Manager, KPMG.

## Subject: Sprocket's Data Quality Assessment

The dataset I received earlier had several Data Quality issues. The problems and steps taken to address them are mentioned below.

## **Transactions:**

| Dimension    | Columns  | Actions                             |  |
|--------------|--|-------------------------------------|--|
| Accuracy     |  |                                     |  |
| Completeness | blanks in online_order blanks in brand                 | Filter out blanks Filter out blanks |  |
| Consistency  |  |                                     |  |
| Currency     |  |                                     |  |
| Relevancy    | 1. canceled order_status                               | 1. Remove canceled orders           |  |
| Validity     | plaintext list_price plaintext product_first_sold_date | Change to currency Change to date   |  |
| Uniqueness   |  |                                     |  |

## **Customer Demographics:**

| Dimension    | Columns  | Actions   |
|--------------|--|---|
| Accuracy     | 1. DOB   | Create Age column and remove ages like 174. Recommended to add an age column.         |
| Completeness | 1. <i>blank</i> s in job _title<br>2. <i>n/a</i> in job_industry | Keep it as it is. Changed nothing.  |
| Consistency  | 1. gender  | convert male to M and convert femal, female to F. Recommended to add a select button. |
| Currency     | Y in deceased_indicator  | Remove data of deceased customers.  |
| Relevancy    | 1. gibberish in 'default' column                                 | 1. Delete column  |
| Validity     |  |   |
| Uniqueness   |  |   |

## **Customer Address:**

| Dimension    | Columns  | Actions  |
|--------------|----------|--|
| Accuracy     |          |  |
| Completeness |          |  |
| Consistency  | 1. state | convert New South Wales to NSW and Victoria to VIC |
| Currency     |          |  |
| Relevancy    |          |  |
| Validity     |          |  |
| Uniqueness   |          |  |

Solving these data quality issues will result in KPMG providing better analysis and Sprocket getting best use of their data.

Sincerely, Shitab Tanzim