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15.280 Communication for Managers  
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## Visual Aids Exercise

Your summer internship is with a well-known consulting firm. Your client, a large philanthropic foundation, believes that a serious shortfall of vaccines will occur in Africa over the next three years for a particularly deadly disease. They have hired your team to provide three specific deliverables:

1. What is the projected demand for vaccines over the next three years?
2. What is the current manufacturing supply projected for the next three years?
3. Is there a shortfall of vaccines and if so, what are the most effective methods to obtain more?

### Demand:

Your team analyzes historical trends of epidemics for the disease and runs Monte Carlo simulations to arrive at the following projections:

- Year 1: 18 million vaccines needed
- Year 2: 12 million vaccines needed
- Year 3: 8 million vaccines needed

The team believes that these projections are accurate within  $\pm 10\%$ .

### Supply:

Your team conducts multiple interviews with all the relevant manufactures of vaccines and arrives at the following conclusions:

- Firm W will manufacture 8 million vaccines in Year 1 but will then cease production. They will sell these vaccines for \$0.75 each.
- Firm X will manufacture 5 million vaccines each of the next three years. They will sell the vaccines for \$1.20 each.
- Firm Y is considering entering the market but will not do so unless they are guaranteed that the vaccines will be purchased. Their manufacturing capacity is 4 million vaccines per year, and they are willing to sell the vaccines for \$0.60 each. However, the firm needs 12 months lead time to ramp up production to manufacture the vaccines.

### Options:

It is clear that unless outside market forces influence production, an insufficient number of vaccines will be delivered to Africa for one or more of the next three years. As a result, tens of thousands of people could die. Your team brainstorms on numerous options to address this dire situation:

- A. "Clear the shelves" of vaccines sold in developed nations. There are 2 million excess vaccines available each year, but they cost \$20 each. These purchases can be made immediately.
- B. Split the manufactured vaccines into 1/2 doses. The efficacy of the vaccine is reduced somewhat so health authorities remain somewhat ambivalent about this option. The costs, however, would be minimal (estimated at \$1 million in labor to

- split the doses). It would also take about 6 months to split the doses and train the appropriate personnel.
- C. A manufacturer in Estonia, Firm Z, can provide 10 million vaccines each year at a cost of only \$0.40 per dose. However, this firm is not pre-qualified by the World Health Organization and thus, it is very unlikely that the vaccines would ever be allowed to be sent to Africa.

After two months of interviews and analysis, your team has its first meeting with the client next week. They are giving you only 3 minutes and expect to hear about your findings and recommendations. The project manager has asked you to prepare not more than 3 appropriate visual aids for the meeting.

Hints:

- Keep in mind what is important to the client. What variables will influence their decision as to what option(s) they choose?
- Keep the slides simple but be sure to include all information that you believe is relevant to their decision making process.