# Visual Data ExplorationDue Diligence Project: Dictionary for Customer\_Dataset\_Data.csv

# Region

**Description:** Numerical code representing the customer's region. **Options:** 

- 1: NorthEast
- 2: Midwest
- 3: West
- 4: Southwest
- 5: Southeast

#### **TownSize**

**Description:** Represents the size of the town where the customer resides, based on population or area.

#### Options:

- '1': Very Large The largest towns, potentially on the verge of being considered cities or the largest towns in the region.
- '2': Large Large towns close to city-like infrastructures but not classified as cities.
- '3': Medium Medium-sized towns with a balance of amenities and residential areas, suburban or larger independent towns.
- '4': Small Small towns with more amenities than the very small towns but limited compared to larger urban areas.
- '5': Very Small -represents the smallest towns, rural or with few amenities.
- · '#NULL!': Data Missing or Not Applicable

# Gender

**Description:** The gender of the customer. **Options:** 

- 'Female': Identifies as female.
- 'Male': Identifies as male.
- NaN: Data is missing or not provided.

## **JobCategory**

**Description:** The category of the job the customer holds, indicating the sector or nature of their employment.

Options:

- 'Professional': Engaged in professions requiring special training or education (e.g., doctors, engineers, teachers).
- 'Sales': Engaged in selling goods or services.
- 'Service': Works in the service sector, providing services rather than goods (e.g., hospitality, customer service).
- 'Labor': Involved in manual labor, in construction, manufacturing, or similar fields.
- 'Agriculture': Works in the agricultural sector, including farming, fishing, and forestry.
- 'Crafts': Engaged in skilled trade or crafts, including artisans and technicians.
- NaN: Data is missing or not provided.

#### UnionMember

**Description:** Indicates whether the customer is a member of a labor union.

## Options:

- 'Yes': The customer is a member of a labor union.
- 'No': The customer is not a member of a labor union.

## **EmploymentLength**

**Description:** Represents the number of years the customer has been employed.

#### Retired

**Description:** Indicates whether the customer is retired. **Options:** 

- 'Yes': The customer is retired.
- 'No': The customer is not retired.

#### **HHIncome**

**Description:** Represents the household income category. This is a categorical representation, indicating income ranges.

# **DebtToIncomeRatio**

**Description:** The customer's debt-to-income ratio, indicating financial health. Expressed in %.

#### CreditDebt

**Description:** Amount of credit debt in monetary units the customer has. Expressed in \$100,000s.

## **OtherDebt**

**Description:** Amount of non-credit related debt. Expressed in \$100,000s.

## LoanDefault

**Description:** Indicates if the customer has ever defaulted on a loan. **Options:** 

- 'Yes': The customer has defaulted on a loan at least once.
- 'No': The customer has never defaulted on a loan.

#### **MaritalStatus**

**Description:** The marital status of the customer. **Options:** 

- 'Unmarried': The customer is not married.
- 'Married': The customer is married.

## HouseholdSize

**Description:** The number of people living in the customer's household.

# **NumberPets**

**Description:** Total number of pets owned by the customer.

#### **NumberCats**

Description: Number of cats owned by the customer.

# **NumberDogs**

Description: Number of dogs owned by the customer.

## **NumberBirds**

**Description:** Number of birds owned by the customer.

#### **HomeOwner**

Description: Indicates home ownership status.

- '1': Owns a home
- '0': Does not own a home

#### **CarsOwned**

Description: Number of cars owned by the customer.

# CarOwnership

**Description:** Car ownership status, which might indicate whether the customer owns, leases, or does not have a car. **Options:** 

- 'Own': The customer owns their car.
- 'Lease': The customer leases their car.
- '-1':indicates missing, unknown, or not applicable data.

#### **CarBrand**

**Description:** Indicates the origin of the car brand owned by the customer.

#### Options:

- 'Domestic': The car brand is domestic.
- 'Foreign': The car brand is foreign.
- '-1':indicates missing, unknown, or not applicable data.

#### **CarValue**

**Description:** Represents the value category of the car owned by the customer.

# CommuteTime

Description: Estimated commute time (in minutes) of the customer.

#### **PoliticalPartyMem**

**Description:** Indicates membership in a political party. **Options:** 

- 'Yes': The customer is a member of a political party.
- 'No': The customer is not a member of a political party.

# Votes

**Description:** Indicates if the customer typically votes in elections. **Options:** 

- 'Yes': The customer usually votes.
- 'No': The customer usually does not vote.

# CreditCard

**Description:** Type of primary credit card used by the customer. **Options:** 

'Mast': MasterCard

'Visa': Visa'Disc': Discover'Othe': Other

'AMEX': American Express

#### **CardTenure**

**Description:** Length of time, in months, the customer has had their primary credit card.

# CardItemsMonthly

**Description:** Number of items charged to the primary credit card on a monthly basis.

# CardSpendMonth

**Description:** Total spending on the primary credit card in a month.

# **ActiveLifestyle**

**Description:** Indicates whether the customer leads an active lifestyle.

Options:

- 'Yes': The customer is considered to lead an active lifestyle.
- 'No': The customer is considered not to lead an active lifestyle.

# **PhoneCoTenure**

**Description:** Length of time, in months, the customer has been with their current phone company.

# VoiceLastMonth

**Description:** Amount in USD spent on voice calls last month.

#### **VoiceOverTenure**

**Description:** Total amount spent on voice calls over the tenure with the phone company.

## **EquipmentRental**

**Description:** Indicates whether the customer rents any equipment from the phone company.

Options:

- · 'Yes': The customer rents equipment.
- 'No': The customer does not rent equipment.

## **EquipmentLastMonth**

Description: Amount spent on equipment rental last month.

# **EquipmentOverTenure**

**Description:** Total amount spent on equipment rental over the customer's tenure with the phone company.

# **CallingCard**

**Description:** Indicates whether the customer uses a calling card. **Options:** 

- 'Yes': The customer uses a calling card.
- 'No': The customer does not use a calling card.

#### WirelessData

**Description:** Indicates whether the customer uses wireless data services. **Options:** 

- 'Yes': The customer uses wireless data.
- 'No': The customer does not use wireless data.

#### **DataLastMonth**

Description: Amount spent on wireless data last month.

#### **DataOverTenure**

**Description:** Total amount spent on wireless data over the tenure with the phone company.

# Multiline

**Description:** Indicates whether the customer has multiple phone lines.

## Options:

- 'Yes': The customer has multiple lines.
- 'No': The customer does not have multiple lines.

## VM

**Description:** Indicates whether the customer uses voicemail services.

# Options:

- 'Yes': The customer uses voicemail.
- 'No': The customer does not use voicemail.

## **Pager**

**Description:** Indicates whether the customer owns or uses a pager. **Options:** 

- 'Yes': The customer uses a pager.
- 'No': The customer does not use a pager.

#### Internet

**Description:** Indicates the type or level of internet service the customer subscribes to.

#### Options:

- 'No': The customer does not subscribe to any internet service.
- 'Yes': Indicates the customer subscribes to internet service, but without specifying the type or level or unknown.
- '2', '3', '4': No data provided.

## **CallerID**

**Description:** Indicates whether the customer subscribes to Caller ID services.

#### Options:

- 'Yes': Customer has Caller ID service.
- 'No': Customer does not have Caller ID service.

## **CallWait**

**Description:** Indicates whether the customer has Call Waiting service.

## Options:

- 'Yes': Customer subscribes to Call Waiting service.
- 'No': Customer does not subscribe to Call Waiting service.

# **CallForward**

**Description:** Indicates whether the customer uses Call Forwarding service.

#### Options:

- 'Yes': Customer uses Call Forwarding service.
- 'No': Customer does not use Call Forwarding service.

# **ThreeWayCalling**

**Description:** Indicates whether the customer has Three-Way Calling capability.

#### Options:

- 'Yes': Customer can use Three-Way Calling.
- 'No': Customer cannot use Three-Way Calling.

# **EBilling**

**Description:** Indicates whether the customer uses electronic billing. **Options:** 

- 'Yes': Customer receives bills electronically.
- 'No': Customer does not receive bills electronically.

# **TVWatchingHours**

**Description:** Number of hours the customer spends watching TV weekly. This numerical column represents the count of hours directly.

#### **OwnsPC**

**Description:** Indicates whether the customer owns a personal computer.

#### Options:

- 'Yes': Customer owns a PC.
- 'No': Customer does not own a PC.

## **OwnsMobileDevice**

**Description:** Indicates whether the customer owns a mobile device. **Options:** 

- 'Yes': Customer owns a mobile device.
- 'No': Customer does not own a mobile device.

# **OwnsGameSystem**

**Description:** Indicates whether the customer owns a gaming system.

## **Options:**

- 'Yes': Customer owns a gaming system.
- 'No': Customer does not own a gaming system.

# **OwnsFax**

**Description:** Indicates whether the customer owns a fax machine. **Options:** 

- 'Yes': Customer owns a fax machine.
- 'No': Customer does not own a fax machine.

#### NewsSubscriber

**Description:** Indicates whether the customer subscribes to a news service.

#### Options:

- 'Yes': Customer subscribes to news services.
- 'No': Customer does not subscribe to news services.