Hello,

This is Satyam Gadekar from KPMG Data Analytics (Virtual Internship) team. We have reviewed the data sets which were provided by your company and during the data quality analysis, we have found some errors in the data sets.

The data quality analysis is the core phase and due to errors in the data set, we suggest the following mitigates in order to improve the data quality, which will eventually help us to driven the better analytics, results for your company.

* We can take a mode year value for the missing records of customers DOB.
* We can assign a uniform last name of customers which values are missing.
* Replace gender ‘U’ with reference to the customer name and make a consistency.
* For tenure values, we can take a mean of rest of the values and assign the mean value to the missing fields in order to maintain the consistency of data.
* Eliminate the blank orders considering fake orders.
* The following are the details of error encountered in the data set.

# Customer Demographic (Total records 4000)

|  |  |
| --- | --- |
| **FIELD NAME** | **ERRORS** |
| **DOB** | 01 record 1843  87 records Blanks |
| **last name** | 125 records Blanks |
| **Gender** | 88 records gender ‘U’  Values are not consistence M, Male, F, Female, Femal, U |
| **job title** | 506 records Blanks |
| **job industry** | 656 records mention ‘N/A’ |
| **Default** | 3317 records value ‘special characters’ includes null and Blanks |
| **Tenure** | 87 records Blanks |

**Transactions (Total records 20000 -past 3months)**

|  |  |
| --- | --- |
| **FIELD NAME** | **ERRORS** |
| **Online order** | 94 records Blanks |
| **brand** | 48 records Blanks |
| **product line** | 48 records Blanks |
| **product class** | 48 records Blanks |
| **product size** | 48 records Blanks |
| **standard cost** | 48 records Blanks |
| **product\_first\_sold\_date** | 48 records Blanks |

# NewCustomerList(Total records 1000)

|  |  |
| --- | --- |
| **FIELD NAME** | **ERRORS** |
| **Unnamed columns** | Drop 5 Unnamed columns |
| **last name** | 29 records Blanks |
| **DOB** | 17 records Blanks |
| **job-title** | 106 records Blanks |
| **job\_industry\_category** | 165 records Blanks |
| **Gender** | 17 records gender ‘U’  Values are not consistence U |

# CustomerAddress(Total records 4000)

|  |  |
| --- | --- |
| **FIELD NAME** | **ERRORS** |
| **State** | Combine New South Wales and NSW as NSW  Combine Victoria and VIC as VIC |

**Regards,**

**KPMG (Data Analytics Team)**