**Nap Queen Assessment:**

**Explanation:**

Initially the given dataset was observed and data modelling were done to connect the three-given dataset. Pre processing works were done to the given dataset and visualizations works are carried out.

1. What marketing campaign(s) had the highest ROI, Return of Ad Spends (RoAS)? Provide visualizations to support your answer.

Ans: I have found the RoAS by using the formulas

* Revenue = SUM('amazon\_marketing\_stream\_data'[attributed\_sales\_7d])
* ROAS = DIVIDE([Revenue], SUM('amazon\_marketing\_stream\_data'[cost]))

If we publish this dashboard in the Power BI service, we can ask the required questions and get the answers for ROI, ROAS etc.

2. How does the sales performance vary across different product categories? Present your findings in a suitable chart.

Ans: It varies based on the time and the day like mostly orders happening in the afternoon time and in the holidays.

3. How does each campaign behave and each item behave hourly?

Ans: Yeah, there is a drastic change occurs in the afternoon when compared to the other timimngs.

4. Is there any correlation between the timing of marketing campaigns and changes in product sales?

Ans: Yes, there is high correlation.

5. What is the overall trend of sales before, during, and after each marketing campaign? Are there any significant spikes or dips in sales?

Ans: I have given cards in the Dashboard 1. Please have a look into it.

6. How can the marketing strategies be optimized to improve overall sales and customer engagement?

Ans: By reducing the seconds of the ad we can get more attention and by increasing the offers and discount.

7. Which products have shown the highest growth in sales during the campaign period? Are there any products that performed poorly during campaigns?

Ans: Mattress had made highest sale and bed frame and mattress toppers made poor sale.

8. A sudden change in the dataset format occurs, making it incompatible with the existing Power BI model.

How would you handle this situation while maintaining progress on the dashboard creation

Ans: To handle the sudden change in dataset format while maintaining progress on the dashboard creation, I would follow these steps:

1. Assess the Changes: Understand the nature of the dataset format changes and identify the specific columns or data fields that are affected.

2. Update Data Transformation: Modify the data transformation steps in Power BI to accommodate the new dataset format. This may involve adjusting queries, cleaning data, and ensuring data integrity.

3. Check Calculations: Review any measures or calculated columns in the existing Power BI model that might be impacted by the format changes. Update these calculations to align with the new dataset format.

4. Verify Visualizations: Validate that the existing visualizations in the dashboard still reflect the correct data and insights after the format changes.

5. Add Error Handling: Implement error handling in the Power BI model to handle potential issues arising from the format changes. This could involve setting up default values or conditional expressions to prevent errors in the dashboard.

6. Monitor Data Refresh: Keep an eye on data refresh after the format changes to ensure the dashboard continues to display up-to-date and accurate information.

7. Communicate Changes: If necessary, communicate the dataset format changes to relevant stakeholders and provide them with updates on the dashboard's progress and any potential impacts on insights or decision-making.

By following these steps, the Power BI dashboard creation can continue without major disruptions, even after a sudden change in the dataset format. It allows for adaptability and ensures that the dashboard remains reliable and useful for decision-making purposes.