Activity: Analyze a data transformation plan

Activity Overview

In this activity, you'll analyze a data transformation plan.

A clear plan is essential to effectively transform data to meet business needs. A data transformation plan outlines the steps, tools, and techniques needed to convert data into a usable format for analysis. As a cloud data analyst, developing a data transformation plan allows you to proactively identify and address potential data quality issues and errors, communicate and document transformation procedures, ensure rigorous testing of the transformed data, and maximize the success of data transformation in achieving desired outcomes.

Scenario

Review the following scenario. Then complete the step-by-step instructions.

TheLook eCommerce's marketing team wants to understand customer behavior better by segmenting the customers with similar behaviors. They've requested that the data team use data transformation to segment the customers based on RFM analysis, a marketing technique used to segment customers based on three key factors:

- **R**ecency: the amount of time since the customer's last purchase
- **F**requency: the number of purchases the customer has made
- **M**onetary value: the total amount of money the customer has spent

Data professionals employ RFM analysis to categorize customers into distinct groups: high-value customers, loyal customers, at-risk customers, and persuadable customers. The marketing team hopes to tailor marketing messages and campaigns to each group's specific needs and interests, thereby increasing customer engagement and sales.

As a cloud data analyst for TheLook eCommerce, you have been asked to analyze the proposed data transformation plan. This plan details the steps you'll take to conduct an RFM analysis using TheLook eCommerce's customer data later in this course. Analyzing this plan will help prepare you to complete the lab.

Your goals for the project include:

- Goal 1: Determine whether the data transformation plan aligns with the business's needs.
- Goal 2: Review the data transformation techniques to identify if they will meet the data goals.
- Goal 3: Assess the proposed tools to confirm if they are appropriate to transform the data.
- Goal 4: Evaluate the planned testing procedures to confirm whether they will ensure accurate results.

Step-By-Step Instructions

Consult the supporting materials to review the data transformation plan. For cloud data analysts, analyzing data transformation plans before transforming data is a crucial step that ensures the chosen tools and techniques align with the specific business goals and will produce meaningful results. After analyzing the data transformation plan, move on to the next course item to answer quiz questions about the material. After you complete the quiz, you can compare your answers to the feedback provided.

Step 1: Access supporting materials

The following supporting materials will help you complete this activity. Keep them open as you proceed to the questions.

🔔 RIGHT CLICK LINKS TO OPEN IN NEW TAB 🔔
Link to supporting materials: [Data transformation plan](#)

Step 2: Review and analyze the supporting materials

After meeting with the stakeholders to identify the business needs, members of TheLook eCommerce's data team created a preliminary data transformation plan. The plan outlines the data, tools, and techniques needed to conduct the RFM analysis. You have been asked to analyze the plan and determine if the team should proceed with data transformation.

In this step, you'll review the data transformation plan. Use the following questions to guide your analysis of the following components:

Business need:
- What are the marketing team's goals for the RFM analysis?
- How will customer segmentation be used to meet the marketing team's goals?
- What will the marketing team do with the segmented data?

Data:
- What data sources are being used?
- Are the proposed data sources sufficient for the analysis?
- How will missing values, inconsistencies, or errors be handled?

Data transformation:
- What specific techniques will be used to transform the data?
- How do these techniques align with the business goals?

Tools:
- Are the proposed tools suitable for this data transformation?
- What are the advantages and disadvantages of using these tools?

Testing:
- Are the proposed tests sufficient to ensure the data's accuracy?
- Has the team identified ways to handle issues identified during testing?

Step 3: Answer questions about analyzing a data transformation plan

Move forward to the next course item to answer quiz questions about analyzing a data plan.