For the scenario based on your client, a car distributor, we will ==focus on creating a dashboard== for "Performance/KPI Reporting" with specific emphasis on "Conversions/Cost per Lead" related to the lower funnel activities. This is a critical area as it directly correlates with the ultimate goal of generating sales and engaging potential customers at a crucial decision-making point in their journey.

Scenario: Car Distributor Conversions/Cost per Lead Dashboard

Objective: The candidate is tasked with creating a dashboard to analyze the effectiveness of the car distributor's lower funnel marketing activities. These activities are aimed at prospective customers who are closer to making a purchase decision, such as those evaluating their car's trade-in value, customizing a car through a configurator, considering finance options, or booking a test drive.

Step 1: Test Data Creation

Create a simplified set of data that reflects user interactions with the distributor's website and subsequent lead generation:

1. User Activities Table: This table tracks various lower funnel activities users engage with on the website.

- Columns: User_ID (integer), Activity_Type (string), Activity_Date (date), Lead_Generated (boolean), Activity_Cost (float)
- Sample Data:

User_ID	Activity_Type	Activity_Date	Lead_Generated	Activity_Cost
501	Value My Car	2023-02-15	True	5.0
502	Configurator	2023-02-16	False	4.5

503	Book Test Drive	2023-02-17	True	6.0

2. Leads Table: This table records the details of whenever an activity results in lead generation.

- Columns: Lead_ID (integer), User_ID (integer), Lead_Date (date), Lead_Value (float), Converted (boolean)
- Sample Data:

Lead_ID	User_ID	Lead_Date	Lead_Value	Converted
8001	501	2023-02-15	250.0	False
8002	503	2023-02-17	300.0	True

Step 2: Dashboard Requirement
The candidate is required to create a single dashboard that provides insights into the efficiency and effectiveness of the lower funnel activities:
Lower Funnel Conversion/Cost per Lead:

- A breakdown of each lower funnel activity type (Value My Car, Configurator, Finance, Book a Test Drive) with the following metrics:
    - Total number of activities
    - Total cost for each activity
    - Total leads generated
    - Conversion rate (Leads generated / Total activities)
    - Average cost per lead (Total activity cost / Leads generated)
    - Conversion value analysis (if applicable)
- Visualization Suggestions:
    - A bar chart showing the number of activities and leads generated for each lower funnel activity type.

- A line graph or area chart depicting the trend of conversion rates and cost per lead over time.
- A table summarizing the key metrics for each activity type, providing a quick overview and easy comparison.

Step 3: Deliverables
The candidate should deliver:

- A Power BI report file (.pbix) containing the requested dashboard.
- A presentation or documentation explaining each visualization, the insights it provides, and any recommendations for optimizing lower funnel activities based on the data.

This dashboard will enable the car distributor to measure the performance of their critical lower funnel activities, identify areas for optimization, and better allocate their marketing budget to maximize ROI.