Subject: Data Quality Assessment and Recommendations

Dear Client,

Thank you for providing the three datasets from Sprocket Central Pty Ltd. After a thorough review, we have identified several data quality issues that could impact our analysis. Below is a summary of these issues and our recommendations for addressing them.

Data Quality Issues:

1. **Customer Demographic**:
   o **Inconsistent Gender Data**: Gender entries are inconsistent (e.g., "M", "Male", "F", "Female").
   o **Missing Age Data**: Several records are missing the age information.
   o **Blanks in Job Title**: Some entries have missing job titles.
2. **Customer Address**:
   o **Inconsistent State Data**: Variations in state names (e.g., "NSW", "New South Wales").
3. **Transactions**:
   o **Missing Transaction Month**: Several transaction records are missing the transaction month.
   o **Missing Profit Data**: Profit column is missing in transaction dataset
   Recommendations for Improvement:
1. **Ensure Gender Consistency**:
   o Standardize the format for gender entries across the dataset (e.g., use "Male" and "Female" consistently).
2. **Add and Validate Age Data**:
   o Add an extra column with the age of customers, ensuring this data is complete and accurate. Where possible, use other demographic information to estimate missing ages.
3. **Complete Transaction Month Data**:
   o Ensure every transaction record includes the transaction month. This is crucial for time-based analyses and tracking trends.
4. **Complete Profit Data**:
   o Populate the missing profit column in the transaction dataset. Profit data is essential for financial analysis and performance assessment.
5. **Standardize State Names**:
   o Ensure consistency in state names by using a single format (e.g., always use full state names or standard abbreviations).

Addressing these data quality issues will significantly enhance the reliability and accuracy of our analysis, leading to more actionable insights and better decision-making.
Please let me know if you have any questions or need further assistance. We look forward to working with you to ensure the success of this project.

Thanks & Regards,
Divya Pardeshi
Data Analyst