



COURSE FIVE – Visualization Tools - PowerBI (30-01-2024)

INSTRUCTIONS FOR THE LAB ASSESSMENT:

Please read carefully and understand the total number of questions, the time allocated for each question, and the duration of the lab assessment.

- Total number of Questions : (9) Nine
 - Total number of questions to be answered: (9) Nine
 - Duration of lab assessment: 120 Minutes
 - Important Notes:
 - ❖ Please read through the entire assignment before starting your work.
 - ❖ Work Independently, no collaboration or referring to notes or browsing, etc.,
 - ❖ The given data is sample data that you need to use to develop PowerBI dashboard.
 - ❖ Your **Dashboard** (9th Answer) should cover all the answers for the given eight questions.
 - ❖ Submit your answers in both PowerBI (.pbix)format and pdf
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Introduction:

You are a member of the Revenue Operations Analytics team, supporting several sales regions and reporting the regions performance to the management. Currently, you have a data set that contains the selling behavior of the different regions. Your objective is to review this raw data to get a better understanding of how the discounting been done and high selling products and plans. Ideally, the insight you glean (get) from this data analysis will help you to better inform your stakeholders about the current selling behaviour and how do we improve it.



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The Feature

One of the main goals of your employer is to make it easy for their customers to run their business with the portfolio of products they have. Unfortunately, there are still a lot of customers who don't utilize their complete portfolio of products. Even for customers you sold, management is not sure of the discount you had offered.

The report, you build should ideally give insights to the management about the discount and the product selling behavior.

Assessment:

In your PowerBI output, summarize and group the overall data to tell the story of how different regions are performing.

Hint: *This data set is designed to be ambiguous and the answers to questions open ended. You will have to make your own assumptions about how to structure the data and what to exclude or include. Please state your assumptions very clearly in your answers.*

1. Which region has performed well in terms of net revenue across Months?
2. What plans are preferred by the customers across months?
3. Do Higher plans correlate with higher discount% ?

Hint:

$$\text{DISCOUNT\%} = (\text{GROSS REVENUE} - \text{NET REVENUE}) / \text{GROSS REVENUE}$$

4. How is the discount varying between different products ?
5. Do you see any behavioral change in plan purchase, product sold, discount% over time.



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6. Create 2 metrics (with visualizations) that can be utilized to track the behavior of the customers.
7. Which team does more 'cross sell' in terms of revenue achieved by the region ?

Definition of 'Cross Sell' :

If a customer has more than one product, then all the additional products (from the second product sold) sold will be considered as cross sell product revenue while the first product sold is considered as Base product revenue.

8. Provide insights using advanced visualizations

Note : Use advance charts like Key influencers, decomposition tree, smart narrative, Q&A and Forecast.

9. Dashboard creation

While creating Dashbord follow the below given rules.

Dashboard Rules:

- A. **Naming Convention for Measures and Columns:** All measures and columns should follow a consistent naming convention. This enhances readability and understanding of the data model.
- B. **Consistency in Fonts:** All visualizations should maintain consistency in font style, size, and color. This ensures a uniform look and feel across the dashboard.
- C. **Standardization of Titles Across Visualizations:** The titles of all visualizations should be standardized. This means they should follow the same format and style, making it easier for users to understand what each visualization represents.



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- D. **Alignment:** All elements on the dashboard, including visualizations, text boxes, and buttons, should be properly aligned. This improves the aesthetic appeal of the dashboard and makes it easier to navigate.
- E. **Inclusion of Home/Back Buttons:** If the dashboard contains multiple tabs, it should include Home and Back buttons. This allows users to easily navigate between different sections of the dashboard.
- F. **Bookmarks and Page Navigation:** The dashboard should utilize bookmarks for capturing the various states of a page (including filters, slicers, and visuals), and effective page navigation techniques to enhance user experience.
- G. **DAX and Drill Through:** The dashboard should demonstrate the use of DAX (Data Analysis Expressions) for creating new information from the data. Additionally, it should incorporate drill through features to allow users to navigate to different levels of data granularity.
- H. **WOW Effect:** The dashboard should have a 'WOW' factor. This could be an innovative design, an unusual insight, or anything else that makes the dashboard stand out.



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Data:

The given data set is entirely made up, but represents the real data and questions we strive to answer.

REVENUE DATA:

- a) **MONTH YEAR** -Month and year of the transaction
- b) **PLAN NAME** – Plan purchased by the customer
- c) **Customer ID** – Unique ID of the customer
- d) **Region** – Region/Team which sold the product to the customer
- e) **Product** – Product Sold to the customer
- f) **Net Revenue** – Revenue realised by the company after applying discounts
- g) **Gross Revenue** – Actual/List Revenue before applying discount

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