

## **LEADERSHIP IN LIVING ORGANIZATIONS, Peter M. Senge**

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All societies are a product of their age and in turn create their age. We live today in a period of extraordinary transition. We are trapped between two worlds, an old world and a new world. The industrial age was dominated by the myth of unending material progress and the image of the machine. The new age remains unnamed because it is as yet unformed. Regardless of how we label it—information age, systems age, or simply postindustrial age—it will not be more of the same. It is not possible to sustain indefinitely a continuing increase in material throughput on a finite planet. Nor can we continue to expand population and resource consumption in an increasingly crowded world of people who do not know how to get along with one another. And the metaphor of the machine, which has given us incredible material affluence but also rigid bureaucracies, assembly-line jobs and schools, and an ever more frenetic, disconnected way of living, must be superseded by the image of the living system.

Nature operates through cyclic processes. The industrial age has operated, by and large, through linear processes: take, make, waste. Nature generates diversity. The industrial age has generated homogeneity, relentlessly eradicating both biological and cultural diversity. Nature focuses on means, allowing ends to emerge. The industrial age has focused on goals, allowing them to justify whatever means were needed.

What kind of society will emerge in and shape the new age? What possibilities will it afford? What new ways of living? None of these questions are answerable. Yet each must be pondered. “History does not follow the path of opportunities but the path \_of desires,” says Chilean biologist Humberto Maturana. How we humans go about discovering, articulating, and manifesting our desires will shape the future.

In particular the practices of a society are embedded in the practices of its institutions and evolve with them. This is why changes in how institutions of business, education, government, and social services operate matter—and why leadership, the energy that enables such change, is so important.

## **What Do We Typically Mean When We Speak of Leaders?**

In everyday colloquial usage, *leader* is typically used as a synonym for *top manager*, as in, “Our leaders will never go for that” or “All change starts with the leadership.” This way of thinking poses at least two problems.

The first is evident when someone says, “Great idea. But what do the leaders think?” This question (and the assumption behind it) is disrespectful and disempowering to everyone in the organization who is not a top manager. It constrains innovative thinking and actions.

The second problem is more subtle: if leadership is defined as top management, then it has no real definition at all. Having two terms to describe the same thing means that one is redundant. But there are few other working definitions that would be widely agreed on. This is why even after organizations decentralize decision making, people still tend to speak of leaders as “the people at the top.”

This confusion affects every aspect of organizational practice, including the development of future leaders. What corporation does not spend copiously for *leadership development*? High-potential managers are identified early in their careers. They are “fast-tracked,” “mentored,” and sent off to countless expensive programs intended to develop them for prospective senior management positions. This is undoubtedly important. But why not call this what it is: executive development. By calling it leadership development, we again reinforce the notion that responsibility for the future of the enterprise lies in the hands of a chosen few. And who knows what opportunities for real leadership development, more broadly construed, we miss by focusing exclusively on the elite?

Our choice of words is not academic. Our language shapes our perceptions. It also shapes our actions, making us aware of some possibilities and blind to others. Definitions are especially important when the experience and concerns we are pointing to are something that matters deeply.

## **What Do We Typically Think Leaders Do?**

*Leaders drive change.* That is what is expected of *real* leaders today. However, when combined with the definition of leader as top manager, this view leads to a continual corporate search for the hero-CEO—the person (read “man”) who can deliver for the shareholder, who can energize change-resistant employees, and who is not afraid to make “tough decisions.” Gradually, this thinking is spreading to other institutions as well, which are likewise becoming trapped in a search for their own heroic figures to drive change in their recalcitrant, inward-focused, noncompetitive organizations.

But might this very thinking be a key reason such institutions are so prevalent? Might not the continual search for the hero-leader to drive change divert our attention away from building institutions that by their very nature continually adapt and reinvent themselves?

In all types of institutions a disturbing pattern is emerging. Faced with practical needs for significant change, we opt for the hero-leader rather than eliciting and developing

leadership capacity throughout the organization. The new hero-CEO then pumps new life into the organization's suffering fortunes, typically by cutting costs (and usually people) and boosting productivity and profit. But the improvements invariably do not last. Many of the leader's grand strategies never get implemented; instead, people cling to habitual ways of doing things. New ideas do not spring forth from people on the front lines because they are too intimidated to stick their necks out. Energies are not released to create new products or new ways to meet customer needs because people are too busy competing with one another in order to please their bosses. Invariably, new crises ensue, spurring a search for a new hero-leader. In effect, the myth of the hero-leader creates a self-reinforcing, vicious spiral of dramatic changes imposed from the top, increasing fear and diminishing leadership within the organization, leading eventually to new crises and calls for more heroic leadership.

Worshiping in the cult of the hero-leader who drives change is a surefire way to maintain change-averse institutions. In fact one can hardly think of a better strategy to achieve precisely this goal. The price that we all pay in the long run is incalculable: institutions that lurch from crisis to crisis, continual stress on the members of those institutions, mediocre (at best) long-term performance, and further reinforcement of the point of view that "common people" are powerless to change things.

### **A Shift of View**

Ironically, despite our continual struggles to drive resisting organizations to change, we are surrounded by a world of continual change. Little in nature seems to stay put. Everything is in motion, continually changing, forever adapting—everything, that is, that is alive.

Herein lies the fundamental failure of most leadership strategies. We fail to understand that what we are seeking to change is alive. Instead, we see our organizations as if they were machines.

It is impossible for us, as products of the industrial age, to know the extent to which the machine metaphor shapes our perceptions. But our language gives away our underlying assumptions. We talk of leaders "driving change," as if they were operating heavy equipment. Have you tried to "drive" a teenager lately? Machine thinking is not limited to the subject of leadership. Our organizational lexicon evokes a mechanical world of *measures, plans, programs*, and managers *in control*. In fact, as Arie de Geus has argued (*The Living Company*, 1997), society views the corporation as a machine for making money. It has *owners*. By contrast, would a living human system be owned? The corporation has designers and builders, those who create its formal *systems* and *procedures*. In contrast, a living system builds itself (this is one of the definitions of a living system in biology). The corporation's *health* is measured by how much output (money) it creates for its owners, again a perfectly reasonable criterion for judging a machine but not a living system. Lastly, of course, as a machine, a corporation cannot change on its own—this is why it needs leaders who can *drive* change.

Noncorporate organizations are no different. For example, the industrial-age school is clearly modeled after an assembly line: everyone is expected to start and end at the same time and the same age and everyone is to move at the same speed. Those that move at a slower speed are given labels like “learning-disabled” and typically pushed off the line, to make way for the “smart” kids, who move more quickly.

Thinking of leadership as an expression of a living system requires fundamental shifts. It requires a new definition and new metaphors, that is, new language. It requires new principles and new perspectives. But, interestingly, none of what is needed is really new. In fact it is quite old. The foundations for understanding leadership in a world of living organizations already exist, recollections that predate the machine age and that we have not yet entirely lost.

### **An Alternative Definition of Leadership**

The following simple definition of leadership has proved quite helpful in change projects over the years: *the capacity of a human community—people living and working together—to bring forth new realities.*

Another way to say this is that leadership energizes. Leadership breathes life into an enterprise, without which nothing truly new can emerge. The word *inspire*, long associated with leadership, derives from the Latin *inspirare*, literally “to breathe life into.”

This simple notion of human communities creating new realities unifies the extraordinarily diverse individuals whom we see as exemplary leaders—public figures like Lincoln, Gandhi, Susan B. Anthony, and Harriet Tubman; organizational leaders Thomas Watson Jr. of IBM, Theodore Vail of AT&T, labor organizer Samuel Gompers; and also leaders from the arts and sciences, from Picasso, Martha Graham, and Shakespeare to Albert Einstein and Marie Curie. Obviously, many of these people were never “bosses” at the top of an organizational hierarchy, yet all are widely regarded as leaders.

This simple definition also points to the interplay of individual and community. Each of the individuals just mentioned was a product of his or her world and in turn inspired an outpouring of new theories, ideas, and approaches that had an extraordinary influence on a given field and on the culture.

Lastly, I believe that this simple definition points to much of what we are actually seeking through greater leadership in human affairs, in organizations, in schools, and in communities. Leadership is about tapping the energy to create—especially to create something that matters deeply. Where this energy exists, we are more engaged, fulfilled, and productive. We are more alive.

### **Creative Tension**

Leaders generate such energy through creative tension.

I recall a small executive session in 1983, led by Peter Drucker, in which a CEO asked Drucker for his definition of leadership. He answered, "Leadership is vision. There's nothing more to say." Indeed, it is hard to think about human communities bringing forth new realities or organizations shaping their future without embracing the notion of "vision." The word *vision* has almost lost its meaning over the last ten years, due to the faddishness surrounding vision and mission statements. But *vision* is not a new word. We are told in Proverbs 29:18, "Where there is no vision, the people perish." It is hard to see an idea from the Old Testament as just a management fad.

*Vision*, an image of the future we seek to create, is closely identified with the arts as well as the world's religions. As Picasso once expressed it, "It would be very interesting to record photographically, not the stages of a painting, but its metamorphoses. One would see perhaps by what course a mind finds its way toward the crystallization of its dream."

But the creative process is equally the domain, potentially, of all managers, all practitioners, all professionals. Ultimately, people in any setting are deeply interested in what they can make happen. Make no mistake: you can have a great theory about business, or about music or painting, but the question that matters ultimately is, *What can you produce?*

Yet I think leadership involves a force beyond vision alone, as suggested by Dr. Martin Luther King Jr.'s reflection on his own work in his "Letter from the Birmingham Jail" (1963): "Just as Socrates felt it was necessary to create a tension in the minds of men so that individuals could rise from the bondage of myths and half-truths; so must we create the kind of tension in society that will help men rise from the dark depths of prejudice and racism."

The tension that King is talking about does not come from vision alone; it comes from vision juxtaposed to current reality. King is famous for his "dream," but his core leadership strategy revolved around "dramatizing the present situation," in the mode of Gandhi, from whom King gained many of his strategic insights. This is the principle of *creative tension*. It is the essence of leadership. Leaders energize through generating and sustaining creative tension, through fostering commitment to realizing a dream and to telling the truth about what is.

Tension always seeks resolution, release. If the vision remains constant, creative tension can be resolved only when reality moves toward the vision. There are no other options. This is not mystical. It is logical.

Conversely, leadership is diminished whenever creative tension is undermined. There are two ways this can happen. One is that we do not have the will or ability to articulate our dreams. The other is that we lie about current reality, especially when we deceive ourselves that reality is closer to our vision than it actually is. The first is the path of compromise; the second the path of denial. Both are commonplace in organizations dominated by fear, stress, and powerlessness.

## **Operationalizing the Definition**

The two poles of vision and reality demarcate the territory in which leaders work. But we also need metaphors and operating principles for leading change.

When leaders contribute to initiating and sustaining significant change, they operate more like gardeners than heavy equipment operators.

Gardeners do not entreat their seeds to grow. Can you imagine a gardener leaning over her or his seedlings and shouting “grow!”—a simple image that would be well worth managers’ considering. Gardeners understand that a seed has the potential to grow and also that they do not put that potential there. If the potential to grow does not exist, there is nothing a gardener can do to cause growth. Gardeners also understand that growth occurs through an interaction between the seed and its environment or, more precisely, that the seed and the environment create a self-reinforcing growth process. The seed sends out small shoots and draws in water and nutrients. As more water and nutrients are drawn into the seed, its primitive root system extends further, drawing in still more water and nutrients, extending the roots even more. As in all of nature’s growth processes, what is growing starts small, and for some time, most of the change is underground.

This is the first principle of leadership: understand the self-reinforcing processes of growth. If these do not operate, change will not generate energy, it will absorb energy. This is why so many people who take on the role of change agents find themselves having to continually push change and why they so often become burned out by the effort.

But such growth processes cannot progress unless they have conducive conditions. This is why the gardener’s attention must also focus on a second set of forces: the host of limiting conditions—like inadequate water, temperature, sunlight, soil nutrients, and room for the root system to expand—that could keep the growth processes from operating. The seed’s potential to grow will not be realized unless these limits are eased or removed.

All things grow in nature through the interplay of reinforcing processes that foster growth and limiting processes that constrain growth. This is why all effective leadership strategies always come down to nurturing reinforcing growth processes and relieving the limiting processes. Period. Effective leaders recognize intuitively the interplay of these forces and learn to work with them. They do not drive change; they participate in the growth processes and mitigate the constraints on change.

## **The Dance of Change**

This leads to two key questions: What self-reinforcing processes promote significant change, and what specific limits impede change? Only by seeking to understand these forces can we see what effective leaders are actually doing and why. In fact, seeking to understand these forces and the variety of leadership strategies employed to deal with them has been a focus of ongoing research for the past several years within SoL, the Society for Organizational Learning. (To learn more, visit the SoL Web site at

<http://www.SoL-NE.org>—see specifically the information on the research project “Towards an Ecology of Leadership.”)

### **Growth Processes**

To date, SoL research has identified three basic, self-reinforcing growth processes. Each of them starts with initial progress made by a “pilot group,” typically in a line organization in which local managers have sufficient autonomy to try out new ideas and work practices. Pilot groups may be sales or engineering teams, manufacturing units, or even top-management teams, so long as they concentrate on changing how they operate in confronting strategic issues, rather than making speeches and “rolling out” programs. Initial adopters or creators of new innovative practices are usually guided by their personal beliefs and vision. They apply new ideas in local settings where they have some control, believing that these ideas will spread if they are effective. These people usually do not think explicitly about self-reinforcing growth processes, but they often have such processes at least intuitively in mind.

The first reinforcing growth process most leaders identify and try to establish is fueled by improved *business results*, that is, improvement in the tangible indicators that practitioners see as evidence that an innovative new practice is producing real benefit. When practitioners achieve significant improvement in business results, the credibility of their innovative ideas increases, leading to more enthusiasm and the willingness of others to commit to these ideas. This “better mousetrap” theory lies at the heart of the potential spread of any new practice or way of doing things.

But achieving significant new practical results does not happen overnight. It can take six, twelve, or twenty-four months for new capabilities and new practices to take root and produce tangible evidence of improvement. Moreover, business results are influenced by many factors in addition to an innovative way of doing things; for example, many promising innovations are thwarted because of external forces like an economic downturn or a new competitor. This is why better business results are a weak reed to rely on for change and why we have found, from deeper examination of countless real cases at SoL, two other primary growth processes \_at work.

The second growth process functions through enhanced *personal results*. Simply put, people become more committed over time to changes that matter to them. Specifically, people value work environments in which they experience trust, shared vision, and genuine listening to one another, and in which difficult issues are dealt with openly, rather than in private hallway conversations. When such environments develop, more people become enthusiastic and willing to commit to further change.

But people are also greatly influenced by peers, by what colleagues in other working teams are doing, and this constitutes the third self-reinforcing growth process. Why does one department head try something that has worked in another unit? Usually, it’s not because the boss told her to try it; it’s because she knows the people involved and considers them credible or because she sees the business results they’ve achieved. As more people become involved in any innovative practice, that practice reaches further into their informal networks, exposing still more people; if people are enthusiastic about

the personal and business results achieved, their enthusiasm spreads through ever widening circles. Such crosscutting *communities of practice*, not formal management hierarchies, have been shown in many settings to be the primary channels through which new ideas and practices actually diffuse in large organizations.

What is important for leaders to understand is that the reinforcing effects of enhanced personal results and informal networks can develop more quickly than increased credibility through improved business metrics. All three growth processes matter, but leaders who rely on increasing credibility from measurable results may miss the leverage from personal commitment and growing networks of like-minded people.

## Limiting Processes

These self-reinforcing growth processes are only half the story, however; by themselves, they would cause all new ideas with potential merit to take root, and those that proved their merit locally would then spread without limit. But this is hardly the case in today's organizations. If anything, the opposite is more likely. Most promising new ideas never get tested seriously, and most of those that do prove themselves in one local setting do not spread, especially when they challenge established assumptions and ways of operating. In fact, as business historian Art Kleiner has shown (*The Age of Heretics*, 1996), one of the most compelling features of the challenge of organizationwide change is how often good ideas not only do not spread but get their proponents into trouble. When this occurs, most change advocates "push harder," trying to overcome those resisting change. Few understand that they are encountering ubiquitous balancing or limiting processes that keep promising new ideas from getting implemented and practices that prove themselves locally from spreading.

These limiting processes are the challenges to significant change, and they fall into three broad areas.

*Challenges of initiating* come into play in the pilot-group setting and can prevent significant change from ever getting started or progressing very far.

*Challenges of sustaining* develop once significant momentum has built up; they can arise within the team or pilot group or at the interface between the pilot group and the larger organization.

*Challenges of redesigning and rethinking* grow out of the fundamental features of industrial age institutions that thwart significant change regardless of how it begins.

Altogether these challenges encompass ten distinct sets of balancing processes. Many of them are sufficient to limit change by themselves. Together they represent a virtually insurmountable array of forces aimed at preserving a host of balances most change agents either disregard or naively believe will not affect their aspirations (see Exhibit 7.1).

In initiating change, for instance, people must have enough flexibility to manage their own time; if they cannot invest the time and effort necessary to develop new capabilities or work processes, no growth will occur. But time to develop without help to develop can result in a waste of time, especially if the changes people are trying to achieve involve significant new capabilities. Likewise, people must understand the business case for change. They must also see that the advocates of change are willing to "walk the talk," that their values and goals are authentic.

These are the kinds of limits that managers seeking to initiate real change must attend to. They are the water, sunlight, and soil conditions that can arrest significant change before it ever gets started. In initiating change, leaders *must* deal with time, help, relevance, and walking the talk if they hope to succeed. It does little good to have brilliant innovative ideas if people have no time to pursue them or no help in implementing them or cannot connect them to their business priorities.

## **Exhibit 7.1. Challenges of Change.**

### Challenges of Initiating

- *Time flexibility.* Do people have sufficient control of their own time? \_If they don't, they will not have enough time for significant change initiatives.
- *Help.* Do people have the coaching support they need? If not, they will flounder in initiatives that require new skills and capabilities.
- *Relevance.* Does management make a compelling case for change? If not, people will conclude that the change initiative is not relevant.
- *Personal alignment.* Are management's values and goals perceived as authentic and aligned with its actions? If not, people will see that management is not "walking the talk."

### Challenges of Sustaining

- *Fear and anxiety.* How will people deal with the personal threat of more honest, direct, and inquiry-oriented working teams? If this threat is not recognized and addressed, some in the pilot team will disengage and even work to undermine the initiative.
- *Assessment and measurement.* Do people have the patience to persist in difficult learning efforts even though significant business results might take many months or even years? What happens when some results look worse by traditional measures? If this challenge is neglected, many will view otherwise promising innovations as unsuccessful.
- *Believers and nonbelievers.* How will the organization deal with the threat posed to those outside the team by the new behaviors of team members? How does a successful pilot group avoid having its confidence turn to arrogance and the consequent siege mentality? If these issues are neglected, polarization between innovators and mainstream people can become unresolvable.

### Challenges of Redesigning and Rethinking

- *Governance.* Is the enterprise able to effectively distribute legitimate power to local operations, or does management seek to maintain control? Are people capable of assuming more power in pursuing new business opportunities and in managing interdependencies? Neglect of these issues leads to continual destructive power struggles between innovative pilot groups and senior management.
- *Diffusion.* Can profound change initiatives spread effectively across organizational boundaries, both internal and external? If not, people will keep reinventing the wheel.
- *Strategy and purpose.* What will it take for the organization to continually reinvent itself as its world changes? How can new ideas about purpose and strategy that emerge from innovative pilot groups influence thinking more broadly? Failure to address this challenge cuts off a source of key ideas about the future and prevents continual renewal and rediscovery of genuine purposefulness.

But leaders must also be prepared for the challenges that arise once a pilot group has begun to build some momentum. They must have strategies for dealing with the fear and anxiety that will eventually arise within the pilot group as difficult issues that have been buried in the past come to the surface (it is these issues that become the subjects of hallway conversations). Leaders must be prepared for the polarization that can occur between believers in the pilot group and nonbelievers outside. They must deal with established performance measures, even though some might be inappropriate for their

efforts. Ultimately, organizationwide change requires dealing with the sources and uses of power (governance), the fragmentation caused by rigid boundaries (diffusion), and reluctance to rethink what the enterprise is all about (strategy and purpose).

If personal and collective vision lies at the heart of generating significant change, then willingness to look deeply at current reality is the key to seeing the forces that can limit change. Often this is a blind spot for passionate innovators. They behave like gardeners who believe so much in their seeds that they neglect the conditions necessary for their growth. Some see the basic challenges of initiating as too mundane for their efforts; consequently, they have great ideas but no significant change ever starts. Others are more successful in initiating yet systematically neglect the challenges of sustaining; finding it incomprehensible that others do not share their zeal, they become increasingly ineffective beyond their small circle of followers. Last, the challenges of redesigning and rethinking are widely ignored because most people in large institutions cannot imagine changes in such entrenched concepts as the central concentration of power or the assumed purpose of the business.

### **Leadership Communities**

Addressing only some of the challenges of change makes the others even more limiting. It is like being a gardener who pays attention only to water and ignores soil nutrients. The success in providing water makes poor nutrients a more severe limit.

This is why leadership communities are so vital. The diversity of forces represented by the different challenges requires a diversity of leaders. So far, within the SoL community, we have found that three types of leaders are essential: local line leaders, internal networkers, and executive leaders. Each plays key roles, and each needs the others.

*Local line leaders* are critical to initiating because by and large only they can deal with important day-to-day matters like time, help, relevance, and walking the talk. They are also vital in dealing with the challenges of sustaining, including challenges within the pilot team and at the interface of the team and its larger environment. In fact, some research suggests that a defining characteristic of a successful team is that it is effective at managing its boundaries with the large organization. Contrary to the myth that the hero-CEO is the primary innovator, our experience within SoL has been that local line managers, with business accountability, operate at the heart of all significant organizational innovation, for the simple reason that they are at the front lines, where value is generated and where new ideas can be applied, tested, and assessed.

But the strengths of talented local line leaders are also their limitations. They are often so focused on their own business or sphere of accountability and its improvement that they are isolated from other like-minded colleagues. This is one reason why *internal networkers*, people who spread new ideas and move freely across functional boundaries, are also important leaders. Internal networkers can be internal consultants, training professionals, or human resource staff; they can also be engineers or salespeople. They serve as guides, advisers, active helpers, and *accessors*, connecting people and ideas

across the organization. They are vital partners to local line leaders in dealing with the challenges of initiating and sustaining, and they also contribute in unique ways to resolving challenges of diffusion, especially as critical agents in communities of practice that cross organizational boundaries.

But neither local line leaders nor internal networkers can deal with the challenges of redesigning and rethinking without the active engagement of *executive leaders*.

Ultimately, executive leaders are vital for influencing the overall environment within which all innovation and learning occurs. They are designers, teachers, and stewards. They have unique responsibilities for the infrastructures of governance, measurement, and strategy. Good design will not create commitment and energy, but poor design will surely thwart them. Executive leaders also play key roles as mentors and coaches, especially in helping local line leaders face complex organizational and political responses to their efforts. Last, effective executive leaders serve as role models. By focusing their energies on the functioning of their teams, they communicate a symbolic and practical message about willingness to change. As recently retired Shell CEO Phil Carroll says, “You have to start, in the first place, with yourself. Every process of transformation is a series of individual learnings and decisions by people. It has to start with personal change. The abstraction of corporate change and so forth—that’s a result, not a method” (R. Hanig, *Leadership* [video], 1997).

One thing executive leaders are not is the primary agent of change. Initiating and sustaining significant change, the operational definition of leadership, is much too complex for any one group. In re-creating industrial-age institutions for the postindustrial world, either there exists a healthy leadership ecology or there is no leadership at all.

The ideas expressed in this chapter are based on the Fifth Discipline fieldbook, *The Dance of Change: The Challenges of Sustaining Momentum in Learning Organizations*, 1999.