

## Challenge 12

Four companies are in competition to win a contract to design a custom electronics product for a multinational corporation. Interestingly, these four companies' bids are so close (cost, schedules for deliverables, etc.) that the multinational corporation has decided to make its selection based on the competitors' responses to certain questions. As the project design leader you have been selected to answer for your company, and you are now in a large conference room at the multinational's world headquarters. Your CEO, several board members, sales personnel, and your organization's management are in attendance. You are told that you must answer extemporaneously, without any appeal to notes, and without any commentary from your fellow employees. You are informed that none of your three competitors gave completely satisfactory responses to both questions. The questions:

- What is the difference between quality and reliability?
  
- What should be the principle reason for any technology company being in business?
  - a. Make a profit
  - b. Satisfy customers' needs
  - c. Advance the state-of-the-art
  - d. Provide employment

Will your answers win the business for your company? Scroll down to find out.

## Answers for Challenge 12

*Quality* measures a product's performance against its specifications *now*. *Reliability* is a measure of performance *over time* [i.e., how long a device will *continue* to perform within its specifications; and, even if it remains within its specifications, that it will be stable (i.e., *drift* will not be an issue)].

Companies should be in business to satisfy customers' needs (including reasonable pricing for the on-time delivery of product that meets quality and reliability guidelines). Assuming this is successfully accomplished, other things (profit, creative innovation, job creation & preservation, etc.) will, with the passage of time, fall naturally into place.