**Data visualization using power BI final project**

**Overview**

“churn” refers to the rate at which customers discontinue or cancel their services with the company during a specific period. It represents the percentage of customers who have stopped using the company’s services, either by switching to a competitor or completely ending their subscription, High churn rates can be indicative of customer dissatisfaction, poor service quality, pricing issues, or increased competition. Understanding churn and the factors influencing it is essential for companies to devise strategies to improve customer retention, enhance service offerings, and maintain a strong customer base.

**Meta data:**

**Customer ID**

**Gender:** Whether the customer is a male or a female

**Senior citizen:** Whether the customer is a senior citizen or not (1, 0)

**Partner**: Whether the customer has a partner or not (Yes, No)

**Dependents:** Whether the customer has dependents or not (Yes, No)

**Start data:** the date when the customer start to use the service

**Tenure:** Number of months the customer has stayed with the company

**Phone Service:** Whether the customer has a phone service or not (Yes, No)

**Multiple Lines:** Whether the customer has multiple lines or not (Yes, No, No phone service)

**Internet Service:** Customer’s internet service provider (DSL, Fiber optic, No)

**Online Security:** Whether the customer has online security or not (Yes, No, No internet service)

**Contract:** type of contract

**PaymentMethod:** type of payment method for each user

**Monthly Charges:** is a single month’s cost

**Total Charges:** reflects the total billing amount for the entire duration of the subscription

**Churn**: if the customer churned or not

**What are you assigned to do?**

* Perform data cleaning and transformations tasks.
* Data modelling if needed.
* Start building your dashboard and answer these questions.

**Questions to answer:**

* What is the overall churn rate?
* Which contract type (e.g., month-to-month, one year) has the highest churn rate?
* What is the average tenure of churned customers versus retained customers?
* What is the average of tenure across customers with different contract types?
* Do customers with certain Service types churn more frequently?
* What is the average tenure for customers by gender and status?
* Is there a noticeable difference in churn between customers with dependents versus those without?
* Are there any trends for Churned and active customers over time?
* What are the average MonthlyCharges and TotalCharges for churned vs. retained customers?
* Do certain PaymentMethod types (e.g., Credit Card, Electronic Check) have higher churn rates?
* Do customers with multiple service subscriptions churn less than those with fewer subscriptions?
* What are the key predictors of churn in the dataset?

**Deliverables:**

* Represent your findings using .pbix file.
* A word document for the process steps and the key findings.
* Also consider providing recommendations to reduce churn rate and how we can get more retained customers.