

Case Study -2

About Dataset

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:

1. Customers who left within the last month – the column is called Churn
2. 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
3. Customer account information – how long they've been a customer, contract, payment method, paperless billing, monthly charges, and total charges
4. Demographic info about customers – gender, age range, and if they have partners and dependents

Dataset link :

<https://www.kaggle.com/datasets/blastchar/telco-customer-churn/download?datasetVersionNumber=1>

Questions:-

1. How many customers are present in the dataset?
2. What is the distribution of gender among the customers?
3. How does age vary among the customers?
4. What are the different locations from which customers belong?
5. How long have customers been using the service on average?
6. What is the distribution of subscription types?
7. What is the average monthly charge incurred by customers?
8. What is the range of total charges accumulated by customers?
9. How many customers have churned?
10. What is the churn rate in the dataset?
11. How does churn vary across different genders?

12. Are there any differences in churn based on the customer's age?
13. Are customers from specific locations more likely to churn?
14. Does the subscription type influence customer churn?
15. Is there any correlation between monthly charges and total charges?