

Dualistic and Systems Thinking

DR. W. EDWARDS DEMING'S "EIGHT SHIFTS IN PRIMACY"

Claire Crawford-Mason produced the 1980 NBC white paper that thrust Dr. W. Edwards Deming into America's corporate consciousness ("If Japan can... Why can't we?"). She believes that perhaps Deming's most important contribution was to bring together Eastern and Western thought. She refers to it as "dualistic and systems thinking."

Crawford-Mason has listed eight changes promoted by Deming that she calls "shifts in primacy." Consider how the following principles compare to your personal point of view and practices in your own organization.

1. Cooperation over Competition. When people value cooperation over competition, they work together more effectively, strive for optimization, think better and get greater enjoyment from their work.

About 25 years ago I experienced what Deming is talking about here. I flew into Dallas, rented a car, and stepped out to the curb to wait for my rental car company's courtesy van. Minutes later, a bus pulled up with the following words stenciled on its side: "National, Hertz, Budget, Avis." (Now this is common at many airports; but this was the first time I'd ever seen it.)

At the time I thought to myself, "How smart these Texans are!" Before me was a sterling example of cooperation over competition. In those days, most airports had separate fleets of courtesy vans for different rental car companies. But in Dallas, they were cooperating rather than competing, and everybody wins!

The companies win, with savings on capital investments, better route and terminal coverage, lower maintenance costs. Their equipment and maintenance services suppliers win because they're able to carry smaller inventories of repair parts, not to mention that they need to service just one type of bus. Every customer wins, with lower rental charges and no longer having to suffer the frustration of watching three other vans drive by before ours shows up.

And none of this keeps anyone from going into the rental car business. None of this is an unlawful restraint of trade. Rather, it is a prime example of Deming's call for leaders to strive for optimization, for cooperation, for win-win relationships.

2. Win/Win Relationships over Win/Lose Relationships.

Deming acknowledged how this point doesn't fit many people's attitudes on the job. "To get promotion, you have to get ahead. You don't get ahead by being equal; you get ahead by being ahead!" Teamwork involves hearing everyone's ideas; fill in for other people's weaknesses; acknowledge their strengths; work together. "You help other people. You may help yourself equally."

3. Both/And over Either/Or. This shift fosters an inclusive attitude rather than an exclusive attitude. It fosters a welcoming of new people and different perspectives more often than rejecting them.
4. Systems Thinking to Guide Analytical Thinking. When people become aware of the larger systems in which they are involved, they learn to stop blaming individuals for problems

produced by the system itself. (More than 90 percent of problems come from the system itself and not from an individual or outdated machine.)

A good way to help people ponder this point is to ask them to solve a simple math problem: If $A + B + C + D + E + F = 73$, what is the numerical value of F? One would conclude that this problem can't be solved without knowing the values or sums of variables A through E. But in American education, we assign a value to F with no knowledge of the value of the other factors. Here's how.

A, B, C, D and E represent the curriculum design, curriculum scope, curriculum sequence, text, supplementary materials, teacher, lesson plan, teaching methods, learning methods, assigned projects - including homework and the effects of the home environment, the test itself, physical facilities, technology, equipment, and a host of other variables. F represents the student. The test score comes out to be 73 and we assign the test score and a C-minus grade to the student alone.

Ludicrous. Grading, appraisal and other American management myths confound the person with all the other variables that affect performance. People can perform no better than the system allows. Stop fixing blame. Start fixing the system.

5. Continual Improvement over Good Enough. Always look for ways to improve the quality of personal and business relationships as well as the product or services being offered.

Years ago I attended a meeting with Dr. David Chambers, Dr. Don Wheeler, Dr. Chuck Holland, and several others who were involved in teaching Deming's principles and statistical methods. We were discussing how best to teach the process capability index (Cpk) to our students and clients. Chambers interrupted the discussion and growled, "I ain't gonna teach it! It ain't nothing but a substitute for spec's."

David's point was that when people learn that a product was meeting specification, they'll often declare, "Good enough." By the same token, if people learn that a Cpk is equal to 1.33, they'll conclude that it's "good enough," a barrier to improvement. He was right. Six Sigma and its obsession with the Cpk have proven to be a recipe for mediocrity; good enough; the antithesis of Deming's call for continual improvement.

6. Managing over Controlling. Use systems thinking to design, manage and continually improve outcomes, in personal relationships as well as institutions.
7. Proactive over Reactive. Cultivate attention and awareness and learn to be proactive rather than reactive. Avoid living in the trance of familiar habits of mind in favor of operating with an open mind.

Many quality management systems (QMS) call for timely application of corrective action/preventive action (CAPA) to all non-conformances and customer complaints. Such reactive behavior is necessary when failures occur. A shift toward proactive thinking occurs when the QMS and stage-gate new product development process integrate Failure Mode & Effects Analysis (FMEA) into the organization's behavior. FMEA anticipates failures and causes of the failures and drives proactive changes to designs and processes to prevent problems and reduce risk.

8. Build more long-term thinking and decisions into your life rather than short-term thinking and impulsive choices.

Notes

J.F. Leonard, The New Philosophy for K-12 Education: A Deming Framework for Transforming America's Schools, ASQ Press, Milwaukee, WI (1996), p. 40.

_____, Management's Five Deadly Diseases: A Conversation with Dr. W. Edwards Deming, Encyclopaedia Britannica Education Corporation, Lake Orion, MI (1984), videocassette.

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