

Exam : **PL-300**

Title : Microsoft Power BI Data

Analyst

Version: DEMO

1. Topic 1, Litware, Inc. Case Study

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview

Litware, Inc. is an online retailer that uses Microsoft Power BI dashboards and reports.

The company plans to leverage data from Microsoft SQL Server databases, Microsoft Excel files, text files, and several other data sources.

Litware uses Azure Active Directory (Azure AD) to authenticate users.

Existing Environment

Sales Data

Litware has online sales data that has the SQL schema shown in the following table.

Table name	Column name	Data type
Sales_Region	region_id	Integer
	name	Varchar
Region_Manager	region_id	Integer
	manager_id	Integer
Sales_Manager	sales_manager_id	Integer
	name	Varchar
	username	Varchar
Sales	sales_id	Integer
	sales_date_id	Integer
	sales_amount	Floating
	customer_id	Integer
	sales_ship_date_id	Integer
	region_id	Varchar
Customer_Date	customer_id	Integer
	first_name	Varchar
	last_name	Varchar
Date	date_id	Integer
	date	Date
	month	Integer
	week	Integer
	year	Integer
Weekly_Returns	week_id	Integer
	total_returns	Floating
	sales_region_id	Varchar
Targets	target_id	Integer
	sales_target	Decimal
	date_id	Integer
	region id	Integer

In the Date table, the dateid column has a format of yyyymmdd and the month column has a format of yyyymm.

The week column in the Date table and the weekid column in the Weekly_Returns table have a format of yyyyww.

The regionid column can be managed by only one sales manager.

Data Concerns

You are concerned with the quality and completeness of the sales data. You plan to verify the sales data for negative sales amounts.

Reporting Requirements

Litware identifies the following technical requirements:

- Executives require a visual that shows sales by region.
- Regional managers require a visual to analyze weekly sales and returns.
- Sales managers must be able to see the sales data of their respective region only.
- The sales managers require a visual to analyze sales performance versus sales targets.
- The sale department requires reports that contain the number of sales transactions.

- Users must be able to see the month in reports as shown in the following example: Feb 2020.
- The customer service department requires a visual that can be filtered by both sales month and ship month independently.

You need to address the data concerns before creating the data model.

What should you do in Power Query Editor?

- A. Select Column distribution.
- B. Select the sales amount column and apply a number filter.
- C. Select Column profile, and then select the sales amount column.
- D. Transform the sales amount column to replace negative values with 0.

Answer: C

2. You need to create a calculated column to display the month based on the reporting requirements.

Which DAX expression should you use?

- A. FORMAT('Date'[date], "MMM YYYY")
- B. FORMAT('Date' [date], "M YY")
- C. FORMAT('Date'[date id], "MMM") & "" & FORMAT('Date'[year], "#")
- D. FORMAT('Date' [date_id], "MMM YYYY")

Answer: A

3. You need to create the required relationship for the executive's visual.

What should you do before you can create the relationship?

- A. Change the data type of Sales[region id] to Whole Number.
- B. In the Sales table, add a measure for sum(sales_amount).
- C. Change the data type of sales[sales id] to Text.
- D. Change the data type of sales [region id] to Decimal Number.

Answer: A

Explanation:

Scenario: Executives require a visual that shows sales by region.

Need to change the sales id column from Varchar to Whole Number (Integer).

- 4. What should you create to meet the reporting requirements of the sales department?
- A. a measure that uses a formula of SUM (Sales [sales id])
- B. a calculated column that use a formula of COUNTA(sales [sales id])
- C. a measure that uses a formula of COUNTROWS (Sales)
- D. a calculated column that uses a formula of SUM (Sales [sales id])

Answer: C

Explanation:

The sale department requires reports that contain the number of sales transactions.

The COUNTROWS function counts the number of rows in the specified table, or in a table defined by an expression.

Reference: https://docs.microsoft.com/en-us/dax/countrows-function-dax

5. You need to create a relationship between the Weekly Returns table and the Date table to meet the

reporting requirements of the regional managers.

What should you do?

A. In the Weekly.Returns table, create a new calculated column named date-id in a format of yyyymmdd and use the calculated column to create a relationship to the Date table.

B. Add the Weekly_Returns data to the Sales table by using related DAX functions.

C. Create a new table based on the Date table where date-id is unique, and then create a many-to-many relationship to Weekly_Return.

Answer: A Explanation:

Scenario: Region managers require a visual to analyze weekly sales and returns.

To relate the two tables we need a common column.