Case: Manny's Manufacturing

Inspired by A.T. Kearney, Round 2

Problem statement narrative

Manny's Manufacturing is a U.S. based company that produces a consumer packaged good. It currently has manufacturing facilities in the U.S. and an idle plant in South America. The executive team at Manny's Manufacturing is trying to determine the health of its business and whether to use the South American plant.

Overview for interviewer

The candidate should first determine the profitability of the North American plant by looking at revenue and costs. He/she will most likely do a market size analysis to assist with this. He/she will then evaluate potential profitability of the South American plant and finally explore some of the qualitative issues that come with operating internationally (additional taxes, environmental concerns, proximity of distributors, product quality, lack of technological advancement etc). The candidate may decide to use the S.A. plant, sell the S.A. plant, or maintain status quo. Depending on the candidate's assumptions, different answers may apply. Be sure that the logic is sound.

Case Type: Profitability, Market Size, Strategic Analysis

Information to be provided upon request

Products are sold only in the United States

North America profitability analysis:

1. Market Size analysis
    1. U.S. Population: 300M
    2. % of population demanding the product: 10%
    3. # of products demanded per person: 20
    4. Price of product: $ 0.50
    5. Manny's Market Share: 5%
    6. Market is mature and not expected to grow significantly. Competitive market, but difficult to steal market share
2. Costs with N.A. plant (see Question 2)
3. Costs with the S.A. plant (see Question 2)
4. Capacity: N.A. plant can make 50M goods; S.A. can make 20M goods
5. The same product with the same quality can be produced in S.A. or N.A.

Question 1 – Market Sizing/ Revenue Analysis

What is Manny's Revenue?

		United States
United States Population (given)		300,000,000
Percentage of the population demanding the product (given)		10%
Total People demanding the product (300M * 10%)		30,000,000
# of products demanded by person on average (given)		20
Total Market Size (# of products) (20*30M)		600,000,000
Price per product (given)		$0.50
Total Market Size ($) ($0.50*600M)	$	300,000,000
Manny's Market Share (given)		5%
Manny's Products Demand (5% * 600M units)		30,000,000
Manny's Total Potential Revenue ($0.50 * 30M)	$	15,000,000

Information to provide up front

- No information is to be given up front. Simply ask how the candidate would do market share analysis

Provide information if asked

- Market Population = U.S.: 300M
- % of population demanding the product: 10%
-# of products demanded / person: 20
- Price: $0.50
- Manny's Market Share: 5%

Question 2 – Cost Structure

What are Manny's costs to operate each plant?

Costs for N.A. Plant

Fixed Costs	$	5,000,000
Variable Costs		
Raw Materials ($0.10 per product)	$	3,000,000
Transportation ($0.05 per product)	$	1,500,000
Other VC	$	4,000,000
Total Costs	$	13,500,000

Costs for S.A. Plant - assuming operating at 100% (20M goods which is not enough to satisfy 100% of demand)

Fixed Costs	$	4,500,000
Variable Costs		
Raw Materials ($.05 per product)	$	1,000,000
Transportation ($0.20 per product)	$	4,000,000
Other VC	$	4,500,000
Total Costs	$	14,000,000

Information to provide up front

-No information is given up front. The candidate should ask for each of the numbers.
- If the candidate asks for "Variable Costs," ask him/her to give examples of V.C.
- Ask them to explore what could be in the Other V.C. bucket (labor, variable overhead, etc)

Provide information if asked

- Fixed Costs for N.A. are $5M
- Raw Material Costs for N.A. are $0.10 per product
- Transportation Costs for N.A. are $0.05 per product
- Other V.C. in N.A. are $4M
- Fixed Costs for S.A. are $4M
- Raw Material Costs for S.A. are $0.05 per product
- Transportation Costs for S.A. are $0.20 per product
- Other V.C. for S.A. are $4M
- Manny's capacity in N.A. is 50M
- Manny's capacity in S.A. is 20M

Issue Tree: Qualitative Factors

In addition to the previous quantitative slides, candidate can explore various buckets

Environmental Concerns	Legal Concerns	International Expansion
-Is there a larger environmental impact associated with transportation from S.A.? - Do the same environmental regulations apply to the S.A. plant as the N.A. plant?	-Are there stricter/looser laws in S.A. or N.A.?	-Is it possible to expand to other markets? - What are the tax implications of international expansion?
Possible follow-up and guidance to interviewer	**Possible follow-up and guidance to interviewer**	**Possible follow-up and guidance to interviewer**
-Carbon footprint is something the company has been extremely concerned with and would like to keep emissions as low as possible. Shipping from S.A. would drastically increase the carbon footprint - Environmental regulations are not as strict in S.A., particularly with waste disposal and factory cleanliness. This could tarnish the company's image	- While laws are stricter in the U.S., Manny's is not willing to use any of the loopholes in S.A. to gain a competitive advantage for fear of damaging its image.	-Have the candidate explore the option by asking follow up questions - How much capacity is available? -Which markets should Manny expand to and why? -Where would Manny produce the goods to expand? - There will be import/export taxes, but for ease, assume they fall within other V.C.

Sample Recommendation

Recommendation	Manny's Manufacturing should continue to produce in the United States and sell the South American plant if an attractive opportunity arises. The reason to continue producing in the U.S. and not in S.A. are 1) Manny's would actually lose money on sales to the U.S. from S.A. ($10M revenue - $14M cost at full capacity utilization in S.A.); 2) It is cheaper to produce in the U.S. mainly due to transportation costs; 3) The environmental impact of producing in the U.S. is significantly lower; and 4) S.A. does not have the capacity alone to meet demand in the U.S. and therefore the N.A. and S.A. plants would both need to be running meaning Manny would incur the fixed costs at both locations.
Risks	-Manny's may not find a buyer for the plant or may miss opportunities to expand in S.A. -Manny's many eventually reach capacity in the U.S.
Next Steps	-Try to increase demand in N.A. to get the N.A. plant fully utilized - Explore international expansion - Find potential buyer for S.A. plant

BONUS
What would it take to make the S.A. plant more appealing? - Increased capacity - Lower transportation costs - Increased demand (the N.A. factory is not running at 100% utilization currently)