**Scenario Based Interview Question:**

A new car company has established. Everyday customers are visiting for a test drive. From last six months, not even if one car has sold. They are paying high fees for all these. If this problem continues, the company will face a huge loss. To prevent this problem, the company hired you as a data scientist. You need to suggest this use case how you solve the problem?

**Ans:** As a data scientist, I can suggest a data-driven approach to analyse the situation and potentially identify areas for improvement. Here's a step-by-step plan:

**1.Data Collection and Preparation**: Gather data from customer visits and test drives. This could include information like customer demographics (including salary), test drive duration, car models tested, feedback provided, etc. Organize this data in a structured manner for analysis.

**2. Data Exploration and Visualization:** Start by visualizing the data to get a better understanding of the patterns. This might reveal insights into which car models are more popular for test drives, the days or times when more customers visit, etc. Also, I will visualize the data to identify any trends or correlations between customer salaries and their interaction with car models.

**3. Customer Feedback Analysis:** Analyse the feedback provided by customers during and after test drives. Look for common themes or issues that customers mention. This might reveal if there's a pattern where customers with certain income levels express specific concerns or preferences.

**4. Market Research:** Conduct a competitive analysis to see how the car models compare to those of other companies in terms of features, pricing, and overall value. This can help to identify if there are gaps in company’s offer that might be affecting sales.

**5. Predictive Analysis (with Salary):** Build a predictive model that incorporates customer salary as a feature. This model can help predict the likelihood of a sale based on various factors, including income.

**6.Customer Segmentation:** Segment customers based on demographics, preferences, and any other relevant criteria. This will help to understand which types of customers are showing interest and whether there are specific segments that are not being targeted effectively.

**7. Sales Incentives and Offers**: If pricing is a concern, I will suggest considering offering limited-time discounts, special financing options, or other incentives to encourage customers to make a purchase.

**8. Salary and Location Impact Analysis:** Conduct an in-depth analysis of how customer salary and location impact sales. Are certain salary ranges or areas showing lower conversion rates? After getting some insights from this, we can make several new strategies.

**9. Marketing and Communication Strategies:** Based on the insights gained from analysis, consider revisiting marketing and communication strategies. Customize the communication to address the issues and worries raised by customers during test drives.

**10. Continuous Monitoring and Iteration:** Keep making changes according to analysis, watch sales impact, and be ready to adjust strategies based on continuous insights. This is important because data driven decisions need constant improvements.

**Conclusion:** By understanding customer details like demographics, feedback, salary, and location, the company can make better marketing strategies and improve the overall experience. This process needs to be ongoing, as data-driven decisions require continuous adjustments. Through these steps, the company can address customer concerns, meet preferences, and achieve better sales results.