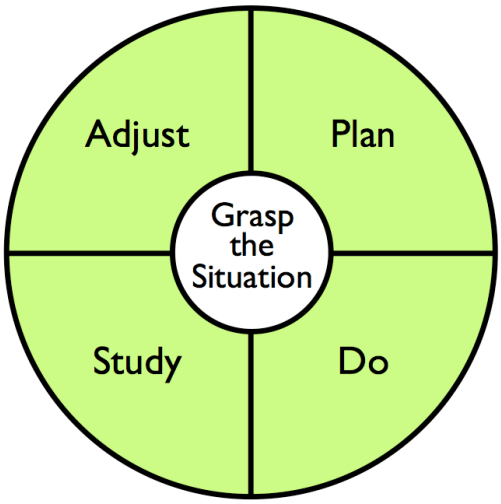
TIMEBACK MANAGEMENT

PDSA: From Fire Fighting to Durable Problem Solving

August 2013 Newsletter



Why do organizations so often fail to solve problems? Every time you read about yet another corporate reorganization, or see that a new head of sales was fired just six months after taking over, you can be sure you're seeing the results of lousy problem solving.

The main reason that our efforts fail is that we don't fully understand the problem. We leap to a solution without taking the time to ensure that we grasp the nature of the problem. We prize quick results, often sacrificing long-term effectiveness and durability. As a result, we spend our days firefighting, rather than identifying root causes and developing durable solutions to our problems.

The Plan-Do-Study-Adjust (PDSA) cycle is the linchpin of continuous improvement and is the antidote for this tendency to leap to solutions. (Some people use Plan-Do-Check-Adjust (PDCA) and the Six Sigma folks use DMAIC, but the principle is the same.) PDSA forces us to look before we leap. Faithfully following PDSA increases the likelihood that our countermeasures actually work and improve the situation. However, first you must get a firm understanding of the actual situation in the workplace.

Grasp the Situation:

Before you can attempt to solve any problem, you have to see the reality of the situation. That means going to the place where the actual work is done and observing the conditions first-hand. Reports from the IT department can't capture all the nuances that you need to truly understand what's going on.

For example, a few years ago, an athletic footwear company noticed an increase in order entry errors. Lazy or careless employees? No. The new software required an enormous number of screen changes and data entry field movement that wasn't at all intuitive. Rather than blaming the customer service reps, the company redesigned the screens. Another example: extra shipping boxes for a warranty department

were stored on the top of an office file cabinet. The warranty lead is 5'4". The top of the cabinet is 7'0". No wonder she couldn't ship out replacement products quickly!

Once you've grasped the situation through direct observation and interviews with the people involved in the processes, you can analyze the problems and identify root causes. Draw diagrams, prepare charts, make models, sketch storyboards, etc. to communicate what you've learned about the problem and the underlying causes.

Plan:
Once you really understand the problem, you can begin to design countermeasures. (Note: I prefer the word "countermeasure" to "solution," because there's seldom only one solution to a problem, and in any event, any solution is only temporary. As your company, your suppliers, your customers, and the external environment—especially technology—change, your solution will inevitably become obsolete.)

The plan stage of the PDSA cycle lists deliverables, timelines, and responsibilities. Unlike traditional corporate plans, it also lists the other alternative countermeasures that you've decided not to pursue. Having the context of all the possible options enables you to choose your countermeasures more wisely. The plan stage also includes likely problems or obstacles to implementation that might occur.

Study:
Think about your attempt to solve this problem as a scientific experiment. Evaluate the results you've gotten. Did your countermeasures work as expected? Why or why not? What did you learn from their success or failure?

Adjust:
If the changes aren't as effective as you hoped, what modifications can you make? If they are effective, can you formalize and standardize the new approach? Can you apply the learning to similar problems in other areas?

Nested PDSA Cycles:
Small problems may be solved with a single PDSA cycle. Larger problems, such as "How can we speed up our product development process?" or, "How can we onboard new employees more quickly?" will inevitably require multiple iterations. They may even require PDSA cycles for each phase of the larger process.

Next Step:
How could you apply the PDSA cycle to a problem you're trying to solve right now? How would you Grasp the Situation? Who would you talk to? What processes would you observe? How would you depict the current state?

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