Dear Sir/Madam,

We appreciate you have entrusted KPMP with your databases. The main quality issues I found in the three datasets are shown in the summary table below. If you have any questions about what we have covered, do let us know.

	Accuracy	Completeness	Consistency	Currency	Relevancy	Uniqueness
Customer Demographic	• DOB: Incorrect	 Last Name: Blanks DOB: Blanks Age: Missing Job title: Blanks 	• Gender: Inconsistency • DOB: Formatted DD/MM/YYYY	• Deceased indicator: Filtered out deceased customers	• Default: Deleted	
Customer Addresses		Customer ID: incomplete	• Status: Inconsistency			
Transaction		Transaction ID: Incomplete Profit: Missing Online order: Blanks Brand: Blanks	Product first date: Formatted DD/MM/YYYY	Order status: Filtered out canceled orders		

Here are more detailed data quality issues:

Customer Demographic:

- 1. Accuracy: The some values in the Date of Birth were incorrect. To correct this Use reliable tools and methodologies for data collection to minimize errors.
- 2. Completeness: Some of the Last Names, Date of Births, and Occupations were missing so implement mandatory fields in the data collection tool to prevent submission of incomplete entries. Also, an Age category should be added to clearly define all the necessary data fields for the analysis or decision-making needs.
- 3. Consistency: The values in the Gender and Date of birth did not have the same standard format therefore standardizing the units of measurement, data formats, and terminology across all the datasets.
- 4. Currency: The Deceased Indicator did not remove those who have passed in the data, regular updates would make the datasets to ensure they reflect the most recent scenario.

Customer Address:

- 1. Completeness: Some Customer ID were missing therefore a regular review the data for any missing entries and follow up to get the necessary data.
- 2. Consistency: Some of the values the Status did not have the same standard format therefore standardizing the units of measurement, data formats, and terminology across all the datasets.

Transaction:

- 1. Completeness: Some of the Transaction ID were missing therefore a regular review the data for any missing entries and follow up to get the necessary data. Also, Profit category should be added to clearly define all the necessary data fields for the analysis or decision-making needs. Lastly, a lot of data under the Online Order and Brand categories were missing so implement mandatory fields in the data collection tool to prevent submission of incomplete entries.
- 2. Consistency: Some of the values the Product First Date did not have the same standard format therefore standardizing the units of measurement, data formats, and terminology across all the datasets.
- 3. Currency: The Order Status did not remove those who canceled their order in the data, regular updates would make the datasets to ensure they reflect the most recent scenario.

All the best, Liana Flores

Dear Sir/Madam,

We sincerely appreciate your trust in KPMP to handle your databases. Following a thorough analysis, we have identified several data quality issues across the three datasets, as summarized in the table below. Should you have any queries or require further clarification on our findings, please feel free to reach out.

	Accuracy	Completeness	Consistency	Currency	Relevancy	Uniqueness
Customer Demographic	• DOB: Incorrect	 Last Name: Blanks DOB: Blanks Age: Missing Job title: Blanks 	Gender: Inconsistency DOB: Formatted DD/MM/YYYY	Deceased indicator: Filtered out deceased customers	Default: Deleted	
Customer Addresses		Customer ID: incomplete	• Status: Inconsistency			
Transaction		Transaction ID: Incomplete Profit: Missing Online order: Blanks Brand: Blanks	Product first date: Formatted DD/MM/YYYY	Order status: Filtered out canceled orders		

Detailed Data Quality Issues:

Customer Demographic:

- 1. Accuracy: Some Date of Birth values are incorrect. Utilize reliable tools and methodologies for data collection to minimize errors.
 - a. Mitigation: Ongoing validation checks during data entry.
 - b. Recommendation: Conduct regular training sessions for data entry personnel.
- 2. Completeness: Missing Last Names, Date of Births, and Occupations. Implement mandatory fields to prevent incomplete entries. Add an Age category for comprehensive analysis.
 - a. Mitigation: Implement mandatory fields in the data collection tool.
 - b. Recommendation: Periodic audits of data collection procedures.
- 3. Consistency: Gender and Date of Birth values lack a standard format. Standardize units, formats, and terminology across all datasets.
 - a. Mitigation: Develop and enforce data entry standards.
 - b. Recommendation: Provide clear guidelines for data entry personnel.
- 4. Currency: Deceased Indicator does not remove those who have passed. Regular updates are needed to ensure datasets reflect the most recent scenario.
 - a. Mitigation: Implement a regular review process for Deceased Indicator.
 - Recommendation: Establish automated alerts for outdated data.

Customer Address:

- 1. Completeness: Some Customer IDs are missing. Regularly review data for any missing entries and follow up to obtain necessary data.
 - a. Mitigation: Implement regular data reviews and follow-up procedures.
 - b. Recommendation: Enhance communication channels for data collection.
- 2. Consistency: Values in the Status field lack a standard format. Standardize units, formats, and terminology across all datasets.
 - a. Mitigation: Develop and communicate a standard format for Status values.
 - b. Recommendation: Provide training on data entry standards.

Transaction:

- 1. Completeness: Missing Transaction IDs. Regularly review data for any missing entries and follow up to obtain necessary data. Add Profit category for comprehensive analysis. Implement mandatory fields for Online Order and Brand to prevent incomplete entries.
 - a. Mitigation: Implement mandatory fields and regular data reviews.
 - b. Recommendation: Enhance data entry tools to prompt mandatory fields.
- 2. Consistency: Values in the Product First Date lack a standard format. Standardize units, formats, and terminology across all datasets.
 - a. Mitigation: Implement data transformation procedures.
 - b. Recommendation: Provide training on consistent data entry practices.
- 3. Currency: Order Status does not remove canceled orders. Regular updates are needed to ensure datasets reflect the most recent scenario.
 - a. Mitigation: Establish a regular review process for Order Status.
 - b. Recommendation: Implement automated updates for real-time status changes.

Your understanding and cooperation in addressing these issues are highly valued.

Best regards,

Liana Flores