

2023 Intern – Marketing Analyst, Digital Experience

In preparation for your final interview, please solve the following data challenge. Be prepared to talk through and present your work in the interview.

Business concepts

- This data represents a business with a Marketing team that runs marketing programs with the key objectives of generating Pipeline (Pipe) and Bookings
- This marketing team runs programs across many geography (geo) and Solutions (products the business sells)
- Bookings will translate to sales/revenue of the business
- Pipeline indicates a stage prior to Bookings when a potential deal was identified. This can be used as a leading indicator of Booking/Sales
- Targets indicate the specific numbers the business needs to hit for the key metrics (such as Pipe and Bookings)
- Actuals indicate what this business actually achieved

You are given three files

- **Pipe and Booking Targets:** These contain the targets and actual numbers for pipe and booking numbers for the fiscal year 2022. It also has fields like application name, sales region, account segmentation, etc
- **Internal order lookup:** This is a bridge table to get product/solution level details for both to spend and Fy22_23_tgts file to the same level of solution mapping.
- **Marketing Spend:** This file contains our marketing spend

Challenge (All the results should be for the year 2022)

1. Map the spend and targets file to each other on a **geo, fiscal quarter, and solution level** (for solution level mapping you have been given the file Internal order lookup). (Hint: Think how geo tagged as “Other” will be reallocated to different regions for spend).
2. Re-allocate or distribute spend data down to **account segmentation and sales region level** in the targets file. Use any method and list your assumptions.
3. Understand how will you measure the **efficiency of marketing**? You have been given spend, pipe targets, booking targets, pipe actuals, and booking actuals. What metric would you create to understand the efficiency of marketing dollars?
4. What insights can you draw about the **spend efficiency** of different GEOs, account segments, and solution groups? What recommendations do you have for the team? Any visualizations you could come up with to present the same?

For further questions please feel free to make your assumptions in the data, you can use any tools like R, Python, Excel, or Power BI for your analysis. Present your output with your raw working file (excel workbook, R code, etc) in a clean and understandable format as well as a 4-slide deck presentation

which should include your assumptions, your method, and your findings along with your recommendations. Be prepared to talk and present your work in the interview.

Note: all data in the files are fabricated for interview purposes only; they do not represent actual data.