Information about the data

Link

https://www.kaggle.com/blastchar/telco-customer-churn

Context

"Predict behavior to retain customers. You can analyze all relevant customer data and develop focused customer retention programs." [IBM Sample Data Sets]

Content

Each row represents a customer, each column contains customer’s attributes described on the column Metadata.

The data set includes information about:

Customers who left within the last month – the column is called Churn

Services that each customer has signed up for – phone, multiple lines, internet, online security, online backup, device protection, tech support, and streaming TV and movies

Customer account information – how long they’ve been a customer, contract, payment method, paperless billing, monthly charges, and total charges

Demographic info about customers – gender, age range, and if they have partners and dependents

Dataset Details

customerID - Customer ID

gender - Whether the customer is a male or a female

SeniorCitizen - 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)

Tenure - Number of months the customer has stayed with the company

PhoneService - Whether the customer has a phone service or not (Yes, No)

MultipleLines - Whether the customer has multiple lines or not (Yes, No, No phone service)

InternetService - Customer’s internet service provider (DSL, Fiber optic, No)

OnlineSecurity - Whether the customer has online security or not (Yes, No, No internet service)

OnlineBackup - Whether the customer has online backup or not (Yes, No, No internet service)

DeviceProtection - Whether the customer has device protection or not (Yes, No, No internet service)

TechSupport - Whether the customer has device protection or not (Yes, No, No internet service)

StreamingTV - Whether the customer has streaming TV or not (Yes, No, No internet service)

StreamingMovies - Whether the customer has streaming movies or not (Yes, No, No internet service)

Contract - The contract term of the customer (Month-to-month, One year, Two year)

PaperlessBilling - Whether the customer has paperless billing or not (Yes, No)

PaymentMethod - The customer’s payment method (Electronic check, Mailed check, Bank transfer (automatic), Credit card (automatic))

MonthlyCharges - The amount charged to the customer monthly

TotalCharges - The total amount charged to the customer

Churn - Whether the customer churned or not (Yes or No)

**1. Loading and Cleaning Data**

* Total of 7043 rows and 21 columns
* Each row represents a distinct user, so we have a total of 7043 users
* Some demographic measures: