



Practice Case 13 (Formula Producer)

Question

The client is a manufacturer and distributor of infant formula. They sell their product nationwide, and are in the middle of the pack in terms of market share. They are currently trying to boost their market share while maintaining profitability.

There is a government welfare program called WIC (Women, Infants, Children) that allows individuals living below the poverty level to receive vouchers for infant formula for their children. Unlike most welfare programs, this one is subsidized by the actual producers of infant formula. On a state-by-state basis, infant formula producers bid for the right to be the sole supplier of infant formula to welfare recipients in that state.

In addition to paying the government for the WIC contract, the client also provides rebates to retailers for WIC sales. As a result, income received from WIC sales is substantially less than that received from normal formula sales. In fact, sales to mothers that remain in the WIC program for more than 12 months result in a net loss.

In trying to determine how much to bid on a WIC contract for a given state, what factors should you consider?

Background

This case is fairly wide open, and presents an issue that is most likely unfamiliar and ambiguous. One challenge will be for the interviewee to find one or more issues that they can explore more in-depth. The basic focus of their analysis should deal with the relative profitability of a WIC contract.

Response

Candidate: I think for this case I would first look at who the typical WIC customer is, and the dynamic of the relationship, meaning how long are they a customer, and what kind of loyalty is there. Since I don't have any children, could you tell me more about a typical WIC customer, in regards to buying formula?



Interviewer: Sure. Obviously the typical WIC customer is poor, since this is a form of welfare. But some things you might not know are that 1) the average WIC recipient stays in the program for less than 12 months, 2) mothers typically remain loyal to a brand through infancy for their first child, but for subsequent children recipients often switch back and forth between brands, and 3) infants typically require formula the first 22 months of their life.

Candidate: Thanks. With that knowledge, I can start to think about the issues facing this company. In trying to decide the terms for the contract, profitability is the primary driver. There's obviously some issue of social-enterprise here, but even so, I think profitability will drive much of the decision. Since the WIC recipient gets rebates in addition to the subsidized cost of the product, we need to quantify that rebate in order to understand what the profitability per recipient is. Can you tell me that?

Interviewer: For the purposes of this interview, let's assume that the rebates average an additional 10% (off of the retail price).

Candidate: OK. So the profit per customer might be determined by (WIC revenue - rebates - COGS). So if the revenue is \$100/customer/year, and the rebates are \$10, and COGS are \$75, we make \$15 per customer per year. As long as we're paying less per customer for these rights to be the sole-supplier, we're in the black.

Interviewer: For the most part, your logic is correct. But is there anything else that might be a factor in determining profit?

Candidate: Well, related to the actual profitability of the WIC product I'm not sure. But maybe there are some hidden costs or revenues that I'm not thinking about. In fact, maybe there are some synergistic revenues that the company can achieve. If they get the contract, that gets them additional shelf-space in the stores. And not just WIC recipients shop in the stores. So maybe they will be able to increase market-share, just by being on the shelf. Of course, they are getting full retail price for those sales. So I might add in an additional sales minus COGS to the equation. But to try and get an idea of that figure might be tough. How long to these contracts last?

Interviewer: Typically, several years.



Candidate: Ok, so knowing that a contract is several years, say 5, we can begin to get a total dollar value for the contract. If we know how many WIC recipients there are in this state that we're bidding, we can calculate expected revenues. Also, if we can get an idea of how much shelf space we would have, we can quantify the synergistic sales.

Interviewer: Good. I'm not going to make you go through the math on it, because we're about out of time, but you're right. There are 1.2 million WIC recipients in the state, and shelf-space is awarded based on volume sales. So for this company to get the contract, it can help them have more sales volume, and thus more shelf-space, and hopefully then more market share.

General Summary Comments

Ultimately, they should come up with some sort of explanation for how numbers would be run to estimate an appropriate contract bid. One example might be:

$$(\text{WIC revenue} - \text{rebates} - \text{COGS}) + (\text{synergistic non-WIC revenue} - \text{COGS}) \geq \text{Contract Bid}$$

COGS takes into account economies of scale.

Real world situation is that synergies are strong, and WIC recipients bounce in and out of program but stay loyal to product for first-borns. Not only are the synergies positive, but also on average WIC recipients are profitable because they pay retail for nearly half of the formula that they purchase over the first 22 months of their child's life.