Telecom Churn Analysis

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Summary:

The purpose of this visualization is to perform an exploratory analysis about the telecom churn dataset, to showcase KPI metrics like Churn Rate, Average Billing Rates, Average Customer Service calls by Region, the number of customers per Region and other metrics as well.

This telecom churn analysis has been performed on a dataset with the following columns with the context of each column and it’s datatype briefly described below.

Each row represents a customer; each column contains customer’s attributes. The datasets have the following attributes or features:

* State: string

The 2 worded abbreviation of the state that the account is located in. (If the state in New York, then the abbreviation would be NY)

* Account length: integer

The number of weeks since the account has been created and part of this service. (If the value if 117, then the account has been a part of this service for 117 days)

* Area code: integer

The 3 digit area code of the account, that is prefixed before the actual phone number.

* International plan: string

Yes/No string value to indicate if the account has an international plan enabled. Yes indicates that the international plan is active, while No signifies that the account doesn’t have an international plan.

* Voice mail plan: string

Yes/No string value to indicate if the account has an voicemail plan enabled. Yes indicates that the voicemail plan is active, while No signifies that the account doesn’t have an voicemail plan.

* Number vmail messages: integer

A number to denote the number of voicemail messages that the user currently has in their voicemail box. (If the value is 23, then the user has 23 voicemails saved/present in the voicemail box)

* Total day minutes: double

The total sum of minutes that a caller has used in the daytime. (250 indicates the total number of minutes that a caller has used calling during the day)

* Total day calls: integer

The total number of calls that a caller has called during the daytime.

* Total day charge: double

The price that has incurred by the caller taking the number of minutes of call time that user has used during daytime. (200 indicates the price that has incurred w.r.t the number of minutes that the user has utilized during the day)

* Total eve minutes: double

The total sum of minutes that a caller has used in the evenings. (250 indicates the total number of minutes that a caller has used calling during the day)

* Total eve calls: integer

The total number of calls that a caller has called during the daytime.

* Total eve charge: double

The price that has incurred by the caller taking the number of minutes of call time that user has used during the evenings. (200 indicates the price that has incurred w.r.t the number of minutes that the user has utilized during the evenings)

* Total night minutes: double

The total sum of minutes that a caller has used in the night. (250 indicates the total number of minutes that a caller has used calling during the night)

* Total night calls: integer

The total number of calls that a caller has called during nighttime.

* Total night charge: double

The price that has incurred by the caller taking the number of minutes of call time that user has used during nighttime. (200 indicates the price that has incurred w.r.t the number of minutes that the user has utilized during nighttime)

* Total intl minutes: double

The total sum of minutes that a caller has used calling internationally. (250 indicates the total number of minutes that a caller has used for international calls)

* Total intl calls: integer

The total number of calls that a caller has called internationally.

* Total intl charge: double

The price that has incurred by the caller taking the number of minutes of call time that user has used calling internationally. (200 indicates the price that has incurred w.r.t the number of minutes that the user has called internationally

* Customer service calls: integer

The number of customer service calls that the user has placed during the time his/her account has been active.

* Churn: string

True/False to indicate whether the customer has quit the service or not. True indicates that the user has stopped using the service. False signifies that the user is currently utilizing the service.