

Case 14: Shermer Pharma

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Case Question

- Our client, Shermer Pharma, is a venture backed start-up Pharmaceutical company. Over the past 15 years, Shermer has been developing a molecule that has been approved by the FDA to cure Alzheimer's with 90% efficacy.
- Shermer's owners have hired us to determine:
 - How should we sell our product?
 - Is our product going to be profitable?

Case tracker

- **Industry:**
Health Care
- **Level of Difficulty:**
Medium
- **Case format:**
Market entry
- **Concepts Tested:**
 - Break Even analysis
 - Marketing strategies
 - Organizational changes

Fit Questions

Spend first 15 min on fit

- Give me an example of a time you had to change someone's mind.
- What are the most difficult or challenging decisions you have made recently?
- In what kind of work environment are you most comfortable?

Guide to interviewer

- This case is focused on 2 questions, can you determine what it takes to launch a new product profitably through a cost benefit analysis, and can you think through the implications of starting a Sales & Marketing organization from scratch
- The interviewee should be guided towards 2 primary options for the Sales & Marketing question
 1. Start your own sales force
 2. Contract sales
- Bonus sales force answer is sell Shermer to a larger firm
- Profitability will center on the interviewees ability to read tables and data on the market and our market share.

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Quants.

8

Structure



B/E
Mkt. Stgy
Org. Chg.

Clarifying answers and case guide

Clarifying answers to provide if Asked

Industry Definitions

- Our product is a pill that cures Alzheimer's, an illness that currently has no treatment that cures or stops the progress of this disease
- Alzheimer's is a degenerative, terminal disease that causes senility and dementia. 30 MM people suffer worldwide
- Sales would be focused on Neurologists and Geriatric psychiatrists (not the consumer of the product)

Client Characteristics

- We don't have a Sales or Marketing organization, the company has purely been a research firm to this point.
- FDA approval, etc has been granted

Competitive Dynamics

- We will not focus on competitive response during this case as we are the only firm that has a cure for this illness and will be for the next 5 years

Interviewer Guide to case and handouts

Case Structure – Interviewee should focus on the questions separately. First we will brainstorm how to sell our product and ask questions to get after the costs of a sales force (Exhibit 1). An optional middle step is a brain teaser to determine the size of the Alzheimer's market. (provide answer of 5MM at the end of the exercise. They then need to ask about the costs and revenues from our new product (Exhibit 2).

Exhibit 1-3 – After Interviewee walks through structure, they should ask questions about the costs of sales and then ultimately the profit equation.

- *If the interviewee isn't getting to the question on the 3 Sales Force options, guide them back toward this and provide exhibit 1.*
- *Have a conversation with the Interviewee to force them to talk through the essential components of the Profit Equation that are needed to answer the question.*
- *Let the Interviewee drive the case. When you feel that they have asked enough information about the following topics, give them the exhibit that shows this information:*

- | | | |
|-----------------------|---|-----------|
| – Sales force options | → | Exhibit 1 |
| – Revenues vs Costs | → | Exhibit 2 |

Answer – The numbers reveal that our product will be profitable. However, a critical question will be the sales channel, which is why they need to determine to use contract sales in order to be profitable. It is also correct to state that Shermer should sell the product to a larger firm, but the second half of the case should be under the assumption that the owners decide to do contract sales.

Key elements to analyze

Market Entry

- Using Exhibits 1 the interviewee should be able to determine that contract sales is the best financial option

Profitability

- Using Exhibit 2, the interviewee should determine that our product will be profitable utilizing either type of sales force.

Notes to interviewer

- The question boils down to realizing that our client's competencies are rooted in developing a product, not Sales and Marketing. The correct approach is therefore to contract sales or sell the company
- The qualitative approach to the answer is appropriate, but once the interviewee has discussed enough of the inputs, **exhibit 1** should be shared:
 - There is missing data in the chart that should be easy to calculate (solutions provided)
- A third option with no attached data would be to sell the company to a larger firm, this is an appropriate discussion to have and if prompted the interviewee should discuss the tradeoffs of this more qualitatively
- A contract sales organization is typically less effective than internal sales, though most interviewers won't pick up on this and simply giving the financial answer is appropriate

Notes to interviewer

- You should let them size the market as a first step, but then provide the actual number of 5MM.
- The firm requires that R&D costs be recovered by Year 5 of the product (a window before which there will be no competitive response)
 - We can ignore NPV for this question and just assume a straight line amortization...interviewee should come to this conclusion on their own, but course correcting is okay if they get stuck
- Critical information on the exhibit should be provided as the interviewee asks, though should only be volunteered if the interviewee is stuck
- We can ignore tax, however a good interviewee will ask about it, and doing so would realize we still hit our profit targets by year 5
 - Manufacturing & Packaging costs are included in the Gross Margin

Math Solutions: Exhibit 1

	Develop own Sales Force	Contract Sales Force
Percent of visit focused on our product	100%	50%
Annual fully loaded cost per Sales Rep	\$200k	n/a
Cost per sales call	$\\$170 ((\\$200k * 85) / 100)$	\$60
Total calls required	$100k$ (should be asked/given)	$200k (100k * 2)$
Total Sales Reps needed	85	$170 (85 * 2)$
Total annual Selling Cost	$\\$17MM (\\$200k * 85)$	$\\$12MM (\\$60 * 200k)$

Math Solutions: Exhibit 2

Total Market	5MM
Annual gross margin per user	\$1000
R&D Cost	\$1.5B
G&A cost	\$25MM

*Data at left to be provided as the questions are asked by interviewee

	Year 1	Year 2	Year 3	Year 4	Year 5
Projected Market penetration	5%	10%	25%	40%	60%
Total Users	250k (5%*5M)	500k (10%*5M)	1.25MM (25%*5M)	2MM (40%*5M)	3MM (60%*5M)
Total Gross Margin	\$250MM (250*\$1000)	\$500MM (500*\$1000)	\$1.25B (1.25MM*\$1k)	\$2B (2MM*\$1k)	\$3B (3MM*\$1k)
Amortized R&D Costs	\$300MM (\$1.5B/5)	\$300MM (\$1.5B/5)	\$300MM (\$1.5B/5)	\$300MM (\$1.5B/5)	\$300MM (\$1.5B/5)
Selling Costs	\$12 MM (from ex.1)	\$12 MM (from ex.1)	\$12 MM (from ex.1)	\$12 MM (from ex.1)	\$12 MM (from ex.1)
G & A Costs	\$25 MM	\$25 MM	\$25 MM	\$25 MM	\$25 MM
Net Income	(\$87MM)	\$163MM	\$913MM	\$1.663B	\$2.663B

Solution and recommendations

Solution & Recommendations

- Shermer Pharma's core competency is their research focus. The plausible argument can be made that they should sell the company to a larger firm that has the appropriate capabilities that it takes to market and sell a product. Though this might be the right answer, the client isn't always going to do take the optimal approach, particularly when it comes to ownership of the firm. We need to be flexible to account management's wishes
- Assuming the owners decide not to sell the company, contract sales is the next best option, that gives us the best scenario when determining overall profitability of our product.
- The latter half of the case is simple math, determining a P & L for our product and coming up with the correct answer that Shermer can be profitable.
- Ask for high level analysis at the end of the case, what else should be consider before engaging this plan?

Bonus/Guide to an Excellent Case

- An excellent interviewee will note:
 - There is an option to sell the company, even though there is no data provided to support this conclusion
 - Some of the numbers give an obvious answer before needing the exact calculations
 - Challenging the interviewer on the effectiveness of a contract sales organization is a bonus. A qualitative argument can be made that for an additional \$5MM a year, we can realize the benefit of a more effective sales force, this isn't the financially correct answer but may be the right tradeoff given the relatively minimal impact to the bottom line vs. revenues of \$3B
 - \$1000 per year for a life saving cure for a currently incurable ailment is definitely under priced!

Exhibit 1: Sales force options

	Develop own Sales Force	Contract Sales Force
Percent of visit focused on our product	100%	50%
Fully loaded annual cost of 1 sales rep	\$200k	n/a
Cost per sales call		\$60
Total calls required		
Total Sales Reps needed	85	
Total annual Selling Cost		

Exhibit 2: Annual Net Income

	Year 1	Year 2	Year 3	Year 4	Year 5
Projected Market penetration	5%	10%	25%	40%	60%
Total Users					
Total Gross Margin					
Amortized R&D Costs					
Selling Costs					
G & A Costs					
Net Income					