competitors.

**# What are the most significant factors contributing to churn?**

The most important factor contributing to the Customer churn is the type of contract the customer engagement, the month-to-month contract are more likely to churn than annual contracts.

Customer experience is another factor that can have great impact on the customers, service issues with internet such as low internet speed, network problem and reduced service will increase the likelihood of high Churn rates.

High Pricing- High pricing of a contract will lead to a high Churn rates as customers will migrate to other service providing internet service at a good rate.

Competition- Customers tend to move to companies with better offer rate and good internet service, this will lead to a high Churn rate.

# How can the company proactively engage at-risk customers to reduce churn?

Company can pro-actively engage at-risk customer to reduce churn by providing rewards, discounts or free trials for a period of time before customer engages the service.

Company can encourage customer for a down grade instead on complete cancellation that will increase the rate of churn. For high valued customers, measures can be placed with the account managers to closely manage such accounts.

Conduct surveys to measure customer feedback, this will give knowledge of the pain point of the customer.

Regular emails and text messages to check with the performance and engagement of customers on social media

**# What customer segments are most vulnerable to churn?**

The customer segments most at risk of churn include new users, low-engagement customers, single users, and those experiencing billing issues. By proactively identifying these groups and implementing tailored retention strategies, businesses can minimize churn and enhance long-term customer loyalty.

**## Dataset Requirements:**

Customer Demographics: Age, gender, income level, etc.

Behavioral Data: Purchase history, usage patterns, interaction frequency.

Subscription Details: Duration, subscription type, renewal status.

Customer Support Interaction: Number of complaints, resolution time.

Churn Label: Indicates whether a customer has churned or not (for supervised learning).

**## Expected Outcomes:**

A machine learning model that predicts churn with high accuracy.

Identification of key churn drivers through exploratory data analysis.

Strategic recommendations for improving customer retention.