

Case Study: Analyzing Customer Churn for a Telecommunications Company

Scenario

A **telecommunications company** is experiencing customer churn, meaning customers are canceling their subscriptions. The management team wants to understand why customers are leaving and how to **reduce churn** using data-driven insights.

Your team will work as **data analysts** to explore and analyze customer behavior, identify patterns leading to churn, and suggest strategies to retain customers.

Dataset Description

The dataset consists of customer records with details such as demographics, service usage, and payment history. The key columns include:

1. **CustomerID** – Unique customer identifier
2. **Gender** – Male/Female
3. **SeniorCitizen** – Whether the customer is a senior citizen (0: No, 1: Yes)
4. **Tenure** – Number of months the customer has stayed with the company
5. **Contract Type** – Monthly, One-Year, Two-Year
6. **Payment Method** – Credit card, Electronic check, Mailed check, Bank transfer
7. **MonthlyCharges** – Customer's monthly bill
8. **TotalCharges** – Total amount paid by the customer
9. **Churn** – Whether the customer left (Yes/No)