Business Report:

Summarize one real-world business report that can be created from the attached Data Sets and Associated Dictionaries.

What are the highest grossing postal codes within districts each quarter? This question can be answered with the data provided. The reports will be used to determine the districts and postal areas where a new store can be opened based on last quarter's revenue. It can also be used to determine what stores may need to be reviewed for closure.

A1. Describe the data used for the report.

For this report we will be using rental, address, and payment information. The rental information is used to provide the stakeholders with information regarding the rental day in order to group the payment information by day and quarter. The address information is used to review the districts and postal codes in order to group the rental information. The payment information is used to determine the revenue brought in each quarter by the district and postal code.

A2. Identify two or more specific tables from the given dataset that will provide the data necessary for the detailed and the summary sections of the report.

For the detailed (sales_deltailed2) and the summary (sales_summary2) tables data will be pulled from the following tables: rental, address, and payment. With this information the stakeholders can review necessary data to make business decisions regarding higher and lower performing districts and postal codes.

A3. Identify the specific fields that will be included in the detailed and the summary sections of the report.

The detailed table (sales_detailed2) will include:
Rental ID
Postal Code
District
Rental Date
Sales Amount
The summary table (sales_summary2) will include:
Postal Code
District
Rental Date by Quarter
Sales Amount

A4. Identify one field in the detailed section that will require a custom transformation and explain why it should be transformed. For example, you might translate a field with a value of 'N' to 'No' and 'Y' to 'Yes'.

Within the sales_detailed2 table the field 'rental_date' required a transformation to the sales_summary2 table. The rental_date field was transformed using EXTRACT in order to get the quarter

a date fell in instead of a TIMESTAMP. This ensures that when reviewing the report, you can easily see the grouped quarters and no data is accidentally reviewed not belonging to the correct quarter.

A5. Explain the different business uses of the detailed and the summary sections of the report.

The detailed table (sales_detailed2) can be used to see all the individual days and the revenue per day at each district and postal area. This data could also be manipulated to review a specific district or specific day if wanting a micro understanding of the revenue impact. This can be used by stakeholders to determine higher or lower profiting days, weeks, or months.

The summary table (sales_summary2) is an already cleansed review of the detailed table. The summary table is intended to give a full scope review of the quarter revenue per district and postal code.

A6. Explain how frequently your report should be refreshed to remain relevant to stakeholders.

The report should be refreshed at the end of every quarter. By updating quarterly, you can forecast for the upcoming quarters and address trending opportunities and capitalize on current growth. Updating too frequently does not give full scope to a postal area's revenue. Without updating the reports, the company is unable to review current revenue and store opening and closure options.

This report can be scheduled to be run each quarter by using a task scheduler like Agent pgAdmin.

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G.   Provide a Panopto video recording that includes a demonstration of the functionality of the code used for the analysis and a summary of the programming environment.

Panopto Video Link < https://wgu.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=37de09b1-d162-4af5-bd24-af8400026c88>

H. The record the web sources used to acquire data or segments of third-party code to support the application is both complete and accurate, and the web sources cited are reliable. Or the candidate did not use any web sources to acquire data or segments of third-party code and stated this in their submission.

I did not use an external web sources to acquire data or segments of third-party code.