

# Scaletrix: Data Analyst Assignment

Feb-2024

## **CASE STUDY**

## Requirements:

- You need to load data in python.
- Prepare the data for the analysis
- Output should be shared in an Excel File
- Analysis Required:
  - Total valid customers, number of bills(by valid customers and total) and sales (by valid customers and total) per month (Overall, By Region, By Channel and By Stores)
  - Retention of the customers from April month, Month over Month i.e. you need to give the number of customers that returns in May, June and July. Need number for each month and overall.
- Excel file should contain data in a way that it can be sliced for month, region, channel and stores.
- You may add charts to the excel file showing the trends.

## **Data: Link To Get The Data**

#### Tables

- Bills: Have data at bill level
- Store\_Master: Have details about each store, can be joined with on 'Plant' column in Bills table and 'Store\_Code' in Store\_Master table.
- Phone\_Delivery\_Bills: It contains the Billkey of all the Phone Delivery bills.

### Logic for data preparation:

- Getting data for Channel:
  - You will have to create a column for channel with three values 'Instore', 'Online' and 'PD'
  - Online bills would be the bills that have Till\_No. as 0000009999. Till\_No is the last 10 digits of the Bill\_Key column.
  - PD bills would be the one with Bill\_keys present in Phone\_Delivery\_Bills table.
  - All other bills would be Instore bills.
- Valid Customers & Bills:
  - Cust\_Id with the Tag Valid\_Mobile\_No equals 1 are the valid customers.
  - You only have to consider Bills with the tag Is\_Refund\_Bill not equals to 1 for all the analysis.