Five Kinds of Gaps and What to Do about Them

A generally accepted notion regarding problems is that a problem exists when there is an unacceptable gap between *what is* and *what should be*. It requires action but the action to take is not immediately apparent. In other words, there is uncertainty regarding action; hence, the view of problem solving as a matter of figuring out what to do.

A less widely known view is that those gaps between *what is* and *what should be* can come about in five different ways and how they come about has a lot to say about how to figure out ways and means of closing them.

In this paper we'll take a look at those five gaps and the three ways of figuring out what to do about each of them. First, the five gaps (see Figure 1).

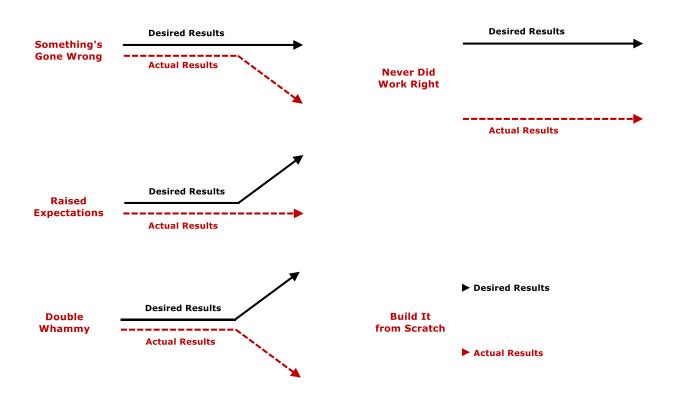


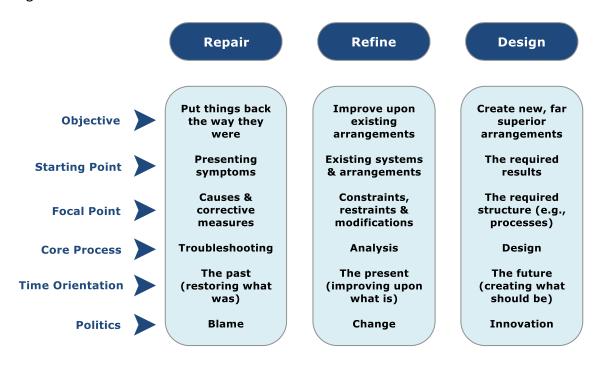
Figure 1 – Five Sources of Gaps

Something's Gone Wrong. In this case, things are going along just fine and then there is
a sudden deterioration in results. The obvious thing to do is find the cause and fix it.
This calls for a troubleshooting approach, one known to generations and legions of
technicians as "fault isolation."

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- 2. **Raised Expectations.** Here, there is no deterioration in results; instead, the bar is raised. New and higher expectations create the gap. There is no cause to find and fix. Some kind of change to existing systems and arrangements is required.
- 3. **Double Whammy.** A sudden deterioration in results is coupled with raised expectations. It might be the case that finding and fixing the cause will take care of part of the problem but to completely close the gap will require other measures as well.
- 4. **Never Did Work Right.** In this case the gap has always existed. The desired results were never achieved. Some practitioners will set off in search of "root causes" for this failure to perform. Other will conclude that an entirely new system is required to close the gap.
- 5. **Build It from Scratch.** The gap is brand-new, the result of setting expectations for the very first time. There is no system in place to achieve them and there is no system to troubleshoot. This is a basic engineering problem; the required system must be built for the first time.

The five gaps just outlined, coupled with their origins, suggest three basic problem-solving approaches, which I will sum up as *Repair*, *Refine* and *Design*. Each is briefly summed up in Figure 2 below.



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Figure 2 – Three Problem Solving Approaches

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As Figure 2 makes clear, an accomplished problem solver has to be a master of three basic and very different approaches to solving problems encountered in the workplace. It also makes clear that a search for the "cause" of a problem isn't always a relevant undertaking and in at least three out of the five cases, it is completely irrelevant.

Last, it can be the case that the search for cause is indeed relevant but, once found, it can't be fixed, so other measures are called for. The bottom line is that you need to take the concept of "cause" with a grain of salt and, in addition to solid troubleshooting skills, you also need the skills and abilities needed to refine and improve upon existing systems and arrangements as well as design or engineer them from scratch.

Recommended Reflection Activities

- Based on your own experience, jot down an example of as many of the five gaps as you can.
- What were the main differences in the way you approached each of them?
- Thinking back on your own problem-solving experiences, which of the five gaps occurred most frequently? Which occurred least frequently? Why do you think that is the case?
- Is there one or more of the five kinds of gaps that you have never encountered? Why do you think that is the case?
- Again, based on your own experiences, which of the three approaches (Repair, Refine, Design) have you employed? How did your experience with each approach fit with the descriptions presented in this paper?
- What more might you like to know about the five kinds of gaps or the three basic approaches to solving problems?