

Data Quality Summary:

CRM_Call_Center_Logs.csv = Logs

CRM_Events.csv = Events

CRM_Reviews_2.csv = Reviews

Completeness:

Reviews: No missing entries.

Logs: Incomplete data with a total of 3999 entries. 511 entries lack 'Complaint ID' and 'rand client'.

984 entries contain only 'Date Received', 'phonefinal', and 'timings'.

Events: Various columns have missing values: 'Sub-product' (9328 values), 'Consumer complaint narrative' (18952 values), 'Tags' (20143 values), 'Consumer consent provided?' (16547 values), and 'Consumer disputed?' (1002 values).

Consistency:

Reviews: Date column contains dates in both UK and USA format.

Logs: No consistency issues reported.

Events: No specific consistency issues mentioned.

Uniqueness:

Reviews: No duplication reported.

Logs: No duplication reported.

Events: No duplication reported.

Accuracy:

Reviews: District column has 8 entries with District of '0', entries removed as no assumption can be made.

Logs: No accuracy issues mentioned.

Events: No accuracy issues mentioned.

Timeliness:

Reviews: No timeliness issues.

Logs: No timeliness issues.

Events: No timeliness issues.

Validity:

Reviews: No validity issues.

Logs: No validity issues.

Events: No validity issues.

This Data Quality Summary provides an overview of the completeness, consistency, uniqueness, accuracy, timeliness, and validity of the data across three different sources: Reviews, Logs, and Events. Each section highlights specific issues or observations regarding the quality of the data within those sources.

Keys:

Logs

Primary key – Index

Foreign key – district to District (district_id)

Events

Primary key – Complaint_ID

Foreign key – Client_ID to Client (client_id)

Reviews

Primary key – Index

Foreign key – Complaint_ID to Events (Complaint_ID)

Code used to link the tables in MSSQL:

To link Reviews

```
ALTER TABLE Reviews  
ADD CONSTRAINT fk_district  
FOREIGN KEY (District)  
REFERENCES District (district_id)
```

To link Events

```
ALTER TABLE Events  
ADD CONSTRAINT fk_client_id  
FOREIGN KEY (client_id)  
REFERENCES Client (client_id)
```

To link Logs

```
ALTER TABLE Logs  
ADD CONSTRAINT fk_complaint_id  
FOREIGN KEY (Complaint_ID)  
REFERENCES Events (Complaint_ID)
```

