

Column Name	Data Type	Description & Business Relevance
customerID	String	A unique alphanumeric ID for each customer.
gender	Categorical	The customer's biological sex (Male/Female).
SeniorCitizen	Binary (0/1)	Indicates if the customer is 65 or older (1 = Yes, 0 = No). (Important for segmentation: Do retirees behave differently than younger demographics?)
Partner	Categorical	Whether the customer has a partner/spouse (Yes/No). (Customers with partners often have "stickier" households and may churn less.)
Dependents	Categorical	Whether the customer has dependents/children (Yes/No). (Families often prioritize stability and may be less likely to switch providers.)
tenure	Integer	The number of months the customer has stayed with the company. (A critical metric. We expect lower churn as tenure increases.)
PhoneService	Categorical	Whether the customer has a phone service (Yes/No).
MultipleLines	Categorical	Whether the customer has multiple lines (Yes/No/No phone service). (Indicates a higher level of service adoption.)
InternetService	Categorical	Customer's internet service provider type (DSL, Fiber optic, No). (High Value: Fiber optic is usually faster/more expensive, while DSL is older tech.)
OnlineSecurity	Categorical	Whether the customer has online security add-on (Yes/No/No internet service).
OnlineBackup	Categorical	Whether the customer has online backup add-on (Yes/No/No internet service).
DeviceProtection	Categorical	Whether the customer has device protection add-on (Yes/No/No internet service).
TechSupport	Categorical	Whether the customer has tech support add-on (Yes/No/No internet service).
StreamingTV	Categorical	Whether the customer has streaming TV (Yes/No/No internet service).
StreamingMovies	Categorical	Whether the customer has streaming movies (Yes/No/No internet service).
Contract	Categorical	The contract term of the customer (Month-to-month, One year, Two year).
PaperlessBilling	Categorical	Whether the customer has paperless billing (Yes/No).
PaymentMethod	Categorical	The customer's payment method (Electronic check, Mailed check, Bank transfer (automatic), Credit card (automatic)).
MonthlyCharges	Float	The amount charged to the customer monthly.
TotalCharges	Float	The total amount charged to the customer over their entire tenure. (Calculated roughly as tenure * MonthlyCharges. Needs cleaning as it often contains blank strings.)
Churn	Categorical	The Target Variable. Whether the customer left the company within the last month (Yes/No).