

Time: 15 min

Instructions: Read the following case study, including descriptions of available data sets. Prepare stories from your prior roles that are relevant to questions in section 4.

Section 1. Overview of the client business and their marketing campaigns.

ABC inc. is a supplier of project management software for IT companies. The marketing team at ABC leverages multi-channel ad campaigns, social media, client referrals and trade shows to reach decision makers at target accounts. The goal of their marketing campaigns is to drive free trial registration.

Section 2. Overview of your role as Marketing Analyst.

Your client has asked you to help them with assembly of the budget for their next quarter. They would like you to provide data driven recommendations to what opportunities exist across different marketing platforms. They want to know where they should spend their budgets and efforts to maximize ability to drive free trials.

Your goal, as a data specialist, is to ensure every marketing dollar delivers optimum returns. In your role, you will perform statistical analysis using historical campaign performance, visualize insights, and formulate data-driven solutions that optimize return on marketing spend.

Section 3. Overview of available data.

80% of the Marketing data from marketing teams across the globe is readily available but some marketing data needs to be additionally assembled from different sources.

Your data has following characteristics:

Dataset Overview

- Campaign ID - Unique identifier of the campaign that's a combination of the date and time of the campaign with additional attributes
- Campaign Name - The campaign name
- Prospect Status - are the different stages that a prospect reaches in the marketing campaign.
 - a. Responded - This is the first stage that lands a demo response.
 - b. No Show - The prospect was a no show to the demo
 - c. Attended - The prospect attended the demo
 - d. Registered - The prospect registered for a free trial following the demo.
- Account ID = The unique account id as captured in salesforce we monitor the marketing funnel.
- Account Name - The name of the company that is our client.
- Country - The home country of the account.
- Prospect ID - The unique prospect or contact id that represents a person at the desired client account.
- Opt-Out Timestamp - The date of opting out. If opt-in is no, the field is blank.
- Job Title - The prospect's profession and title within the company. This is used to understand if the prospect is a
 - a. Practitioner = is someone who is typically below a manager level like an analyst and would be the person consuming the software on a daily basis.
 - b. Decision maker - is a manager- director level prospect that manages multiple teams and is the decision maker on the value to his teams.
 - c. Executive - an executive interested in using this for the entire organization.
- 14. Prospect Source - The source through which the prospect learnt about the product: Advertisement, Social Media, Referral and Trade Show

Section 4. Questions to prepare for discussion:

1. Cleaning/ Preparing the data - Describe your prior experience in cleaning and preparing marketing data. Give **2 specific examples** of challenges and how you overcame them.
2. Cleaning/ Preparing the data - What specific data points provided in the case study above should be carefully considered in your analysis? Given the data set described in the case study, how would you lay out your data set for analysis? Describe conceptually or provide **1 similar example** based on your prior experience.
3. Data Analysis - Describe how you would outline the analysis that could recommend optimizations across marketing budgets, **provide 1 specific example** from your prior

experience where you used analytics to recommend optimizations to a business process.

4. Statistical Techniques - What statistical methods could you use to provide budget optimizations to the client? **Provide 2 examples** of statistical methods you used in your prior roles.
5. Data Visualization - How would you go about building an insights visualization for this optimization task? Describe conceptually or **provide 1 example** from your prior experience. We are interested in your data visualization process, methodology and specific data presentation experiences (charts, tables) and how to make them most impactful for business users.
6. Insights - How would you present the optimization recommendations to your business / non-technical client? Describe your thought process of building impactful presentations based on **1 example** from your prior projects.