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The Key to Cultural Transformation

Frances Hesselbein

Changing the culture of an organization requires transformation of the organization's purpose, focus on customers, and results. Frances Hesselbein explores the seven steps involved: (1) scanning the environment for the few trends that will have the greatest impact on the organization in the future; (2) determining the implications of those trends; (3) re-examining the mission and refining it; (4) dropping the old hierarchy and creating flexible, fluid management structures and systems that unleash people's energies; (5) challenging assumptions, policies, and procedures and keeping only those that reflect the desired future; (6) communicating a few compelling messages that mobilize people around mission, goals, and values; and (7) dispersing the responsibilities of leadership across the organization at every level.

In times of great change, organizational culture gets special attention. Leaders issue calls for cultural change, stating: "We need a more entrepreneurial culture," or, "We must create a culture of accountability." If we could alter the underlying beliefs of our organizations, the thinking goes, our practices would surely follow.

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But changing the culture of an organization requires a transformation of the organization itself—its purpose, its focus on customers and results. Culture does not change because we desire to change it. Culture changes when the organization is transformed; the culture reflects the realities of people working together every day.

Peel away the shell of an organization and there lives a culture—a set of values, practices, and traditions that define who we are as a group. In great organizations the competence, commitment, innovation, and respect with which people carry out their work are unmistakable to any observer—and a way of living to its members. In lesser organizations, distrust and dysfunction are equally pervasive.

If we note Peter Drucker's definition of innovation—"change that creates a new dimension of performance"—it is the performance that changes the culture—not the reverse.

When I was leading a transformation of one of the largest organizations in the world, with a workforce of over 700,000 adults serving more than 2.2 million young members, our focus was not on changing the culture—though that was a result. Our focus was on building an organization committed to managing for the mission, managing for innovation, and managing for diversity.

Changes in the practices and beliefs of an organization do not happen because someone sits in the executive office and commands them. They happen in the real world, in local communities. The 700,000 women and men who served as volunteers and staff, as well as the parents of the young people served, had to be deeply committed to the goal of equal access and to building a richly diverse organization.

We changed the very face of the organization—the program, the uniforms, the way we trained adults and delivered services,

the way we communicated—but never the purpose, the values, the principles, or the promise of a great institution. The changes came through a mission-focused effort that was inclusive and involved those affected by the decisions as well as those implementing them. We listened to our customers—some of them only five years old.

A respected first-time visitor to our headquarters, listening and observing, said, “Rarely have I observed a culture that is so palpable.” That culture flowed from the transformation—it changed as the organization changed.

Our passionate purpose was creating opportunities for girls to reach their own highest potential. We concentrated on building a viable, relevant, contemporary organization that truly furthered that purpose. Through that building process, the culture was inexorably changed. The result was the greatest membership diversity in 78 years, coupled with the greatest organizational cohesion anyone could remember. The culture became a powerful reflection of the organization and its people, those who served and those who were served.

From experience and observation, there are seven essential steps to transform a culture through a changed organization:

- *Scanning* the environment for the two or three trends that will have the greatest impact upon the organization in the future
- *Determining* the implications of those trends for the organization
- *Revisiting* the mission—answering Peter Drucker’s first classic question, “What is our mission?” and examining our purpose and refining it until it is a short, powerful, compelling statement of why we do what we do

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- *Banning* the old hierarchy we all inherited and building flexible, fluid management structures and systems that unleash the energies and spirits of our people
- *Challenging* the gospel of “the way we’ve always done it” by questioning every policy, practice, procedure, and assumption, abandoning those that have little use today or will in the future—and keeping only those that reflect the desired future
- *Communicating* with the few powerful, compelling messages that mobilize people around mission, goals, and values—not with 50 messages that our people have trouble remembering
- *Dispersing* the responsibilities of leadership across the organization, so that we have not one leader, but many leaders at every level of the enterprise

And along the way, by initiating each of these challenging steps, leaders of the organization, in their behavior and language, embody the mission, values, and principles. By working with others toward change, we create the desired result—the inclusive, cohesive, productive organization reaching new levels of excellence in performance and significance.

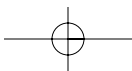
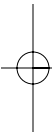
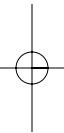
Peter Drucker, in *Managing in a Time of Great Change*, makes a powerful statement: “For the organization to perform to a high standard, its members must believe that what it is doing is, in the last analysis, the one contribution to community and society on which all others depend.”

That is the marriage of culture and organization, of belief and practice, that marks our best institutions. And in a wonderfully circular way, as the organization and its people grow

and flourish, the culture reflects and resounds and delivers a message—changing as the environment and the needs of our customers change.

In the end, it is a good thing that culture is not easily changed. A culture defines the heart of the organization, and a change of heart is not to be taken lightly. But the introspective and inclusive process by which an organization formulates its values and revisits its mission will enable organizations to serve their customers and communities with high performance, to be viable and relevant in an uncertain future. That capacity to change and to serve is the essence of a great and vibrant culture.

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Strategies for Change Leaders

A Conversation Between
Peter F. Drucker and Peter M. Senge

In late 1999, Peter Drucker and Peter Senge explored some of the challenges of leadership and change. Their conversation touched on many issues, including the pace of change and how leadership can deal with constant change; they discussed the issue of what can be learned from nonprofits. Highlights of their dialogue are presented here.

How can leaders prepare themselves and their organizations for the changes that lie ahead? No question is more fundamental to the success of our business and social institutions. In a remarkable meeting in late 1999, two of the great thinkers of our time—Peter Drucker and Peter Senge—explored the challenges of leadership and change. Their three-hour conversation touched on many issues:

- The discipline of planned abandonment
- The need to focus on opportunities rather than problems
- The importance of preserving institutional values and trust in the midst of change

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- What businesses can learn from nonprofits about attracting and mobilizing knowledge workers

Will the pace of change accelerate in the future?

Peter Senge: It's hard to imagine that the next 10 or 20 years are going to bring less change than the past 10 or 20 years. An interesting way to think about this question is to imagine where we were 10 or 20 years ago, and what we would have imagined for the time we've just lived through. What's most useful is not so much predicting specifics, but trying to understand the forces at play. Futurologists love to tell us that we're going to work so many hours, commute so many miles, and so on. But those are just extrapolations, trends. What's extremely difficult in a time like this is to think about what *breaks* the trends.

Peter Drucker: Most people think the last few years have been years of very great change. Actually that's only because the preceding 30 years were so continuous. We are at the point where the transition turns over. We have been through two big transitions in the last 500 years in the West, one starting with Gutenberg and one with the steam engine. After 40 or 50 years there's a total change, and we are just at that point today. One implication is that every organization will have to become a change leader. You can't manage change. You can only be ahead of it. You can only make it.

People say, for instance, that the information revolution is just beginning to have an impact, but nobody predicted the biggest force for change in the information era—e-commerce. E-commerce will make the multinational as we know it today obsolete. At the same time we can say with 90 percent probability that the new industries that are emerging will have noth-

ing to do with information. I will take a risk here and suggest that the most important new industry in the next 30 years will be fish farms. We are moving from being hunters and gatherers on the oceans to being aquaculturalists. There are a few others in the wings, and they have nothing to do with the information technology. They have a lot to do with the new mind-set.

In all probability, the single dominant factor in all developed and emerging countries will be population changes. Only in the English-speaking world, where we accept immigration, will we still have a birthrate barely adequate to maintain the population. In Italy the birth rate is down to about a third of the replacement rate. In Japan it's half the replacement rate. Except in the English-speaking countries, the youth market is over. The extreme youth culture of the last 40 years was based on demographics. It's an old rule that the population group that is both the biggest and growing the fastest determines the mood. Since 1950, in all developed countries, these have been people between 15 and 30, or 12 and 25. Even in the U.S. today, the fastest-growing age group is 55-plus. Nobody quite knows yet what the new mind-set is going to be, because we've never had these demographic changes.

How does an organization and its leadership deal with a world in the vortex of change?

Peter Drucker: First, accept the fact that organizations have to deal with change, and not believe this is something you do on Friday afternoon. Second, leaders have to create receptivity to change, and there is only one way to do it. You have to build organized abandonment into your system. There's nothing that so concentrates a manager's mind as to know that the present product is going to be abandoned in two years. Otherwise you won't innovate, you'll postpone.

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Innovation is hard work and you may put in five years before you see any output. In the meantime you are being compensated on this year's results, and you're going to put more money into making the old product, the old service. That's just patching. Every three years, at the least, every organization should sit down and look at every product and every service and say if we didn't do this already, knowing what we now do, would we go do it? If the answer is no, don't make another study, just stop.

Peter Senge: Your notion of planned abandonment raises the question, Why is it so hard for us? Logically it makes a lot of sense. You just can't keep adding in new things. After a while the weight of everything that's there holds you back. A lot of people in the creative arts have a very good feeling for this because you create something and you move on. But once we get into organizations and institutions somehow the dynamics change. As you suggested, it's one thing to say the business is dead and we're losing money like mad, so we must abandon it. But often the right time to abandon is much earlier than that, because trying to maintain this activity is soaking up your creative possibilities.

We do things the way we do because we haven't really thought of other ways to do them. And it is extremely difficult in many organizations to challenge assumptions. It's a career-threatening act for individuals to raise their hand and say wait a second, I have a real question about what we're doing.

Peter Drucker: Once you've gotten over the first couple of years, the process becomes self-supporting, but the start is very difficult. That is because managers, over the course of their career, spend more time with their product or service than with their spouse and children. This is their child, their life. They're emotionally invested. I've seen so many people who have no

personality except in their product. But the time to get rid of a product is not when it no longer produces, but when somebody says it still has five good years. That's the time to say cut.

Peter Senge: It seems to me, Peter, we're on to something quite fundamental. There is a difference between *creating* as an orientation toward life and *problem solving*. Our enterprises are so dominated by an ethic of problem solving that it undermines creating—bringing something new into reality. So much of the recognition and rewards system of the organization says, Who fixed what problems? And of course we spend a lot of our time fixing unimportant problems. The real question is, what predominates—creating or problem solving? It seems to me that this basic shift between predominantly creating and predominantly problem solving is profound.

Peter Drucker: You know, I am a little unhappy with all the talk about creativity. To some extent it's a cop-out to cover up our problem focus. There is no lack of creativity. But we are doing our level best in most organizations to squelch it. There are exceptions, quite a few. But by and large, even small businesses find it very hard to experiment. I say to my clients, don't make a study, go out and try it. Where you have a market in which you are strong, and it's sufficiently remote, go test it. In three weeks you'll know 10 times as much as you'll know in any study, at a fraction of the cost.

What else does it take for an organization to lead change?

Peter Drucker: You have to infuse your entire organization with the mind-set that change is an opportunity and not a threat. That takes hard work. And then you have to work with two

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hands. One is the systematic right hand where you methodically look at changes. You start out looking for unexpected success, because that is usually the first indication of an opportunity. Where you look for change is different for different businesses. Demographics is always one, and technology is always one. But if the change looks like an opportunity, you put one or two good people to work on it.

Then, with your second hand, you have to be receptive to what comes in over the transom. You have to have somebody at the top who enjoys the unexpected. The most important thing I have to tell people at the top of the organization is that they're not being paid for being clever. They're being paid for being right.

I have a friend in Canada who arrived penniless from Europe right out of a displacement camp. Today he has a \$3 billion company, a leader in the high-tech field of information. He credits all of his success to his willingness to listen to customers who say, I want to show you something that we are doing.

Peter Senge: That's an appreciation of surprise. There's an element there that you're talking about, which is completely disregarded in formal management education. We're supposed to figure things out. We're supposed to make the machine work and correct problems when they come up. But when you are creating, a lot of the most important developments are what you *didn't* expect. It's how you recognize and deal with surprise that counts.

Peter Drucker: That will become absolutely crucial, because there will be a great many surprises, and if every surprise is a threat we won't be around for very long. I'm not saying that every surprise is an opportunity, but every surprise is something to be taken seriously.

Peter Senge: You need to learn how to ask, Is this a *relevant* surprise? If we were out sailing and the wind changed, that would be a surprise, but it would be a relevant surprise. We would know immediately that our prior course was not nearly as important as dealing with the surprise. The problem that happens in a lot of corporations is people immediately disregard most of the surprises as being not relevant. So how do we help people think about that distinction?

Peter Drucker: Most problems cannot be solved. Most problems can only be survived. And one survives problems by making them irrelevant because of success. It's amazing how many minor ills the healthy body can stand. One focuses on success, and especially on unexpected success. And runs with it. This is a matter, above all, of placing people.

What I have learned to do is to take a sheet and list our opportunities, and the risks. I try to focus on few priorities; one cannot do too much. And then I have a list of the best-performing, ablest people in the organization, and try to match the people to the opportunities. Until I have a name, a deadline, and accountability I have good intentions and nothing else.

Peter Senge: That's one of the most simple and basic lessons for leaders, is find where the energy wants to go, and work with it. Sometimes there's a part of us that wants to correct the people that are wrong, rather than finding the people who are passionate to build something and supporting them.

Peter Drucker: One answer to this is the human law that says the gap between the people at the top and the average is a constant. And it's terribly hard to work on that big average. You work on the few at the top and you raise them, and the rest will follow.

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I knew the late Georg Solti, who raised the Chicago Symphony Orchestra in five years from comfortable mediocrity to being world class. He told me, “I looked at 128 members in the orchestra, and the 20 who were top flight and wanted to excel, and worked with them. Sure, I had to fire a second oboe or cello. But suddenly the standards, the vision had changed.” One runs with performers, one runs with success.

Peter Senge: It connects back to something you mentioned earlier when you said there’s no shortage of creativity in organizations. The question is, Are we paying attention to the creativity that’s trying to come out? Or are we busy trying to move the whole thing in lockstep fashion?

Peter Drucker: A substantial majority of executives in all organizations spend most of their time worrying whether we need that fourth carbon copy. The weight is constantly being pushed into being program focused and mediocrity focused. One has to fight it all the time.

How do you create a balance between change and continuity?

Peter Drucker: Today’s businesses, especially American businesses, are upsetting people unnecessarily—not because there is too much change, but because leaders do not even try to emphasize the continuity, the relationships, the mature responsibilities that convert them all into an organization.

Peter Senge: We tend to think that people are stressed out because there’s too much change. I don’t think that’s true. People are stressed because they’re profoundly uneasy at what it is they’re doing. There’s a principle in biology that I’m just starting to understand. A famous biologist, talking about the evolu-

tion of species, said history is a process of transformation through conservation. Nature preserves a small set of essential features and thereby allows everything else to change. For example, bilateral symmetry, whereby nature can produce 2 legs, 4 legs, 8 legs, 16 legs, is conserved across diverse species. If we start to understand there's a fundamental principle that allows change to occur in nature, then we immediately see that as human beings living and working together we must continually ask the question, What do we intend to preserve?

Peter Drucker: The same biologist would probably have also said that it's by no means an accident that all animals have the same number of heartbeats during their lifetime. Whether this is a salamander or a human being, it's the same. Nature learned that this is optimum, and preserved it. And if you look at organizations what is the equivalent? It is trust, and we are not really doing the things needed to preserve the trust in an organization. And trust basically means predictability.

The things you fundamentally are committed to remain the same. They are values, they are not tools. That is the way you help create trust. And on that basis you can have very rapid change and it doesn't upset people.

During a time when people's commitment to their work and their workplace is critical, how can organizations promote worker satisfaction?

Peter Senge: We tend to think that in a traditional organization people are producing results because management wants results, but the essence of a volunteer organization is people who produce because *they* want the results. If people are enjoying their work, they'll innovate, they'll take risks, they'll trust one another because they are committed to what they're doing. And

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it's fun. Edwards Deming used to talk about people seeking joy in work. Americans thought this sounded very naive and romantic. It's always puzzled me why people think that's so strange.

Peter Drucker: No, that's anything but romantic, that's pure realism. But one reason for our attitude is clearly that legacy that work is a curse. It is amazing how quickly most people in retirement deteriorate. Work is one of the two dimensions of the human being. The other is love and family. And people who perform enjoy what they're doing. I'm not saying they like everything they do. Everybody has to do a lot of routine. I'm a professional writer and I know I have to rewrite. Nobody enjoys rewriting but it's got to be done, and I enjoy it because I enjoy the work. That is the difference, I believe, not between mediocrity and performing, but between an ordinary organization and what you call a learning organization, one where the whole organization grows.

I work with many nonprofit, pro bono communities, and my business friends and clients don't believe me when I tell them that I have learned from the nonprofit more to be applied to business than the other way around. To be sure, nonprofits have to learn to read a balance sheet, but that's easy. The things that nonprofits can do, for example, to attract and mobilize and hold volunteers, the business will have to learn with respect to knowledge workers.

Today we see so many businesses trying to duck the problem of managing the knowledge worker by bribing him with stock bonuses and options. We know from experience that works in good times, but only in good times, but then it boomerangs, terribly.

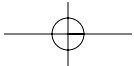
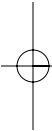
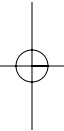
Peter Senge: You know, Peter, as I think about all the things we've talked about, it would be easy for someone to feel a bit

overwhelmed in the present situation. There's not only so much changing, there's so much changing at different levels. I think we both share the sense that we're at the *beginning* of something, not the end.

Peter Drucker: People are secure if they realize that this time of sudden, unexpected, and radical change is a time of opportunity. So I'm very hopeful. No, hopeful is the wrong word; optimistic is the wrong word. The right word is excited.

Peter F. Drucker has been a teacher, writer, and adviser to senior executives for more than 50 years. Author of 31 books, including *Management Challenges for the 21st Century*, he is honorary chairman of the Drucker Foundation and Clarke Professor of Social Sciences at the Claremont Graduate University in Claremont, California.

Peter M. Senge is a senior lecturer at the Massachusetts Institute of Technology and chairman of the Society of Organizational Learning, a global community of corporations, researchers, and consultants dedicated to personal and institutional development. He is author of *The Fifth Discipline* and coauthor of *The Fifth Discipline Fieldbook* and *The Dance of Change*.



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Lessons for Change Leaders

Peter M. Senge

Reflecting on his conversation with Peter Drucker, Senge observes that the first step in thinking about the future is to consider the givens (if A happens, B will occur). This includes recognizing long-range changes, such as demographics, and emerging industries, such as life sciences. In difficult times, old approaches no longer work. He urges leaders to abandon the Machine-Age mind-set and realize that: (1) problem solving (a negative focus) is not creating (a positive focus); (2) effective leaders do not need to control, they are open to surprise and do not ignore the unexpected, and they encourage diversity of thought; and (3) change starts with a passionate few who should be encouraged, and they will lead the rest.

Peter Senge offers further reflections on the challenges of organizational learning, leadership, and change. Here, drawing from the themes raised in a conversation with Peter Drucker (see previous chapter, “Strategies for Change Leaders: A Conversation”) and from his own work, Senge presents his observations of what it will take for leaders to be effective in the 21st century.

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A clear logic flows through Peter Drucker's comments on leadership and change. He opens the conversation by identifying basic constraints to action. He then draws out broad implications of these constraints and offers principles for guiding our choices, along with problems he anticipates along the way.

Identifying constraints is a concept that engineers know well. Others call them the *givens*. The first step in disciplined thinking about the future is to consider the givens.

That approach is at the heart of Royal Dutch Shell's scenario planning process. A key architect of that planning process, Pierre Wack, believed there was great confusion about anticipating the future. "You cannot forecast," he said, "but when it rains for a week in the foothills of the Himalayas, you know the Ganges will flood." *That* is a given.

The first constraint that Drucker describes is demographics. He's one of the few organizational thinkers who continually points to demographic change. Many managers are too impatient to consider the kind of 30- to 50-year changes Drucker describes; they're worried about the next 30 to 50 *days*. But if you're a senior executive, one of your fundamental tasks is to think longer term than others in the organization. Understanding the demographic shift that we know is occurring is like noticing the rain in the foothills of the Himalayas. It is a way to anticipate change. For instance, one forecast we can make with confidence, based on demography, is that retirement as we know it will disappear for most people in the next 20 years.

The second constraint that Drucker identifies is less widely understood. It has to do with our perception of the information revolution, which he regards as just at its outset. Moreover, he sees aspects of the great transition we are living through that go well beyond information technology.

Drucker identifies several broad implications of these constraints. First, all organizations will have to learn how to accept change. Indeed, he suggests that all must become “change leaders,” or else face the future doomed to only react. Second, as this era of change continues, there may be many surprising developments—for example, emerging industries in which information technology plays an important but small part. Drucker gives the provocative example of fish farming. Third, leaders must learn to create receptivity to change by practicing the principle of abandonment, cutting loose from old practices, even before they are no longer justified economically.

He identifies several other principles that will matter: weakening the obsessive hold of problem solving in favor of creating, seeing change as an opportunity rather than a threat, and understanding that change depends on small numbers of those with passion to create something new, not on the majority. Last, he warns us of the consequences of executives who do not “enjoy the unexpected” and of the time required for basic innovation and building first-class performance.

For me, unpacking Peter’s reflections starts with thinking a bit more deeply about the economic and social transition that is creating the context for leadership today. The emerging industries of the Next Economy, Drucker tells us, will have little to do with our current notions of information technology. They will have more to do with the life sciences. He reminds us that it is not technology that makes a new age of history, it is a new mind-set. Whether a technology changes the world depends on how we think about and use that technology. It is the new metaphor, not the technology per se, that transforms us.

Patterns of Change

As Josef Schumpeter observed, industrial economies evolve in waves characterized by how significant new technologies find their way into the economic system. Consider the pattern of technological innovation that has marked four great periods of change in the industrial era:

- *The 1830s.* The spread of the railroad and factory production practices coincides with the opening of the West in the United States and tremendous social dislocation.
- *The 1880s and 1890s.* Telephone and communications technology enter the economy—along with deep and sustained unemployment that reached 18 percent in 1893.
- *The 1930s.* Commercial airlines, the automobile, and the oil industry start to become dominant in the throes of the Great Depression.
- *The mid-1970s to early 1990s.* This period of economic stress also marks the real beginning of the biotech and information revolution, including the first biotech start-ups and the Internet.

The lesson to take from this pattern is simple: The shift to radically different industries and technologies is a recurring phenomenon of the Industrial Age. So the radical shifts to a “Net economy” and e-commerce, while disruptive, are not unprecedented; they are a familiar feature of the Industrial Age. Moreover, these shifts take place during the winters of economic

performance. When times are good we don't innovate. We incrementally improve; we look for advantage on the margin. Why do hard times foster change? That's when dominant organizations are in disarray. They try to pump up the products and strategies that have always sustained them, but the old reliable approaches no longer work. The ground beneath the business and social institutions of the era has shifted. This opens the door for new ideas and new organizations. These epochs of change provide the context for any leader thinking about the future today.

What makes the current period so distinctive is that we are simultaneously living through a new wave of technology and a much longer-term phenomenon—the transition to a new age. Most people call it the Information Age, but that is because, I believe, they confuse the technological transition that is occurring with this deeper transition. A new age is defined by new metaphors and core assumptions. To appreciate this, we must reflect on the metaphors that have guided the past 200 years.

What is the dominant metaphor of the Industrial Age? *The machine.*

At the beginning of the Industrial Age, labor productivity had been the same for centuries. Then, in a period of 50 years in England, it increased by a factor of 100. It was an unprecedented change. Drucker says we've lived through two epochal periods in the past 500 years—one represented by the printing press and the second by the steam engine. The steam engine was the prototypical machine. It launched the Industrial Revolution, or what Russell Ackoff calls the Machine Age.

We in the West are all products of the Machine Age. We tend to think of our organizations as machines. Why else does it seem so natural to talk about "leaders who *drive* change"? It is because the guiding ethic of the Machine Age is control; we

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would not consider operating a machine, or “running” an organization, that we could not control.

The principles Drucker suggests are easy to describe, but they are difficult to practice because each contradicts some aspect of this Machine Age thinking.

The Case for Abandonment

If we’re entering a new era of extraordinary change, Drucker believes that every organization must develop the discipline of planned abandonment. Unless we develop a discipline of shedding things, letting go, we cannot create something new. The first step in that process is to realize how hard it is.

It’s difficult to abandon what we do because we are emotionally attached. Drucker tells us, “I have seen so many people who have no personality except in their product.” We have emotional attachments to our work. We *are* our work. The tendency to become what we do holds for organizations as well as individuals.

To begin to abandon the old—which is what it takes to truly lead change—I believe we must embrace three other non-Machine Age strategic principles.

- Problem solving is not creating.
- Effective leaders are open to surprise.
- Change starts with the passionate few.

Problem Solving Is Not Creating

Organizational life is shaped by two fundamentally different orientations: creating versus problem solving. For most of us, problem solving dominates. Virtually our entire educational system

is based on it. Most of our work as managers is about solving problems. We identify successful managers as problem solvers. And organizations that primarily define success in terms of who solves what problems create certain expectations and capabilities. This is a natural point of view if we see the world around us as being made up of machines: machines break down and need to be fixed. The trouble comes when problem solving becomes the dominant focus of the enterprise, especially in a time when we are leaving the Machine Age behind us.

When we focus only on problems we don't have time to look at possibilities. There is a fundamental difference between problem solving—making problems go away—versus creating, bringing something new into being. People in the creative arts are not confused by this distinction. For artists, writers, performers, or musicians, it doesn't matter how original your ideas are. The question is, what can you bring into reality?

Shifting from my comments on Drucker to my own thoughts on the subject, I am convinced that this question challenges our view of the organization. As products of the Machine Age, we tend to see work life as a series of things that need to be fixed. Yet most of us see the limits of this approach in our personal lives. When people are asked to identify what is most important to them, what usually comes up is family, children, parenting. Parents intuitively know that they are participating in a process of bringing something into reality. Of course, on a day-to-day or hour-to-hour basis parenting often feels like a series of problems. But we know that it is creating, helping children grow, not just the problem solving, that gives parenting such meaning and richness.

Likewise, it is creating something new, not managing day-to-day problems, that brings meaning to work life. That is the power

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of Drucker's observation: "It's amazing how many minor ills the healthy body can survive." It is a reminder to focus on what is important, which is to build vitality, not "solve" all disease symptoms. When we are clear about what is primary—growing healthy systems as opposed to eliminating all ailments—we're creating. Our work has meaning. When we lose that clarity, our work loses its meaning. It's that simple.

Effective Leaders Are Open to Surprise

Every organization needs to have a systematic approach to examining the future. At the same time its leaders must look for today's unexpected success. That is usually the best way to spot new opportunities.

These are what Drucker calls the right hand of disciplined thinking and the left hand of openness to surprise. He uses the phrase "being receptive to what comes in over the transom." This receptivity must start at the top. Yet few organizations are full of senior executives who enjoy the unexpected. This is not surprising. After all, who generally gets promoted in organizations? The good problem solvers, people who value predictability and control.

This poses a practical issue about how we identify and develop people for leadership positions. The fact is, most organizations, and most people, are not wired to readily perceive the unexpected. Most of us would agree that it is important for senior executives to continually scan the environment, talk to customers, get a sense of the market and the times, identify emerging trends. However, it's extraordinarily hard for us to do this.

Our perceptions of the world are based on past experience and the mechanics of cognition (see "Barriers to Seeing Differ-

ently”). Most successful organizations don’t adapt to waves of change simply because they cannot see those waves coming.

That is why diversity is a core leadership issue. Ultimately this goes beyond racial, ethnic, or gender diversity, although it includes them. It has everything to do with how we see the world. I believe successful organizations of the future will work consciously to develop diversity of thought. But this will be difficult for Machine Age organizations, dominated by the tendency toward homogeneity, a norm instilled by the assembly line. Machine Age organizations tend to fall back on their established ways of seeing the world, largely because they are so homogenous in their outlook. Organizations and communities need many eyes. Only by working with people who see things differently can we be truly open to surprise.

Change Starts with the Passionate Few

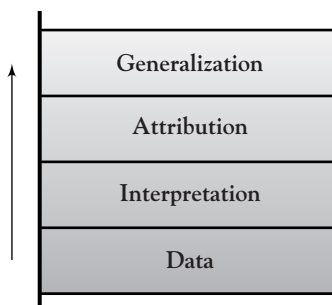
Leaders (and teachers) spend too much time trying to remediate weaknesses and too little building on strengths. Remember Georg Solti, conductor of the Chicago Symphony, who found 20 musicians who had a passion to do something new: Rather than trying to push the entire organization forward, he focused on the top performers. It’s an atypical strategy, but it’s the most effective one. As Drucker notes, there’s plenty of creativity in most organizations. We simply don’t pay attention to it.

To build a strategy for change, see where the natural leadership is already surfacing in the organization. People follow their own leaders—based on excellence of performance, clarity of vision, or quality of the heart. That’s the only antidote to relying on one person to direct others and hoping that person is open to the unexpected. Looking for natural leaders and seeing “where

Barriers to Seeing Differently

Why is it so difficult to spot signs of change in the environment? Why do we often fail to respond in new ways to the shifts we do see? One tool used widely within the Society for Organizational Learning network, drawn from 60 years of research in cognitive psychology and linguistics, provides some useful answers.

The Ladder of Inference is a way of thinking about what goes on when we perceive the world. It distinguishes several levels on which the mind operates and suggests ways to overcome the psychological blinders that can inhibit fresh understanding.



The Ladder of Inference

On the bottom rung of the ladder is *data*—information that is directly observable. For instance, Jim walked into our meeting at 9:15. Or, my boss is nodding as I speak. Based on data we immediately climb the next step on the ladder—*interpretation*: Jim is 15 minutes late. My presentation is going well. However, our interpretation of data is based largely on our culture. In Brazil, for instance, a colleague joining a 9:00 meeting at 9:15 would not be considered late. In Japan, nodding carries no implication of agreement.

From our interpretations we make *attributions*, assumptions about other people: Jim is a jerk. My boss agrees with me; she shares my values. Finally comes *generalization*—high-order inferences or stereotypes. There are, of course, professional stereotypes—“engineers can only work with other engineers”—as well as gender and racial stereotypes.

We move up the ladder at blinding speed, and we fail to distinguish the data from the interpretation from the attribution from the generalization. Based on the subtext of the conversation, we leave a meeting convinced that we’re succeeding brilliantly—or failing miserably. Those are sweeping conclusions, and they constrain fresh thinking and effective change in organizations. Part of a leader’s job is to identify important changes, and point to new directions. To do that, we must be aware of these constraints and build teams that bring a diverse set of interpretations to our discussions.

the energy wants to go” sounds hopelessly soft, but it is one of the toughest challenges of leadership. It means committing ourselves to cultivating leadership throughout the organization, building a culture of performance, and creating an environment where people see that their visions really matter.

But this principle likewise contradicts Machine Age thinking. It seems much more “natural” to leaders to think in terms of change programs and roll-outs.

The New Metaphor

The underlying shift that I believe is needed if we are to follow the principles that Drucker prescribes is to think of our organizations as living organisms rather than machines. We must study

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the way nature innovates. Nature does not fix broken systems. Nature creates the new in the midst of what already exists. In nature things always start small and grow in response to favorable conditions and self-directed energy. No one controls living systems, and their pattern of development is always characterized by surprise and serendipity. The science of the 21st century is dramatically different from the science of the Machine Age. It's a science of living systems and it is giving us the new metaphors we need to make sense of a changing world.

One of the great illusions of the Machine Age is that everything can be speeded up. Bill O'Brien, the retired CEO of Hanover Insurance, says, "It takes nine months to have a baby. It doesn't matter how many people you put on the job." You cannot speed up everything. You can send an e-mail message to 30 people, but will they read them—and even more important, will they think about them? That's one of the rude awakenings of our time. The innovation process is fundamentally human and social. It's been with us for millennia. Like natural processes, it has limits to how much it can be speeded up.

The Last Constraint

Ultimately, in addition to demography and old mind-sets, we face a third constraint and a powerful force for change. Every day, on average, 200 times the body weight of every American is extracted from the earth to support our standard of living. Ninety-nine percent of that material will end up in a junk heap. We have created the most wasteful economic system in the history of humankind. It is not, in current form, a sustainable system. We are running into environmental *and* social constraints. The Machine Age has not been an age that cares much about

equity. For much of it, particularly over the past 25 years, it has been characterized by increasing concentration of wealth and income. That too is probably not sustainable.

As Pierre Wack reminds us, when it rains in the foothills of the Himalayas for seven days, the Ganges will flood. How much longer can we create inequity and destroy species? Will it change in the next 10 or 20 years? Can we continue to run our organizations in the future as we have in the past? Those are the kinds of questions that leaders will have to answer.

The question facing us today is, Are we in the middle of the next wave in the Machine Age or is it really the beginning of something new? Technology will not determine that. It can at best only enable it. It will be determined by us—by our values, our commitments, our passions, and, in the end, our perseverance and patience.

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