

2-on-1 Case
Spring 2023

### **BACKGROUND**

Your client is MedClear, a quickly growing mid-sized healthcare-tech company that now has a lot of cash they wish to invest into R&D for a new product. The client's goal is to choose one of two products to introduce into the market: a wearable Virtual Reality technology for mental health or a 3D printer for prosthetics. They have asked you to determine which product is more feasible and how much additional revenue the new product would make them.

Virtual Reality has recently started to be used to treat and manage psychological conditions such as anxiety and stress. It can help patients change their thoughts and perceptions around their conditions.

3D printers have also been used in a wide variety of applications and are very popular in the healthcare market today. In the prosthetics industry, 3D printers are popular because they enable a degree of precision that dramatically increases comfort and mobility for patients.

### QUESTION 1 – FRAMEWORK

If they didn't directly ask to create a framework, ask "What are some areas that you would want to explore before deciding on which of the two is a better option?"

#### Content:

 Good candidates will factor in size of the prosthetics and mental health industries in the U.S., technology effectiveness in treating mental health and creating good quality prosthetics, pricing/cost of the technology, % of people who are diagnosed, competitiveness in each of the industries, and also the company's current offerings/internal structure

#### Presentation:

Good candidates will be structured, easy-to-follow along, and concise

### **QUESTION 2 – BRAINSTORMING**

Without considering any data, which product do you think is the better choice and why?

Follow-up question: Can you think of three reasons why the other product you didn't choose could be the better option?

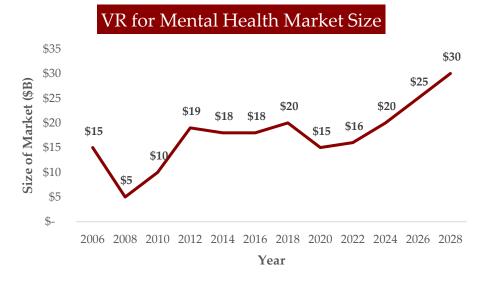
- It is ok for candidates to take some time to think of a response but make sure they don't take too long (e.g. more than ~30 seconds)
- Look for if their answer intuitively makes logical sense. Good candidates will bring in case context (e.g. 3D printing for prosthetics is more competitive, VR tech for mental health is relatively new/less competition, MedClear is midsized and quickly growing & has a lot of money to invest in R&D so being an early player in the VR industry would be a good opportunity for them to grow even quicker etc)

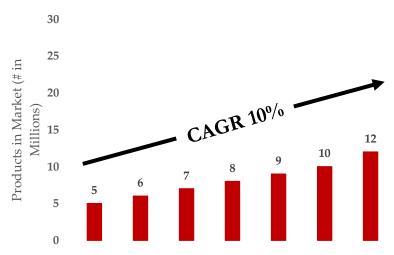
# QUESTION 3 - CHART/GRAPH

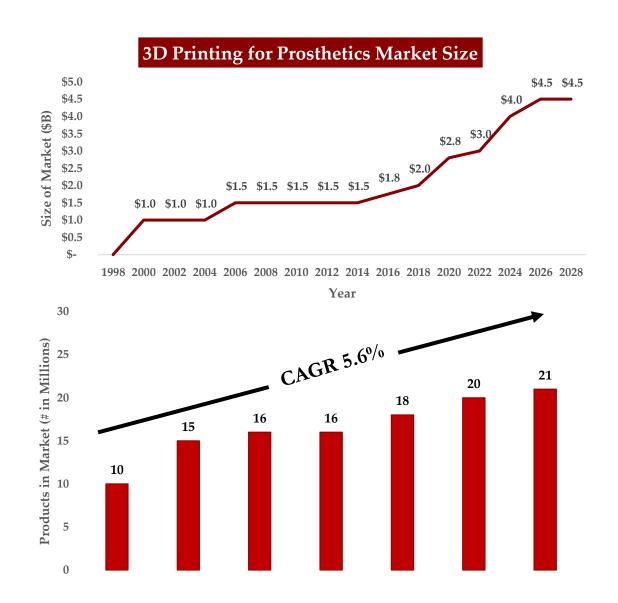
What are the key insights that you gather from this chart here?

- \*Show them/share with them the chart that's on the next page
- Candidates should recognize that VR is a more volatile industry, but faster growing overall. VR industry has fewer products in the market than 3D printers despite its market size being bigger, indicating a potential for higher revenues/profits/margins
- 3D printing is fairly stable but a smaller industry and has been around for longer. It seems like a more popular technology given the # of products Follow up question: Given everything we know so far, in 30 seconds, which do you think is the best option and why? (after they answer, ask them "What additional information would you like to know")
- A good candidate will recognize that there is more opportunity in the VR
  market since it is newer and faster growing. They will recognize that there is
  some risk associated with it (over 3D printing) and that MedClear seems to be
  in a position to take on some risk considering its large cash balance and rapid
  growth

# QUESTION 3 – CHART/GRAPH cont.







## **QUESTION 4 – MATH**

Great, MedClear has decided to do a deeper analysis on VR technology for mental health. They would like you to estimate their anticipated profit by 2028. You can assume that they don't make any sales until 2026.

#### Revenue Calculation (Cost calculation on next page)

When asked if we have insight into size of market, ask which years they want for (Size of Market = SOM):

- In 2028 the SOM is \$40B and they capture an additional 7%
- In 2027 the SOM is \$35B they capture 5%
- In 2026 the SOM is \$30B initially they capture 4%
- \$2.8B + \$1.75B + \$1.2B = \$5.75B (REVENUE)

## QUESTION 4 - MATH cont'd

Great, MedClear has decided to do a deeper analysis on VR technology for mental health. They would like you to estimate their anticipated profit by 2028. You can assume that they don't make any sales until 2026.

#### **Cost Calculation**

- When asked: do we have any insight into fixed or variable costs?
  - Answer: they anticipate spending \$1.5B on R&D for the first 3 years each and \$500M each year thereafter.
- Calculation: \$3B + \$500M\*(3) = 1B + 1.5B = \$6B (COST)

Profit: 6B-5.75B = -\$0.25B (LOSS)

Follow up question: Do you think MedClear should enter this industry? Good candidates will recognize that over the next 5 years, MedClear is expected to lose \$0.25B due to the initially high R&D costs. However, the market is quickly growing and MedClear has been consistently capturing higher market share, indicating that they would likely be profitable by next year based on their current trajectory.

## **QUESTION 5 – Brainstorming**

Follow up question: What are 2 risks or potential obstacles associated with entering this industry?

Sample answers include high barriers to entry, competition (other bigger competitors could be faster to it), 3D printing was more recession proof than VR (comes from looking at the graph numbers)