

Here's a structured breakdown of the data gaps, accuracy, and reliability for each file based on the information provided:

1. Customer File

Data Gaps:

- Missing Customer Information: Key fields such as Customer Email, Phone Number, and Address are missing. This makes it difficult to identify customers or analyze customer behavior effectively.
- Duplicate Entries: No duplicates present, so data integrity in terms of unique customer records is maintained.
- Missing IDs: No missing IDs, ensuring that every record is properly identified.

Accuracy Issues:

- None reported. The data in terms of existing fields is accurate and complete.

Reliability:

- Reliability Impact: The absence of crucial customer information affects the reliability of customer insights and personalized communications.

2. Order File

Data Gaps:

- Missing Order Details: Fields like Order_Date, Product Category, and Quantity are missing. This can affect reporting accuracy related to sales performance and inventory management.
- No Product/Category IDs: Missing product or category identifiers can hinder analysis related to product performance and sales.

Accuracy Issues:

- None reported. The data in terms of existing fields is accurate.

Reliability:

- Reliability Impact: Missing details can undermine the reliability of sales reports and product performance metrics.

3. Shipping File

Data Gaps:

- Missing Shipping Dates: Lack of shipping dates can impact the accuracy of delivery time analysis and delay detection.

- Missing Tracking Information: Without tracking numbers, it's challenging to monitor shipments, affecting customer satisfaction and logistics.
- Incomplete Delivery Addresses: Missing delivery address information can result in delivery errors and affect geographic analysis.

Accuracy Issues:

- None reported. The data in terms of existing fields is accurate.

Reliability:

- Reliability Impact: Missing shipping and tracking information can lead to issues in shipment tracking and delivery reliability.

General Observations:

- Customer File: Critical for personalized marketing and customer support; missing fields significantly impact its utility.
- Order File: Essential for sales and inventory analysis; missing data limits the ability to generate accurate reports and insights.
- Shipping File: Important for logistics and customer experience; missing data affects tracking and delivery accuracy.

Error Handling:

- Customer File: Implement validation rules to ensure all critical fields are filled out before records are saved. Consider a data enrichment process to populate missing information.
- Order File: Develop protocols to ensure completeness of all order details. Implement checks to ensure product and category IDs are correctly assigned.
- Shipping File: Establish procedures for entering shipping and tracking information. Regularly review and update delivery address records to ensure accuracy.