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Subject: summary of data quality issues and mitigation strategies

Dear team,

I hope you are doing well. I've reviewed the four data sets provided by Sprocket Central Pty Ltd using key quality Framework Dimensions including completeness, Accuracy, consistency etc. Below is the summary of main issues I found along with steps to fix them.

1. CustomerDemographic.csv

Key issues identified:

- Several unrealistic date of births (e.g. DOB in 1800's)
- Missing values in fieldset as last_name, job_title and job_industry_category.
- Gender field containing multiple values (e.g. F, Female, U)
- Default column contain corrupted or malicious text (e.g. 0/0,...//..)

Recommendations:

- Apply logical validation rules to remove unrealistic dates of birth.
- Identify and assign values where possible.
- Standardize gender values.
- Correct or remove default column.

2. Transactions.csv

Key issues identified:

- Product_first_sold is in excel serial format then in date format.
- Check online_order or unexpected or missing values.

Recommendations:

- Convert the serial date value to standard date format.
- Standardize boolean online order field.

3. NewCustomerList.csv

Key issues identified:

- Multiple blank columns appear in the data set.
- Missing values in various customer fields.

Recommendations:

- Remove or properly label unused columns.
- Scan all and clean missing values.

4. CustomerAddress.csv

Key issues identified:

- Both full state name and abbreviation appears.
- Certain customer id are missing when compared to CustomerDemographic.

Recommendations:

- Convert all states into uniform format.
- Check all customer ids across the table and add missing.

Once these data quality issues are addressed, the datasets will be in a suitable condition for further analysis as required in the project.

Kind regards,
Noor UI Huda