The Challenges of Profound Change

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In 1988, the *Harvard Business Review* carried an article called "Planning as Learning," by Arie de Geus, coordinator of group planning at Royal Dutch/Shell. Though he was not well known outside of Shell, his article resonated with a great many people–particularly this line:

"We understand that the only competitive advantage the company of the future will have is its managers' ability to learn faster than their competitors."

Eight years later, the American CEO most admired by his peers, Jack Welch of General Electric, had come to the same conclusion. Welch made this statement in a GE annual report:

"Our behavior is driven by a fundamental core belief: The desire and the ability of an organization to continuously learn from any source—and to rapidly convert this learning into action—is its ultimate competitive advantage."

Several other large companies—including Chevron, Coca-Cola, First National Bancorp, Mead Industries, Shell Oil, and Tenneco—have also featured the "learning organization" concept in recent annual reports. These and other corporate statements echo the theme that learning is the only infinitely renewable resource. Conpetitors can gain access to other resources: capital, labor, raw materials, and even technology and knowledge (for example, they can hire away your people). But no one can purchase, duplicate, or reverse-engineer an organization's ability to learn.

This article is an excerpt from the book The Dance of Change: The Challenges of Sustaining Momentum in Learning Organizations, published by Currency/Doubleday, 1999.

By now there are many years of experience to draw upon from organizations that have explicitly sought to enhance their capacity to learn. While the gains from downsizing, reengineering, and "slash and burn" retrenchments often fail to sustain themselves, the gains from enhancing learning capacity have proven to be sustainable, cumulative, and self-reinforcing. Here are just a few examples described in our book:

- The Ford Motor Company's Electrical and Fuel Handling Division (EFHD, now part of Ford/Visteon, a freestanding Ford operation that combines all Ford's components businesses) had been a poorly regarded division, losing \$50 million in 1991. It changed into a "successful learning community" that made more than \$150 million in 1996. The division's sales doubled, and it expanded from three United States plants to ten around the world, with an unprecedented style of collegiality across international boundaries. "We talk about problems openly, without penalty, so the problems don't happen again, "said one senior manager.
- "Transformation" endeavors at the Shell Oil Company in Houston, and more recently within the Royal Dutch/Shell group of companies worldwide, have been credited with sparking a renaissance of business initiative and innovation. Shell Oil has evolved a "federalist" governance structure, in which formerly bureaucratic entities such as Shell Chemicals and Shell Services (formerly the "Administration" department, responsible for information technologies and other centralized services) have become new global businesses, independent and viable in their own right.
- The U.S. Army's highly innovative National Training Center uses elaborate practice fields, simulations, and "After Action Reviews" to build a sophisticated organizational self-awareness involving officers and enlisted men. The success of tactical operations in Desert Storm, Haiti, and Bosnia has been attributed to this new approach— and so has a recognizable leap in soldiers' capabilities and commitment.

Similar stories have emerged in a wide range of organizations: British Petroleum, Burch-Lowe, Chrysler, Covenant Insurance, Detroit Edison, Eskom, Harley-Davidson, Hewlett-Packard, Intel, Mitsubishi Electric, Scania, Springfield Remanufacturing Company, Toyota, Xerox, and many others.

Ultimately, these learning initiatives are judged through the lens of business results. People learning in business settings have no difficulty defining meaningful indicators of real progress—such as time to market, customer loyalty, quality, and long-term profitability and growth. But people also ascribe meaning to the satisfaction of the journey itself. "This was the first time in [my long career] with this company that I, as an individual, felt valued by management," commented an engineer involved in a multiple-year learning initiative. "I felt that they had an absolute trust in me and in the team. Because I had trust from them, I put a lot of trust in my team. On other programs, I was constantly double-checking and telling people what to do—not asking them, 'What do you think we should do?' It's made a lot of people enthusiastic who have not been enthusiastic at this company for 20 years."

Each of the authors of this article has had the experience of being pulled aside by a manager or executive. "I just want to tell you," the manager will say, "what I appreciate more than anything else about this work. I've redis-

covered my love of learning."

Learning Versus Training and Teaching

To many people in business, "learning" means "training." They seem to see learning as a frill, with no link to business results (or other desired results). At worst, learning means "taking in information"–listening to a lecture or reading an assigned text, with no relevance to the future you are creating.

This view may come from the passive style of rote learning that many people associate with school. The word "training" originally meant "directing the course of a plant": to be trained is to be controlled.

But the word "learning" derives from the Indo-European *leis*, a noun meaning "track" or "furrow." To "learn" means to enhance capacity through experience gained by following a track or discipline. Learning always occurs over time and in "real-life" contexts, not in classrooms or training sessions. This type of learning may be difficult to control, but it generates knowledge that lasts, in the form of enhanced capacity for effective action in settings that matter to the learner.

All organizations learn—in the sense of adapting as the world around them changes. But some organizations are faster and more effective learners. The key is to see learning as inseparable from everyday work. (Training, by contrast, is typically episodic and detached from the context in which results are produced.)

The Challenges of Sustaining Progress

But amid all the success and satisfaction, there are also many stories of failure, setbacks, and organizational backlash. Some learning initiatives never seem to get off the ground, despite interest, resources, and a compelling business case. In other cases, initial success goes unrecognized. Innovators who expected to be rewarded and promoted lose their jobs instead. Or they just move on, searching for organizational settings more open to their ideas. Even after years of success, learning-oriented cultures can come under relentless attack from new bosses, new members who don't appreciate their benefits, or sudden changes in the business environment that lead to a perceived need for tighter controls. Unexpected problems seem to come from nowhere. We who have been working in the field of organizational learning for many years have experienced all the above problems and a few more. Indeed, leaders of innovation have faced these sorts of setbacks for the 200-year history of modem corporations and throughout human history.

Recognizing that learning is not just a matter of good intentions, some leaders seek to reinforce those intentions with shifts in governance structures or top-down policies. Jack Welch, in his 1997 letter to GE shareholders, pointed to "critical enablers," such as new compensation and appraisal mechanisms, as essential mechanisms "if the rhetoric [of organizational learning] is to become reality."

While changes in measurement and performance appraisal mechanisms might be important, we are skeptical about whether they are sufficient. In fact, inappropriate measurement of people's performance is but one of several limits to learning. There are equally deep and difficult impediments to change. For example, an unspoken attitude that "managers should never present problems—only solutions" could ensure, if unchallenged, that all reward systems promote "lone ranger-style" heroics and discount team learning. Unless this assumption is openly examined and unless it eventually shifts, any new performance appraisal mechanism that managers design will simply reproduce the same chronic problems that plagued the company before.

So far, we have identified 10 distinct challenges—sets of forces that oppose profound change—as well as 3 growth processes that sustain such changes. Each challenge grows from distinct limits to learning and change. Although we have encountered these challenges in the context of "learning initiatives"—change initiatives in which enhancing learning capability was an overt part of the strategy—we believe they will just as likely come into play in all initiatives aimed at deep and extensive change. They are, as best we can tell, the organizational analogs to the plant's need for water, soil nutrients, sunlight, and space for roots to spread. They are the limits to any profound change process, and any one of them can be sufficient to thwart such change.

All these challenges are predictable. They arise as natural counterpressures to generating change, just as the need for soil, sunlight, and water arises as natural limits when plants start to grow. Though they often appear as seemingly independent events, they are interconnected and interdependent. There are high-leverage strategies that can help teams and individuals deal with each challenge separately. But the greatest leverage comes from understanding them as an ensemble of forces.

Failure to understand these limits and the challenge they generate is the source of countless frustrations for committed leaders. For those readers who have struggled with the norms of control and intimidation in traditional cultures, who have coped with being judged as ineffective amid abundant evidence that new innovations are working, and who have had to protect subordinates from the larger corporate culture, it is easy to become discouraged. It seems as though the harder you push, the harder "the system" pushes back.

In fact, this is exactly correct—the system is pushing back. The organizational limiting processes naturally

represent the "homeostatic" forces of industrial-age organizations. The fundamental flaw in most innovators' strategies is that they focus on their innovations—on what they are trying to do—rather than on understanding how the larger cultures, structures, and norms will react to their efforts. On the basis of the experience of those who seem to be sustaining progress, we have come to the view that no progress is sustainable unless innovators learn to understand why the system is pushing back and how their own attitudes and perceptions (as well as other forces) contribute to the "pushback." When they see this, they start to develop systemic strategies for sustaining profound change.

Ten Challenges

The challenges **of initiating change** develop as soon as any "pilot group" (which could be a local team, a business unit, or a senior management team) begins to conduct its work in unfamiliar ways:

- "We don't have time for this stuff! " The challenge of control over one's time. People involved in change initiatives need enough flexibility to devote time to reflection and practice.
- "We have no help!" The challenge of inadequate coaching, guidance, and support for innovating groups, and of ultimately developing internal resources for building capacity.
- "This *stuff isn 't relevant!*" The challenge of relevance: making a case for change, articulating an appropriate business focus, and showing why new efforts, such as developing learning capabilities, are relevant for business goals.
- "They're not walking the talk!" The challenge of management clarity and consistency: the mismatch between behavior and espoused values, especially in those championing change.

The challenges **of sustaining momentum** take place within a pilot team as it achieves early success, and between the team and the larger organizational culture:

- "This stuff is worthless." The challenge of fear and anxiety: concerns about exposure, vulnerability, and inadequacy, triggered by the conflict between increasing levels of candor and openness and low levels of trust among pilot group members.
- "This stuff isn't working!" The challenge of negative assessment of progress: me disconnect between the organization's traditional ways of measuring success (both metrics and time horizon) and the achievements of a pilot group.
- "We have the right way! They don't understand us!" The challenge of isolation and arrogance, which appears when the "true believers" within the pilot group confront their "nonbeliever" counterparts outside the group; the pilot group and the rest of the organizational system consistently misinterpret each other.

The challenges **of redesigning and rethinking** appear when change initiatives gain broader credibility and confront the established internal infrastructure and practices of the organization:

- "Who's in charge of this stuff?" The challenge of the prevailing governance structure, and the conflicts between pilot groups seeking greater autonomy and managers concerned about autonomy leading to chaos and internal fragmentation.
- "We keep reinventing the wheel!" The challenge of diffusion, the inability to transfer knowledge across organizational boundaries, making it difficult for people around the system to build on each other's successes.
- "Where are we going?" and "What are ice here for?" The challenge of organizational strategy and purpose: revitalizing and rethinking the organization's intended business focus, its contribution to its community, and its identity.

It is customary, in the West at least, to hear the term "challenges" and immediately gear ourselves to overcome hurdles. Indeed, the word's roots come from the Latin *calumnia*, or "deception." But there is an alternative meaning, suggested by natural systems, where "challenges" are simply the conditions of the environment that regulate growth.

As more complex organisms, such as human systems, evolve and grow, they contribute to their own limits or challenges. Historian Arnold Toynbee, for instance, proposed the influential theory of "challenge and response": that civilizations sustain their existence through their creative development in response to new large-scale challenges, which in turn are often the consequence of their prior development. In that spirit, challenges are opportunities to improve—by exercising our attention, understanding, and ultimate creativity. This is not dissimilar to the Chinese notion of crisis: two symbols meaning "danger" and "opportunity."

There is no guarantee that you will encounter all 10 challenges. *You* will likely encounter others we have not yet identified. But we believe that leaders seeking to sustain profound change should at least understand these limits.

In the book from which this article is extracted, we first address the challenges of initiating change (such as "not enough time") because, by and large, these challenges must be confronted at the outset. After some progress has been achieved, one is likely to encounter the challenges of sustaining momentum. The challenges of redesigning and rethinking may be present from the beginning, but they will tend to manifest as obvious impediments after some success and legitimacy have been achieved. Within that general pattern, each organization will encounter its challenges in its own sequence.

Although the symptoms may appear isolated from one another, the 10 challenges of profound change are dynamic, nonlinear, and interdependent. They are dynamic because they arise from balancing processes that naturally "push back" against efforts to produce change. They are "nonlinear," in the sense that you cannot extrapolate reliably from one experience to another. In a different setting, with only a few small distinctions, a given challenge may play out entirely differently. Last, they are interdependent. Addressing one can increase the challenge of addressing another, or, in other cases, make it easier.

As noted above, these challenges occur not just in "learning organization" initiatives, but in any organizational change movement aimed at making deep changes in systems and practices and in people's attitudes and behavior. Writer Virginia O'Brien, for example, points out that they have all been visible in efforts by women and minority members to establish an equitable presence in the workplace. According to one prominent report, successful initiatives had to include the following elements: support from the CEO (to meet the challenge of "walking the talk"); research on the barriers created by clashing assumptions (the challenge of true believers); programs to recruit and develop new behaviors (the challenge of "no help"); reducing barriers between different parts of the organization (diffusion); linkage initiatives to business plans (not relevant); goals and managerial accountability for progress (measurement); gender-neutral rewards and promotions (governance); etc.

The stronger a learning or change initiative, the stronger the challenges seem to be, because they represent natural systemic responses to maintaining balances threatened by the initiative. At the same time, the earlier and more clearly that you can anticipate these challenges, the easier it becomes to deal with them. *You* don't have to wait until the challenges become visible; the best time to prepare for them is before they have appeared. They require investments of time and energy that may not be possible once you are facing the problems directly.

As leaders at all levels deal with these challenges (and others) regularly, they may gradually cease to appear as challenges at all. They will become aspects of life, episodes that bolster and strengthen those committed to genuine change, bringing new capabilities and new understanding. For each of us authors, dealing with them has helped us to see things about ourselves—like a tendency to blow up or get discouraged in the face of resistance. Ultimately, as a wise advisor once suggested, "reality is not the adversary."

Questions

As you consider the 10 challenges, the following questions can help you link them to your own experience and future.

- Do I see the challenge in my situation? Am I aware of the set of forces that might be working counter to my efforts? Many challenges to sustaining significant organizational change are invisible at first.
- Do I understand the nature of the challenge? How do I tend to see it? Can I see it differently? How do others see me when this challenge is encountered? These questions establish an orientation of inquiry toward important developments that we might otherwise see only as barriers blocking our path. Blaming "barriers" tends to evoke our most habitual, not our most creative, responses.
- Who can best help me in understanding and dealing with this challenge? How might we help each other? Many of us set out to conquer our problems single-handedly. But most of the time, these challenges do not affect us merely as isolated individuals. We can operate much more effectively by sharing our efforts with colleagues who are part of the same "system," or whose abilities and interests complement our own.
- What would constitute effective action in dealing with this challenge? What capabilities might we want to develop? All too often, people's actions represent reactions to circumstances rather than considered strategies aimed at deep aspirations. This question helps you look strategically at your actions over the next several years.
- *How -will I know if I am making progress?* No strategy is ever completely apt, so all courses of action need to be continually assessed. But most people, when acting, stop paying attention to what is going on around them.

Focused on moving forward, they lose sight of the effects they are having, especially those on the periphery of attention. Because the challenges of profound change are complex, it is pivotal to remain open to continuous improvement in the clarity with which we see them.

Appreciating Balancing Processes and Compensating Feedback

Self-proclaimed "change agents" often complain that "people resist change." But the people or groups typecast

as resistant rarely see themselves that way. Often, instead, they believe themselves to be quite open. From a systems viewpoint, it is not the people "who are resisting," rather, it is a system functioning to maintain its internal balances, as all living systems do. Just as all growth in nature is achieved through self-reinforcing growth processes, "homeostasis"—maintaining balances critical to survival— is accomplished through balancing processes.

"History is a process of transformation through conversation," according to biologist Humberto Maturana. In our efforts to produce change, we often forget how important it is to pay attention to what is being conserved. Balancing processes are not the enemy. They are neither inherently good nor bad. Whether or not we value a particular balancing process depends on how much we value *what it conserves*. Balancing processes that conserve financial cash balances, adequate production capacity, technological know-how and innovation, or committed customers are not problems. Indeed, many of the change strategies at the heart of developing learning organizations hinge on conservation of personal purposefulness, honesty, love of inquiry, and the quality of relationships. But, balancing processes that conserve inflexible cultures, outmoded centralized styles of management, defensive routines that stifle innovation, mis leading metrics, organizational "stovepipes" that thwart knowledge diffusion, high levels of stress, and fragmented ways of thinking are problems.

The flaw in most leadership strategies stems from fighting blindly against balancing processes, rather than seeking to understand what is being conserved. When this happens, leaders of all types become the victims of "compensating feedback."

Compensating feedback arises when people attempting to produce change do not see the balancing processes that are conserving the status quo. When they encounter difficulties, they "naturally" work harder to overcome them. But the harder they push, the harder the system pushes back.

Compensating feedback is what happens when a person enters a room with no knowledge of the thermostatic heating system in place. Imagine that the thermostat is set at 90 degrees. *You* open a window to cool down the room. It works for a short while, until the heater comes on and it starts getting warmer again. *You* then open another window, with the same results. After a while you have opened every window there is and you can't understand why the room will not cool off. In this case, there is no leverage in opening the windows. Achieving lasting change requires understanding the thermostatic balancing process in operation; *You* need to either alter the balancing process (for example by turning off the furnace) or reset the thermostat.

Exactly the same happens with each of the limiting processes underlying the challenges of profound change. For example, a local line leader fails to understand why people seem uncommitted to a new initiative. He entreats them to the task, telling people how important it is. *Yet* the harder he tries to convince them, the less convinced they seem. Somehow "pushing harder" on commitment is not making people more committed. In fact, the harder he pushes, the less committed people seem to be. He fails to see that his own credibility is the real issue—people do not trust that he himself is prepared to change. The more he exhorts them, the more they hear "you must change." Until he addresses the limiting process at play, the "credibility of his values and aims," the balancing process will keep compensating for his efforts.

If leaders do not understand the balancing processes and limits underlying each challenge, they do not understand what the system is trying to conserve. Each of the individual limiting processes works to conserve some aspect of the status quo. For example, the limiting processes underlying the four challenges of **initiating** conserve a low rate of successful initiation. They do so through conserving low effectiveness of such initiatives (because pilot groups have neither the time nor help they need) and through conserving low commitment to them (because they are seen as not relevant or because their advocates are distrusted). Each of the challenges of **sustaining** conserve a high rate of premature mortality of otherwise successful initiatives. For example, the limiting processes of "true believers and nonbelievers" conserve irresolvable differences between innovators and the mainstream by reinforcing each's stereotypes of the other. The same can be said of each of the challenges of **rethinking and redesigning**, only more so: these limiting processes conserve both low initiation and low sustaining. For example, underlying the challenges of governance are balancing processes that conserve centralized decision-making through conserving low tolerance for local control and conserving low decision-making capabilities of local actors.

Once leaders begin to appreciate these limiting processes and what they are conserving, they can begin to identify higher-leverage strategies. In each case, this starts by seeing the balancing process that is at work and what it is trying to conserve. This is why virtually all of our suggested strategies for the challenges focus either on weakening those balancing processes or altering the underlying limit or constraint. Otherwise, we will just keep "opening windows," rather than sustaining profound change.

Nonlinearity

Understanding limiting processes and principles such as compensating feedback is very different from having a list of "how to's." *Yet* many managers seek just the latter type of answers, and many management books en-

deavor to provide them. The only problem is that most "how to" books are not very practical.

Generalizing from one situation to the next can be logically sound in a system like the solar system. If you know the location of Pluto today, you can extrapolate its position for the next 2,000 years. This is because the laws of motion that govern the planets are linear laws, where each incremental change in one variable causes a constant incremental change in another. But extrapolation is a fool's occupation in a nonlinear world, where even "perfect knowledge" leads to highly imperfect predictions.

Effective leaders know this intuitively. They know that it is tempting to say, "This is how we did it over there and it worked. So, we should follow the same rules here." But "here" and "there" are never identical and even small differences can alter the outcome of so called "tried and true" formulas. If you have ever worked for a manager who knows "exactly how things should be done," you know what we mean. He or she is trapped in a futile struggle to make today's reality fit yesterday's answers, and everyone suffers as a consequence. This does not imply that there is no learning from experience, but real learning is more subtle than that which can be captured in simple formulas or rules.

This is why we repeatedly emphasize intuitive appreciation of the different challenges to profound change and reflection on their meaning in your own context. Only through deep understanding of these issues can you lay a foundation for real learning, Only through practice and continuing reflection will practical know-how develop. There are no answers. But there are ways of looking at reality that offer more leverage than others.

For more information on The Dance of Change, see http://www.fieldbook.com.

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