

This is the fifth of a series of 12 articles on systems thinking, a way of understanding complex organizations and society offering significant promise for improving the leadership and management of commercial companies, not-for-profit organizations, and government agencies.

Part 5

The Learning Organization: Adapt or Die!

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How can a team of committed managers with individual IQs above 120 have a collective IQ of 63?

—Peter Senge [7:9]

An interesting question Peter Senge poses. I've seen the phenomenon myself, and other prominent instances abound. For example, consider an excerpt from a recent article in USA Today about Delta Airlines:

On Monday [Delta] will launch an updated Delta.com [web]site that has streamlined features, including a focus on core consumer services such as booking trips, checking flight information, viewing itineraries, and monitoring frequent flier mileage..."This is our primary focus of our marketing for the second half of the year," chief marketing officer Paul Matsen said...The troubled airline hopes to cut costs by luring more travelers to its website—and away from its telephone reservations lines. [2]

If Delta is fishing for more customers, they're not using very persuasive bait. The day before, Delta's chief executive officer, Gerald Grinstein, warned employees that cost-cutting efforts so far are not enough to keep Delta out of bankruptcy. Wall Street was so thrilled at this news that Delta's shares immediately plummeted 26 percent. [1]

This isn't a unique situation. Delta has had hard times before. Other airlines (United comes to mind) have had worse. Still other airlines (Eastern, Braniff and Pan American) have even failed to survive. In other words, there is no shortage of lessons out there about how *not* to run an airline, and at least one example (Southwest) of how to do it right. As Yogi Berra once said, "You can observe a lot just by watching." You'd think that airline executives would *learn* something. But apparently, you'd be wrong. As George Santayana once said, those who cannot learn from history are condemned to repeat it. (There's that word "learn" again!)

The Learning Organization

In *The Fifth Discipline: The Art and Practice of the Learning Organization*, Peter Senge defined a learning organization as one that is continually expanding its capacity to create its future. That's an intriguing definition, but one that says more about the outcome than the process.

Senge suggests that organizations aspiring to create their futures need to be able to learn in ways that Delta and the other airlines in financial trouble obviously haven't. The airlines are trying to survive. But *survival learning*, also referred to as "adaptive learning," while necessary, is reactive rather than proactive. Creating futures requires what Senge calls *generative learning*--a horse of a distinctly different color.

According to Senge, a successful learning organization satisfies five indispensable criteria: [7:6-10]

1. It practices *system thinking*.
2. Individual employees and leaders strive for *personal mastery* in all their activities.

3. Employees and leaders alike have a shared *mental model* of the world—the organization, its markets and competitors, and environment.
4. Its leaders have a *vision* of where they want the organization to go.
5. *Team learning* is central to its activities and success.

Senge maintains that systems thinking and team learning are incomplete without shared vision, personal mastery, and mental models. I can't dispute that. But for the purposes of this discussion, we'll acknowledge the importance of the middle three and focus on the first and last.

Team Learning: What is it?

The concept of teams inherently assumes that the coordinated efforts of many are more effective than the isolated effort of any individual—or even a collection of individuals. Anyone who has listened to a good symphony orchestra or watched a world-championship sports team intuitively understands this.

Organizations are composed of teams. In small companies, a single team may *be* the organization. Larger organizations may be comprised of many discrete teams. Either way, the concept of “team learning” is somewhat of a *non sequitur*. Since team is an abstract classification of a group of individuals, it's a little difficult to understand how learning can occur at an abstract level. Individuals can learn, and if a group of individuals that don't constitute a team learns the same lesson, it's difficult to justify that “team learning” has occurred.

I submit that the concept of *team* is inherent in how its members *operate and interact* with one another, not in how they learn. Senge himself makes the following observation:

"Team building" exercises sent colleagues whitewater rafting together, but when they returned home, they still disagreed fundamentally about business problems. Companies pulled together during crises, and then lost all their inspiration when business improved. [7:15]

When individual faces on the team (or in the company) change, expertise—previous learning—is resident only in the remaining individuals, whether they are executives, managers, supervisors, or line employees, not in the team. Any learning subsequently transferred to new team members comes from individuals, not "the team."

Collective learning occurs at multiple hierarchical levels: individual, group, organizational, societal. With each increasing level of complexity, the challenge of learning (and institutionalizing that learning) becomes more difficult. It requires more conscious, concerted effort, and sustainability at the organization level is uncertain at best.

This kind of learning is usually driven by one person (or a few committed individuals). Individual learning becomes team or organizational learning only when leaders institute a conscious effort—either by personal example or by directed policy—to seek out new information that could potentially change the nature of the operating environment, or the interactions of those who operate within it. In other words, *establishing effective organizational learning is a responsibility of leadership.*

Team Learning Versus Teamwork

The point here is that the operative word is “learning,” not “team.” The important activities associated with learning are capture, retention, recall, and application—in other words, how the learning is used to enhance *teamwork*. The distinction is important, because in the final analysis, all that is important from the team perspective is that team members recognize the need to aspire to learn (individually), to share what they've learned with other members of the team, and to internalize themselves the learning of others that is shared with them.

So, if learning occurs at the individual rather than at the team level, where does the “team” concept fit into the scheme of things? Effective teams are like well-oiled, finely-tuned machines. The various members work “seamlessly” with one another—virtually without friction. This doesn't happen naturally. It requires concerted effort and practice, practice, practice. In 1645 Miamoto Musashi, the prototypical *samurai* warrior, wrote *A Book of Five Rings* in which he described what it took to become a *samurai*: "Practice is the only way that you will ever come to understand what the Way of the warrior is about...Words can only bring you to the foot of the path." [5:94]

The team learning that Senge refers to [7:9] is not functional expertise. It's composed of two distinctly different domains: *teamwork* and *systems thinking*.

We've already touched on the idea of teamwork in this installment, and if you recall, we've seen it earlier, too, in the second installment, “Business and the Blitzkrieg.” Remember the essential tenets of the *blitzkrieg*: *Einheit* (mutual trust), *fingerspitzengefühl* (“fingertip feel”), *auftragstaktik* (moral contract), and *schwerpunkt* (focus point)? [6:52-58] Trust and the moral contract are the bedrock upon which effective teamwork is built, and they must be learned. They may be introduced to individuals, but they can only be learned as a team.

What about fingertip feel and the focus point? The former is equivalent to Senge's criterion of personal mastery. And the focus point—*schwerpunkt*—requires a systems thinking perspective, another key Senge criterion.

Systems Thinking: The Key to Effective, Efficient Teamwork

Systems thinking must also be learned on an individual basis, but it must be *applied* by teams to be effective. Whether that team is a small, cohesive unit or a large organization, or even society as a whole, systems thinking is a team function in successful organizations. (Refer to the first installment, “Systems Thinking” for a more detailed review of systems thinking.)

How does one (or an organization) apply systems thinking? In the last installment, “Sun Tzu and the O-O-D-A Loop,” we examined the maneuver warfare philosophy of John Boyd and its elegantly simple expression, the O-O-D-A loop. [3:190] The O-O-D-A loop has direct impact on both individual and organizational learning.

Observation and Orientation

Recall that the first two O's in O-O-D-A stand for observe and orient. [3:163-164] Their relationship to organizational learning is crucial.

According to Boyd, the observation step is a process of gathering information, from both within and without. This information can come from a variety of sources: the media, research, direct observation, experimentation, or clandestine intelligence activity, to name just a few. What are the potential targets of these activities? Generally, they fall into three classifications: our own operations, the actions and activities of others (e.g., competitors), and the external environment (e.g., politics, economics, international developments, technology advances, catastrophic events, etc.).

Observation might be characterized as “situational awareness”—an aviation term that means paying attention to everything that's going on around you. But obviously at some point paying attention to everything indiscriminately can lead to sensory overload. Leaders and teams need a way of separating what's important from what isn't; otherwise, they can drown in data.

This is where orientation comes in. The *orient* step can be described as a process of interpretation and synthesis. (Refer to the third installment, "Analysis and Synthesis.") By analysis and synthesis, the

separation of the important from the trivial—and the integration of the important parts into a useful whole—takes place.

Boyd described orientation as one's "world view," or how we visualize what's going on around us. In other words, our understanding of the world, how it affects us, and how we affect it. To the extent that our perception of the world actually *matches* reality, we're confident in our ability to function effectively in it. To the extent that reality diverges from our view of how things are, or ought to be, we experience difficulty and confusion, which normally show themselves as failures.

How do we come to our orientation (world view)? Boyd suggests that it's the integration of many factors: cultural traditions, previous experiences, our own analysis and syntheses, new information, and even our genetic heritage, from which we derive our psychophysical skills. [3:189]

The chief problem: people's world view becomes entrenched—static—while at the same time reality is *anything but* static. To the extent that there is a mismatch between an organization's orientation and reality, policies or practices based on that orientation become increasingly invalid or even irrelevant. Performance deteriorates and failures occur.

Such failures are hard to miss, even by busy leaders and managers. And naturally, they try to correct these problems. In other words, they *react* to a deteriorating situation. But inevitably, without a systems thinking perspective, these reactions are based on the aforementioned invalid policies or procedures—the result of an entrenched world view—so those reactions are often not effective. They may even exacerbate an already unfavorable situation. As reality diverges further from the organization's orientation, reactions become progressively less effective.

The Solution

The solution should be obvious: make a concerted effort to seek out new information (observe), then try to fit it into our world view, adjusting (orient) the world view as required to logically accommodate the new information. Done properly, effective orientation reduces the mismatch between perception and reality, pointing leaders toward revising policies and procedures that are more effective in the real, competitive world.

Richards points out that “since what you're looking for is mismatches, a general rule is that bad news is the only kind that will do you any good.” [5:63] What this means is that we must be actively gathering information, looking for mismatches between it and our orientation, and adjusting our world view, and the policies that spring from it—and do this faster than our competitors—in order to gain tactical or even strategic advantage. Thinking about all this "learning business," is it clear now how Delta, United, American, and the other airlines have failed to observe and orient properly?

So, how is *your* organization doing at learning?

You live and learn. Or you don't live long.
—Lazarus Long [4]

The ability to learn faster than your competitors may be
the only sustainable competitive advantage.
—Arie de Geus [7:4]

Endnotes

1. “CEO's cost-cutting memo sends stock into dive,” USA TODAY, Thursday, July 28, 2005, p. 3B.
2. “Delta hopes fliers will flock to new web site,” USA TODAY, Friday, July 29, 2005, p. 6B.
3. Hammond, Grant T. *The Mind of War: John Boyd and American Security*. Washington, D.C.:The

Smithsonian Institution Press, 2001.

4. Heinlein, Robert A. *The Notebooks of Lazarus Long (illustrated by D.F. Vassallo)*. San Francisco: Pomegranate Artbooks, 1995.

5. Musashi, Miamoto. *A Book of Five Rings* (Victor Harris translation). London: Allison and Busby, 1974.

6. Richards, Chet. *Certain to Win: The Strategy of John Boyd Applied to Business*. Xlibris Corporation, 2004.

7. Senge, Peter. *The Fifth Discipline: The Art and Practice of the Learning Organization*. NY: Doubleday, 1990.