Dear Sir/ma,

I am Olasunkanmi Ayodele, and I am the data analyst to work on Sprocket Central Pty Ltd datasets. I am writing to provide an overview of the data quality of the datasets that you provided to us.

Upon review, we have identified several issues with the data quality. Using the data quality framework attached as a guide, we drafted the table below.

| Data Quality Dimensions | Customer Demographic | Customer Address | Transaction |
| --- | --- | --- | --- |
| Accuracy | DOB data is not correct. |  |  |
| Completeness | last\_name, DOB, job\_title, default and tenure data are not complete | customer\_id is not the same number as that of Customer Demographic dataset. | There are missing data for online\_order, brand, product\_line, product\_class, product\_size, standard\_cost, and product\_first\_sold\_date |
| Consistency | gender data has some inconsistencies | state data has some inconsistencies |  |
| Currency | Some customers in the DOB column are too old |  |  |
| Relevancy | default data is not necessary |  |  |
| Validity | default column does not contain values that are allowable | product\_id contains number zero (0) and it's not allowable |  |
| Uniqueness |  |  | product\_id and customer\_id data contains duplicates |

In the future, we recommend that you put in place reconciliation framework control that would check the number of records passing through your analytical layers and alert when records have gone missing. To fix data format inconsistencies, we recommend that data should be standardised across the source system or data pipeline when fed to the data warehouse. Also, to fix duplicate data, a master data management control needs to be implemented to check for exact duplicates of records that signals the data engineer to investigate the other record. Lastly, to fix the irrelevant data (as seen in the default column), data capturing principles should be agreed on where each data attribute should have an end goal, otherwise, it should not be captured.

Thank you for your cooperation on this project. If you have any questions or concerns, please don't hesitate to reach out.

Kind Regards

Olasunkanmi Ayodele