

Encouraging challenges to the status quo, leaders of organizations in the new century will need to share knowledge with—and empower—ALL their employees.

Changing Roles: **Leadership in the 21st Century**

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On the threshold of the 21st century, organizational leaders face a whole new set of management challenges. The globalization of markets and the rapid diffusion of information and communications technologies have transformed the economies of the developed countries of the world. Citing a recent OECD study, the *Economist* points out that

more than half of the total GDP in the rich economies is now knowledge-based, including industries such as telecommunications, computers, software, pharmaceuticals, education and television. High-tech industries have nearly doubled their share of manufacturing output over the past two decades, to around 25 percent, and knowledge-intensive services are growing even faster. Knowledge workers . . . from brain surgeons to journalists . . . [now] account for eight out of ten new jobs.

In industry after industry, it's no longer just a game of market power and financial muscle, economies of scale, and breadth of scope. Over the past century, the locus of

wealth creation has shifted from capital-intensive industries like steel and automobiles to information-intensive industries like information services, financial services, and logistics. As we stand on the threshold of the knowledge age, the most powerful sources of growth, employment, and wealth creation are found in innovation-driven industries—computer software, biotechnology, and the like—where innovation, flexibility, responsiveness, and the creative redefinition of markets and opportunities are the new sources of competitive advantage.

As the strategic emphasis shifts from the efficient management of mass markets and tangible assets to innovation and the effective utilization of knowledge and human capital resources, organizations and their leaders must also change. More capable leadership at the top—smarter managers—is not necessarily the answer. Rather, to compete in the information age, firms must increasingly rely on the knowledge, skills, experience, and judgment of *all* their people. The entire organization, collectively, must create and assimilate new knowledge, encourage innovation, and learn to compete in new ways in an ever-changing competitive environment.

The demands of this changing environment present a complex set of challenges—and require a shift in focus and emphasis—for organizational leaders. The traditional tools and techniques of management are designed, in large measure, to ensure organizational stability, operational efficiency, and predictable performance. Formal planning processes, centralized decision making, hierarchical organization structures, standardized procedures, and numbers-oriented control systems are still the rule in most organizations. As important as these structures and processes are to organizational efficiency, they tend to limit flexibility and create impediments to innovation, creativity, and change. To meet the challenge, organizational leaders must “loosen up” the organization—stimulating innovation, creativity and responsiveness, and learn to manage continuous adaptation to change—without losing strategic focus or spinning out of control.

To position their organizations to compete and win in the competitive environment of the 21st century, organizational leaders must place less reliance on traditional structures and controls, and focus their efforts on five key priorities:

- Using strategic vision to motivate and inspire
 - Empowering employees at all levels
 - Accumulating and sharing internal knowledge
 - Gathering and integrating external information
 - Challenging the status quo and enabling creativity.

USING STRATEGIC VISION TO MOTIVATE AND INSPIRE

Every organization has a strategic vision, explicit or implicit. Effectively employed, a strategic vision provides many benefits: a clear future direction; a framework for the organization's mission and goals; and enhanced employee communication, participation, and commitment. But if an organization's vision exists only in the imagination of

a single individual, or is shared only with a select few at the top, its value is diminished.

The power of strategic vision lies in how it is used. An effective strategic vision is clear, compelling, and communicated in a way that motivates and inspires a broadly shared sense of organizational direction and purpose. Such a vision is essential to developing an organization that can learn and adapt to a complex, interconnected, and rapidly changing environment. In the words of William O'Brien, CEO of Hanover Insurance: “Before there can be meaningful participation, people must share certain values and pictures about where we are trying to go. We discovered that people have a real need to feel that they're part of an ennobling mission.” Similarly, Xerox PARC guru John Seely Brown asserts: “The job of leadership today is not just to make money: It's to make meaning.”

Percy Barnevik, CEO of the Swedish-Swiss holding company that includes Asea-Brown Boveri, nurtures pride and creativity with a vision that focuses on the organization's broader role in society:

It is important that people in an organization have something to be proud of. It is important that our people can feel pride in something beyond the numbers. For example, if you look at our company now, we have been pioneering investments in Eastern Europe, spearheading East-West integration. Many of our people are proud of participating in that process. The same can be said about our work in the environmental field. I would like to create and develop an image of us as helping to improve the world environment. For example, transferring sustainable technology to China or India, where they have a tremendous need to clean up their coal-fired power plants.

Our employees can look at work like that and see that we contribute something beyond mere shareholder value. Internally, we can pride ourselves on certain environmental improvements



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without being too bombastic or boastful about them. This is particularly relevant for attracting young people to the company. They are by and large not happy just to work for a big company with high profits; they also like to see a purpose that goes beyond numbers. It is important that a company can be perceived as changing the world in a positive way.

As Barnevik suggests, an effective strategic vision is multifaceted, addressing the needs and concerns of all the organization's stakeholders, not just its employees. The formulation of a strategic vision requires an in-depth understanding and knowledge of the organization, its competitive environment, the needs and priorities of its stakeholders (customers, suppliers, employees, and shareholders), and other salient environmental trends and forces. This understanding must be shaped and molded into a clear and compelling vision of what the organization is, what it could become, and how it will get there. The most powerful visions are clear about the direction and objectives and proactive in approach, but deliberately vague about the means—leaving room for flexibility in developing viable strategic options and solving complex problems.

At times, creating a vision involves what the CEO of Yokogawa, GE's Japanese partner in the Medical Systems business, calls "bullet train" thinking. That is, if you want to increase the speed by 10 miles per hour, you look for incremental advances. However, if you want to double the speed, you've got to think "out of the box"—widen the track, change the overall suspension system, and so on. In today's challenging times, leaders typically don't just need to keep the same train with a few minor tweaks, but rather come up with more revolutionary visions. Consider, for example, how Enron's CEO, Kenneth Lay, completely changed his firm's (and its industry's) mental model of the natural gas pipeline industry:

In 1986, after Enron was formed by the merger of two natural gas pipeline giants, Lay determined that it was time

to change the entire way his firm did business. According to Lay: "I was trained as an economist, love free markets, and was convinced that government regulation was causing most of the problems in the industry."

By pushing for deregulation, Lay felt that Enron could use all of those natural gas lines as a network to buy gas where it was cheap and sell it where it was needed. (Regulation required a gas pipeline to run single-mindedly from a specific field to a particular utility company, with few shifts or diversions.) Although other gas utilities pressed for continued regulation, Enron hired aggressive, well-paid traders and almost single-handedly began creating spot markets in gas. Enron found that its new approach and structure could reduce the cost of gas for some utilities by 30 percent to 50 percent. "We changed the concept of how the natural gas industry was run—new products, new services, new kinds of contracts, new ways of pricing," says Lay. Texas Senator Phil Gramm's take on Kenneth Lay: "He has the ability to step back from an issue and see the big picture, something that I don't see in a lot of people in business."

Guided by Lay's innovative vision, Enron has turned in an impressive financial performance. Sales soared 52 percent to \$20.2 billion in 1997. The average annual total return to investors over the past decade has been 19.7 percent.

Visionary thinking is not, of course, the exclusive province of the firm's top executive. Nor should it be. Broad participation in the formulation of a strategic vision offers multiple perspectives and encourages commitment. Back in 1994, during the early stages of Sears' dramatic transformation, the firm's top 120 executives were grouped into task forces focused on such key strategic elements as customers, employees, and financial perfor-



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mance. Working together, they arrived at a vision for the business: a "compelling place to shop, work, and invest."

This vision was implemented in the design of a comprehensive performance measurement system based on key indicators: one for compelling place to work, two for compelling place to shop; and three for compelling place to invest. Simply an academic exercise? Hardly! A consulting firm was hired to develop a quantitative model that permits management to make inferences about cause and effect with a rather high level of predictability. According to Anthony Ricci, chief administrative officer:

Now we know that if a store increases its employee satisfaction score by five measuring units this quarter, the following quarter its customer-satisfaction scores will go up by two units. And if a store increases its customer satisfaction by two units this quarter, its revenue growth the following quarter will beat our stores' national average by 0.5 percent. It's not guesswork or theory anymore. We have built an empirical model that says unless you have a trained, literate, motivated, competent workforce, and give them decision-making authority, you don't get satisfied customers no matter how good the merchandise is.

Inspiring the organization and its stakeholders with a clear vision and compelling sense of purpose is a *necessary* but not a *sufficient* condition for the development of an organization that can learn, adapt, and respond effectively to a rapidly changing competitive environment. Empowerment, providing motivated employees with the responsibility and authority to implement the vision, is equally important.

EMPOWERING EMPLOYEES AT ALL LEVELS

Organizations often fall prey to the "heroes-and-drones syndrome," wherein the value of

those in powerful positions are exalted and those who fail to achieve top rank are diminished. Such an attitude is implicit in phrases like "Lead, follow, or get out of the way" or, even less appealing, "Unless you're the lead horse, the view never changes." The fact is, of course, that few will ever reach the top positions in an organization, but in a competitive environment increasingly dependent on knowledge and information, the strongest organizations will be those that effectively use the talents of all the players on the team.

"The great leader is a great servant" asserts Ken Melrose, CEO of Toro Company and author of *Making the Grass Greener on Your Side*. In his view, the key role of top management is the creation of an environment in which employees can achieve their potential as they help move the organization toward its goals. Many leading organizations have come to realize that the results available in an environment based on trust and cultural control are superior to those formerly achieved under a system of rules, regulations, and hierarchy.

Instead of viewing themselves as resource controllers and power brokers, leaders must truly envision themselves as flexible resources willing to assume numerous (perhaps unaccustomed) roles—coaches, information providers, teachers, decision makers, facilitators, supporters, or listeners—depending on their employees' needs. The key to empowerment is effective leadership. According to Melrose: "I came to understand that you best lead by serving the needs of your people. You don't do their jobs for them; you enable them to learn and progress on the job."

Consider Chris Turner's perspective. She's an executive called the "Learning Person" for Xerox Business Services (XBS)—a \$1 billion organization growing at 40 percent a year. Largely through her efforts, XBS has created an environment that not only produces business results but also supports personal growth:

My job is to disturb the system. I give people new ways to think. It's more a matter of offering people different perspectives and influencing their thinking than trying to drive them. It sounds

strangely indirect. Why not adopt a more top-down approach? It turns out you can't "empower" anyone. This is not the freeing of the slaves.

Chris Turner makes the insightful point about empowerment requiring more than the sprinkling of fairy dust. At first glance, it may appear that this overstates or trivializes the case, but it is critical that organizations look at empowerment as involving more than just "giving more power" to people throughout the organization. Empowerment also requires that organizations redistribute *information*, *knowledge* (i.e., skills to act on the information), and *rewards*. For example, a company may give frontline employees the power to act as "customer advocates," doing whatever is necessary to please the customers. To function effectively in this role, however, employees will also require appropriate training and knowledge—information about customer expectations, timely feedback, and data on firm performance. In order to make the best decisions in each customer interaction, employees must clearly understand the goals, objectives, and priorities of the organization and be knowledgeable about its internal procedures and processes—how key value-creating activities are related to each other. Finally, rewards should be allocated on the basis of how effectively employees use this information, knowledge, and power to improve the quality of customer service, as reflected in customer loyalty and overall firm performance.

If the widespread sharing and distribution of information and knowledge are key to empowerment, the organization's internal processes and practices for accumulating and sharing internal knowledge and information also represent a key link in the chain. Effective leadership requires that these internal processes and practices be consistent with and supportive of the broader goals of the organization.

ACCUMULATING AND SHARING INTERNAL KNOWLEDGE

Most organizations have elaborate formal

processes and devote considerable resources to gathering, organizing, and analyzing information about their inner workings and overall performance. But all too often, the end products of this effort are available only to a limited group of managers—individuals who frequently have insufficient time to read, understand, and meaningfully interpret the volumes of information available. At lower levels, individuals see only the isolated bits and pieces of information related to their specific activities, and are largely in the dark about what is going on elsewhere or how their efforts relate to the overall performance of the organization. As a result, much of the potential value created in this information-gathering process is wasted because the information is not made available to those who could most effectively use it. Effective leaders have learned how to leverage their investment in internal information by (1) sharing information and ideas across the organization; (2) encouraging and cultivating informal sources of information; and (3) utilizing technology to facilitate both the gathering and sharing of information.

Sharing Information and Ideas

Jack Stack is president and CEO of Springfield ReManufacturing Corporation (in Springfield, Missouri) and author of *The Great Game of Business* (Doubleday/Currency, 1992). He is generally considered the pioneer of "open book" management—an innovative approach to gathering and disseminating internal information. Implementing this system involves three core activities. First, numbers are generated daily for each of the company's employees, reflecting their work performance and production costs. Second, this information, aggregated once a week, is shared with all the company's people—everyone from secretaries to top management. Third, extensive training—how to understand balance sheets, income statements, and cash flows—is provided to enable employees to use and interpret the numbers appropriately. In explaining why SRC embraces open-book management, Stack provides an insightful counter-perspec-

tive to the old adage: "Information is power":

We are building a company in which everyone tells the truth every day—not because everyone is honest but because everyone has access to the same information: operating metrics, financial data, valuation estimates. The more people understand what's really going on in their company, the more eager they are to help solve its problems. Information isn't power. It's a burden. Share information, and you share the burdens of leadership as well.

Whole Foods Market, Inc., the largest natural foods grocer in the United States with 43 stores in ten states, places a strong emphasis on teamwork throughout the organization. The company's "gain sharing" program ties bonuses directly to team performance and team members vote on who gets hired. What really makes the system work, however, is CEO John Mackey's "no secrets" management philosophy: a dedication to sharing virtually all company information with all employees:

The curious team member at any level of the company has access to nearly as much operating and financial data as anyone in the Austin, Texas headquarters. In Ron Megahan's store, for example, a sheet posted next to the time clock lists the previous day's sales broken down by team. Another sheet lists the sales numbers for the same day last year. Once a week, Megahan's store posts a fax that lists the sales of every store in the New England region broken down by team, with comparisons to the same week last year, as well as year-to-date totals. Once a month, stores get detailed information on profitability. The report analyzes sales, product costs, wages and salaries, and operating profits for all 43 stores. The data is sensitive, but it is freely available to any employee who wants to see it. And store managers routinely review it

with their team leaders. Since individual teams make decisions about labor spending, ordering, pricing—the factors that determine profitability—the reports are indispensable.

An additional benefit of the information sharing at Whole Foods is the active process of *internal benchmarking*. Competition is intense. Teams compete against their own goals for sales, growth, and productivity; against different teams in their stores; and against similar teams at different stores and regions. On a periodic schedule, each Whole Foods store is toured by a group of as many as 40 visitors from another region. The tour is a mix of social interaction, reviews, performance audits, and structured feedback sessions. Lateral learning—discovering what your colleagues are doing right and carrying those practices into your organization—has become a driving force at Whole Foods. Mackey puts it bluntly: "If you don't cross-pollinate, you become a hick."

Cultivating Informal Sources of Information

In most organizations, the formal sources of internal information represent the by-products of an accounting system designed years earlier and, by its very nature, focused on what happened weeks or months ago. Aggregated, summarized, standardized, and sanitized, this kind of information has its place but lacks the "freshness" and urgency of direct personal communications through informal channels. Most organizations have well-developed patterns of informal communications, but frequently those at the top are "out of the loop." To successfully tap into these informal networks, managers must (1) *listen effectively*; (2) *be accessible*—demonstrate the desire for information and feedback; and (3) *provide opportunities* for information exchange.

In a recent survey of presidents, CEOs, board members, and top executives in a variety of nonprofit organizations, respondents were asked what differentiated the successful

candidates for promotion. The consensus: *The executive was seen as a person who listens.* According to Peter Meyer, the author of the study:

The value of listening is clear: You cannot succeed in running a company if you do not hear what your people, customers, and suppliers are telling you. Poor listeners do not survive. Listening and understanding well are key to making good decisions.

Effective leaders must beware of the errors of poor listening and misinterpretation. Once an associate told movie producer Sam Goldwyn that audiences would not respond to the script he wanted to produce—it was *too caustic*. Goldwyn's reply: "*Too costly?* To hell with the cost. If it's a good picture, we'll make it." Did he miss the point?

John Chambers, president and CEO of Cisco Systems, the \$6 billion networking giant, has an effective vehicle for discovering potential problems and getting candid feedback from employees. Every year during their birthday month, employees at Cisco's corporate headquarters in San Jose receive an e-mail invitation to a "birthday breakfast" with Chambers. Any question is fair game at these sessions, and the employees don't hold back—asking tough questions about strategy and operations, and providing stark assessments of perceived management failings. Although not always pleasant, Chambers believes it is an indispensable hour of unmediated interaction, observing: "I'm not there for the cake."

Using Technology to Leverage Efforts

Technology can play a vital role in gathering and disseminating information across an organization. To illustrate, at PeopleSoft, a firm with a powerful position in one of technology's hottest sectors, enterprise resource planning (ERP) software, all new hires receive

the same laptop: a top-of-the-line model with a CD-ROM drive, a high-

speed modem, and lots of performance enhancements. One purpose in giving everyone the same computer is to underscore the company's aversion to hierarchy. A more important purpose is to support its all-important global network. At PeopleSoft, a laptop isn't just a personal-productivity device. It's the point of entry into a massive information infrastructure that spans continents and time zones. "You can take your laptop to any of our offices anywhere in the world, plug it in, and the network recognizes you as if you were in your home office," CIO Steve Zarate says with obvious pride.

CEO Dave Duffield is very explicit about the kind of company he's building. He states: "The objective is to have all 4,500 people know what matters. If people don't have total access to information, they have to guess what they should be doing. Both e-mail and Lotus Notes databases are powerful forces for open access at PeopleSoft. Over 400 databases store marketing presentations, intelligence on competitors, and status reports on projects. Claims Duffield: "Anyone can get to anyone else or to any piece of information."

Sharing internal information is important, but if the organization is out of touch with its external environment, the organization's strategy will miss the mark and the information shared internally may be irrelevant. In the following section we will discuss how leading organizations learn from their environments—gathering, distributing, and integrating critical external information into their organizational knowledge base.

GATHERING AND INTEGRATING EXTERNAL INFORMATION

Organizational strategies and competitive responses are frequently based more on management's collective assumptions, premises, and beliefs than on an empirical understanding of the environment. Hamel and Prahalad, in *Competing for the Future*, maintain that

"every manager carries around in his or her head a set of biases, assumptions and presuppositions about the structure of the relevant 'industry,' about how one makes money in the industry, about who the competition is and isn't, about who the customers are and aren't, about which technologies are viable and which aren't, and so on." Peter Drucker calls this interrelated set of assumptions the "theory of the business."

Strategies frequently go awry when management's internal frame of reference is out of touch with the realities of the business situation, when one or more of management's assumptions, premises, or beliefs are incorrect, or when internal inconsistencies among them render the overall "theory of the business" no longer valid. These assumptions must be periodically updated and validated on the basis of a realistic appraisal of current conditions.

Recognizing the opportunities—and the threats—in the external environment is equally vital to a firm's success. The organization must become "externally aware" and sensitive to all that is going on around it. How effectively an organization gathers, interprets, and integrates relevant external information into its internal decision-making processes has a lot to do with its competitive performance. Focusing exclusively on the efficiency of internal operations may result in a firm's becoming, in effect, the world's most efficient producer of typewriters or leisure suits—hardly an enviable position! Arthur Martinez, chairman of Sears, Roebuck & Co., puts it this way: "Today's peacock is tomorrow's feather duster."

In the business world, many peacocks have, in essence, become feather dusters over the past several years (or at least had their plumage dulled!). Consider Novell and Silicon Graphics in the high-tech sector—both have recently fallen upon hard times. Novell unwisely tried to go head to head with Microsoft. Silicon Graphics ignored the PC market and mistakenly focused on high-end machines (a much smaller market)—including their purchase of troubled Cray Research. McDonald's insular management culture has

cost them more than a few feathers in recent years. In addition to an eroding market share, their recent two-year total return was 3 percent. Compare this with the benchmark performance of some of the world's top brands—Coca-Cola (71 percent), Gillette (101 percent), Sony (49 percent), and Walt Disney (49 percent)!

In a rapidly changing competitive environment, the organization's "theory of the business" must be continuously tested, updated, and refined with new information. Who is responsible for gathering and interpreting the critical information that every organization needs to validate its key assumptions and identify new opportunities? The job is too big—and too important—to be delegated to a select few. It must become part of everyone's job, from the CEO on down, and the rewards for those who sense the opportunities and get it right are tremendous!

Recall Andy Grove's legendary "bet-the-company" strategic move in 1985, when Intel walked away from the memory chip business that launched the company two decades earlier. Sales and profits for 1997 soared to \$25.1 billion and \$6.9 billion, respectively, and the firm enjoys a near-monopoly in microprocessors.

Most readers are probably less familiar with Paul Orfalea's dramatic success story. While most students were whining about the high cost charged for copy services—10 cents per page—at the library of the University of California at Santa Barbara, Paul sensed opportunity. With a \$5,000 bank loan he opened his first "copy center" in 1970—a rented former hamburger stand near campus. He went by the name "Kinko" because of his curly red hair. His huge chain now has over 860 stores—expected to grow to 2,000 locations by the year 2000. In January 1997, the New York investment firm of Clayton, Dubilier & Rice, Inc. acquired a one-third interest in Kinko's for \$219 million to help spur the organization's growth and expansion.

Two totally different industries—semiconductors and reproduction services—but in both cases, a dramatic success began with the perception of an opportunity that no one else rec-

ognized. So how do leaders ensure that their organization is "in touch" with its environment? We believe the process begins by creating a "culture of environmental awareness."

In small entrepreneurial organizations, one externally aware visionary who is alert to the potential opportunity or sees the first signs of impending danger may be enough. In larger organizations, however, the CEO can't do it all. He or she can, however, create and reinforce a culture that is sensitive to and aware of its environment, curious about its surroundings, and responsive to the early signals of change. Hundreds of pairs of eyes and ears will clearly be more effective than one or two in detecting the early signals of environmental change. We believe that five key elements must be addressed in creating a culture of external awareness:

- *Priority.* Gathering and sharing relevant external information must become an organizational priority—part of the culture. Its importance and urgency must be demonstrated and communicated by timely and relevant examples of the successful use of current intelligence and the adverse consequences of not having timely and relevant information.

- *Involvement.* Everyone must be involved. Frontline customer contact personnel—salesmen, service technicians, purchasing agents, clerks and receptionists—are constantly in touch with customers, suppliers, and competitors, and their committed involvement is essential.

- *Focus.* The effort must be focused. No organization needs to know everything that is going on in its environment—but some things are vital. People need to know what to look for—what kinds of information are relevant and important to the success of the organization—and what can be safely ignored.

- *Process.* Internal processes must be implemented to ensure that relevant information is quickly and accurately communicated within the organization, properly interpreted, and delivered to those who have the authority and responsibility to take appropriate action.

- *Motivation.* Employees must be motivated to participate and contribute. Formal

incentives, rewards, and recognition have their place, but frequently, positive feedback and an understanding of how an individual contribution helped the organization are sufficient motivation.

While many managers will acknowledge the need for a better understanding of their competitive environments, most organizations are unwilling to invest the organizational resources necessary to implement a formal program of competitor intelligence. More often than not, managers take advantage of a variety of less formal—but not necessarily less effective—means to keep in touch with their environments. Some of the most interesting approaches include using the Internet as a resource, networking, benchmarking, and sharing information with supply chain partners. A few selected examples can illustrate these points:

Using the Internet and Other Resources

The Internet has dramatically accelerated the speed with which anyone can track down useful information or locate people who might have useful information. For example, locating an organization's former employees—always a good source of information—used to be quite a challenge. Today, however, many people post their resumes on the Web, participate in discussion groups and say where they work. It's pretty straightforward.

When everyone is involved, even "garden variety" sources for the acquisition of external information become more powerful. Much can be learned from trade and professional journals, popular business books and periodicals, but no one individual has time to read them all. If, however, everyone in the organization is involved in gathering external information, a broader range of sources can be covered.

Networking

Networking among colleagues both inside and outside one's industry is a useful technique for gathering external information. Intel's Andy Grove, for example, picks the

brains of people like DreamWorks SKG's Steven Spielberg and Tele-Communications Inc.'s John Malone. He believes that such interaction helps to provide insights into how to make PCs more entertaining and better at communicating. Internally, he spends time with the young propeller-heads who run Intel Architecture labs, an Oregon-based skunk works that Grove hopes will become the de facto R&D lab for the entire PC industry. Other effective networking venues include professional and trade organizations, meetings and conventions.

Benchmarking

Benchmarking is often a useful source of external information. Here, managers seek out the best examples of a particular practice as part of an ongoing effort to improve the corresponding practice in their own organization. When Xerox, for example, wanted to improve its order fulfillment operations, it went to L.L. Bean, the Freeport, Maine, mail-order house. Although the products of the two companies have little in common, the order-filling processes were very similar. Both involve picking items that varied so much in size and shape that they had to be picked manually. L.L. Bean was able to "pick" orders three times as fast as Xerox, and through benchmarking and thoroughly studying L.L. Bean's process, Xerox was able to cut its warehousing costs by 10 percent.

Sharing Information with Supply Chain Partners

Many organizations learn a great deal by regularly sharing information with their customers and suppliers. William McKnight, head of 3M's Chicago sales office, required that the salespeople of abrasives products talk directly to the people in the shop to find out what they needed, instead of calling on the executives in the front office. This was innovative at the time—in 1909—and is still a good practice, illustrating the need to get to the end user of the product or service. McKnight went on to become 3M's president from 1929 to 1949 and

chairman from 1949 to 1969. More recently, Fred Taylor, senior vice president for Global Marketing at Gateway 2000, discussed the value of customer input in reducing response time, a critical success factor in the PC industry:

We talk to 100,000 people a day—people calling to order a computer, shopping around, looking for tech support. Our Web site gets 1.1 million hits per day. The time it takes for an idea to enter this organization, get processed, and then go to customers for feedback is down to minutes. We've designed the company around speed and feedback.

Information is not, of course, a one-way exchange. Important data must be shared in a reciprocal relationship based on trust and mutual advantage, not just "gathered" from the other party. No one of these techniques is, of course, the whole answer. When everyone is involved, there is ample room for a variety of approaches. The important thing is that the organization stays in touch—it is fully aware of both the day-to-day events and longer-term trends in its competitive environment, and that critical information is widely shared and vectored to decision makers in a timely manner.

Even when external opportunities or threats are recognized, many organizations fail to respond appropriately because they are unable to overcome the barriers of internal inertia and resistance to change. There is no more important role for leaders than to convince their organizations that they must change and to then lead them in the right direction.

CHALLENGING THE STATUS QUO AND ENABLING CREATIVITY

Here is Edward Bear, coming downstairs now, bump, bump, bump, on the back of his head, behind Christopher Robin. It is, as far as he knows, the only way of coming downstairs, but some-

times he feels that there really is another way, if only he could stop bumping for a moment and think of it.

—Opening lines in A. A. Milne's classic, *Winnie-the-Pooh*

Unlike Edward Bear, organizations and people do have a choice. So why is there often such resistance to change? There are, of course, many reasons why organizations are prone to inertia, slow to learn, adapt, and change, and in essence just keep "bumping along." Researchers have identified numerous barriers to organizational change. These include a commitment to the status quo, various structural, behavioral and political barriers, and the constraints of time.

Commitment to the Status Quo

Many people have vested interests in the status quo. There is a broad stream of organizational behavior literature on the subject of "escalation" where individuals (in both controlled laboratory experiments and in actual management practice) continue to throw "good money at bad decisions" despite negative performance feedback. Present management has a vested interest in the status quo and does not want to admit a bad decision or "defeat." After all, careers may be on the line!

Structural Barriers

Structural barriers—the design of the organization's structure, information processing systems, reporting relationships, and so on—often impede the proper flow and evaluation of information. A bureaucratic structure with multiple layers, onerous requirements for documentation, and rigid rules and procedures will often "inoculate" the organization against change.

Behavioral Barriers

Behavioral barriers also come into play. Individuals frequently look at issues from a biased or limited perspective because of their education, training, work experiences, or other fac-

tors. Consider an incident shared by David Lieberman, marketing director at GVO, a Palo Alto innovation consulting firm:

A company's creative type had come up with a great idea for a new product. Nearly everybody loved it. However, it was shot down by a high ranking manufacturing executive who exploded: "A new color? Do you have any idea of the spare-parts problem that it will create?"

This was a vice president, not a lower level employee exasperated at having to build a few new storage racks at the warehouse. He'd been hearing for years about cost-cutting, lean inventories, and "focus." Says Lieberman, "Good concepts, but not always good for innovation."

Political Barriers

Political barriers have their roots in the power relationships within organizations. They manifest themselves in a variety of ways, including vested interests (such as the aforementioned escalation problems), refusal to share information, conflicts over resources, conflicts between departments and divisions, and petty interpersonal differences.

Time Constraints

The implementation of meaningful change usually requires a commitment of time and effort. This problem of "not having time to drain the swamp when you are up to your neck in alligators" (slight paraphrase!) illustrates this point. In effect, Gresham's law of planning states that operational decisions will drive out the time necessary for strategic thinking and reflection. This tendency is accentuated in organizations experiencing severe price competition and/or retrenchment wherein managers and employees are spread rather thin.

How can leaders overcome these barriers to change, promote organizational learning, stimulate innovation, creativity, and responsiveness, and manage the difficult

challenge of organizational change without losing strategic focus or direction? There are no pat answers. Challenging the status quo is always a difficult undertaking, but a number of common threads run through those organizations that have made successful transformations. In most cases, their leaders have created a sense of urgency, facilitated constructive dissent, encouraged experimentation and risk taking, and gotten everyone proactively involved in the processes of change.

Creating a Sense of Urgency

A leader can directly challenge the status quo by forcefully creating a sense of urgency. Tom Kasten, a vice president of Levi Strauss, explains this direct approach:

You create a compelling picture of the risks of *not* changing. We let our people hear directly from customers. We videotaped interviews with customers and played excerpts. One big customer said, "We trust many of your competitors implicitly. We sample their deliveries. We *open* all Levi's deliveries." Another said, "Your lead times are the worst. If you weren't Levi's, you'd be gone." It was powerful. I wish we had done more of it.

Initiatives such as these—if sincere and credible—clearly establish the need for change. Properly utilized, they can be effective both in overcoming resistance and in motivating employees to constructively implement the necessary solutions.

Facilitating Constructive Dissent

Facilitating "constructive dissent" is also an effective means of questioning the status quo and stimulating creative thinking. At Microsoft, for example, organizational norms encourage dissenters to openly question a superior's perspective without fear of retaliation or retribution. Steven Ballmer, Microsoft's CEO, observes:

Bill (Gates) brings to the company the idea that conflict can be a good thing. . . . Bill knows it's important to avoid that gentle civility that keeps you from getting to the heart of an issue quickly. He likes it when anyone, even a junior employee, challenges him, and you know he respects you when he starts shouting back.

Motorola has gone a step further and institutionalized their "culture of dissent." By filing a "minority report," an employee can go above his immediate supervisor's head and officially lodge a different point of view on a business decision. Motorola's recent technology gamble, a multi-billion-dollar satellite project called Iridium, was begun as a minority report. According to former CEO George Fisher: "I'd call it a healthy spirit of discontent and a freedom by and large to express your discontent around here or to disagree with whoever it is in the company, me or anybody else."

Encouraging Risk Taking

Closely related to the "culture of dissent" is the fostering of a culture that encourages risk taking. "If you're not making mistakes, you're not taking risks, and that means you're not going anywhere," claims John Holt, co-author of *Celebrate Your Mistakes* (McGraw-Hill, 1996). "The key is to make errors faster than the competition, so you have more chances to learn and win." Minneapolis-based 3M's culture is filled with lore and storytelling of how risk taking and failure led to success. Perhaps one of the best known is the story of how Francis G. Okie came up with the idea of a sandpaper product in 1922 to sell to men as a replacement for razor blades. Obviously, that idea didn't fly. However, the technology led to 3M's first blockbuster product—a waterproof sandpaper that became a staple of the automobile industry. A well-known motto at 3M is: "It's better to ask forgiveness than to request permission."

Companies that encourage experimentation and risk taking make sure that *failure* is not a four-letter word. People who stretch the

envelope and ruffle feathers are protected. More important, they encourage mistakes as a key part of their competitive advantage. Wood Dickinson, CEO of the Kansas City-based Dickinson movie theater chain, tells his property managers that he wants to see them committing "intelligent failures in the pursuit of service excellence." If a manager at Acer, the Taiwan-based computer company, takes an intelligent risk and makes a mistake, even a costly one, CEO Stan Shih writes the loss off as tuition payment for the manager's education. Such a culture must permeate the entire organization. As a high-tech executive recently told us during an interview: "Every person must have the freedom to fail."

Getting Everyone Involved

By getting everyone involved, organizations can maximize the number of innovative ideas available for consideration. Concrete mechanisms should supplement management philosophy and cultural norms. The Walt Disney Company, for example, sponsors a "Gong Show" in which everyone in the company—including secretaries, janitors, and mailroom staff—gets the opportunity to pitch ideas to the top executives. Jeffrey Bair, a former vice president at Lotus (now CEO of Instinctive Technology) drives the point even harder: "You have to put your corporation's destiny into the hands of someone you wouldn't want your daughter dating."

Ideas can also be encouraged throughout the organization by well-designed and supported suggestion systems. A pacesetter in this area is Dana Corporation, the auto-parts maker. As CEO Woody Morcott claims: "It's part of our value system." Also driving the system is a broad-based understanding of the need for the program. Dana competes in a mature industry and useful suggestions come down to the issue of survival. Steve Moore, a plant manager, says, "We drill into our people that they are responsible for keeping the plant competitive." In addition, instructors at Dana University offer classes on how to come up with better ideas, and awards and luncheons are used to recognize and reward the best idea

generators. The result of all of these mechanisms to spur suggestions: In 1996, each of Dana's 45,500 employees submitted 1.22 ideas *per month*—for a total of 666,120 suggestions. Astonishingly, 70 percent of ideas are used!

CONCLUSION

As we stand on the threshold of the knowledge age, the rules of the game are changing rapidly. Innovation, flexibility, responsiveness, and the creative redefinition of markets and opportunities have become the new sources of competitive advantage in an increasingly interconnected global economy.

In this rapidly changing world, organizations must become more flexible, more responsive, and more willing to change and adapt. They must create and assimilate new knowledge at an increasing pace, encourage innovation, and learn to compete in new ways. The leaders of these organizations must be proactive in facilitating organizational learning and encouraging positive adaptation to external changes. John Browne, CEO of British Petroleum, puts it this way:

Learning is at the heart of a company's ability to adapt to a rapidly changing environment. It is the key to being able both to identify opportunities that others might not see and to exploit those opportunities rapidly and fully. This means that in order to generate extraordinary value for its shareholders, a company has to learn better than its competitors and apply that knowledge throughout its businesses faster and more widely than they do.

The demands of this new environment will increasingly require organizations to rely on and exploit the knowledge, skills, experience, and creativity of all of their employees—and that will require a new approach to organizational leadership. Former Citibank CEO Walter Wriston observes: "The person who figures out how to harness the collective genius of the people in his or

EXHIBIT 1: STRATEGIC INVENTORY

Using Strategic Vision to Motivate and Inspire

- Does the vision reflect a holistic understanding of the organization's purpose, environment, and stakeholder interests?
- Does the vision challenge the organization's assumption base and mental models?
- Is the vision communicated in a way that motivates and inspires employees at all levels?
- Do all employees feel and support a compelling purpose for the organization (beyond shareholder returns)?

Empowering Employees at All Levels

- Does the organization support and encourage "bottom-up" empowerment?
- Does the organization rely on trust and culture, or does it control behavior with a system of rules, regulations, and hierarchy?
- Does the organization provide the training, information, and knowledge employees need to do their jobs? Are rewards and incentives aligned with performance objectives?

Accumulating and Sharing Internal Knowledge

- Is internal information widely shared? Are the processes timely, effective, and efficient?
- Do managers at all levels use effective techniques to tap informal sources of information? Do they have strong listening skills?
- Is technology used effectively to facilitate the gathering and distribution of internal information?

Gathering and Integrating External Information

- Has the organization created a "culture of environmental awareness"? Are the key elements of priority, involvement, focus, process, and motivation in place?
- Do managers throughout the organization have a sound awareness of emerging trends and events in the industry environment? Is relevant external information broadly shared throughout the organization?
- Does the organization utilize multiple sources of competitive information—including the Internet, published sources, networking, benchmarking and supply chain partners?
- Are underlying assumptions about the external environment tested regularly?

Challenging the Status Quo and Enabling Creativity

- Does a sense of urgency exist throughout the organization?
- Do employees throughout the organization actively question the status quo?
- Is there a strong "culture of dissent" and a "freedom to fail" mentality?
- Are ideas solicited from all levels of the organization?
- Does the organization have a culture that encourages innovation and creativity?

her organization is going to blow the competition away."

The role of leadership is vital, and the challenges are considerable. To position their organizations to compete and win in the competitive environment of the 21st century, organizational leaders must place less emphasis on traditional structures and controls and shift their focus to concentrate on five key priorities:

- Using strategic vision to motivate and inspire
- Empowering employees at all levels

- Accumulating and sharing internal knowledge
- Gathering and integrating external information
- Challenging the status quo and enabling creativity.

Clearly, none of these elements alone is sufficient to accomplish the overall objective. Nor do they together define a sequential process. Rather, each reinforces and strengthens the others. Becoming a more flexible, responsive, and innovative organization will necessarily involve an ongoing process of organi-

zational learning that takes time and patience. Leaders must pursue a new agenda and create a sense of urgency to begin the process, but patience is essential as well. Success is likely to come slowly over time, as a result of consistent emphasis and reinforcement of an organizational commitment to continuous improvement on each of these dimensions.

Exhibit 1 is a strategic inventory—a checklist to help the reader relate the key concepts and ideas presented in this article to his or her own organization. Use it to stimulate the development of your plans and strategies or as a yardstick to gauge your progress toward becoming a more flexible, responsive, and innovative organization.



SELECTED BIBLIOGRAPHY

For a good overview on strategic vision, refer to John Kotter's 1990 article, "What Leaders Really Do," *Harvard Business Review*, 68(3), 103-111, and A. E. Person, "Six Basics for General Managers," *Harvard Business Review*, 67(4), 94-101. Recent works on the need for strategic perspective in the context of global competition include M. A. Hitt, B.W. Keats, and S. M. DeMarie, "Navigating in the new Competitive Landscape: Building Strategic Flexibility and Competitive Advantage in the 21st Century," *Academy of Management Executive*, 12(4) 22-42; and Gary Hamel and C.K. Prahalad's best-selling book, *Competing for the Future* (Boston: Harvard Business School Press, 1994).

Seminal works on the concept of the learning organization include Peter Senge's 1990 article, "The Leader's New Work: Building Learning Organizations," *Sloan Management Review*, 31, 7-23; and his book, *The Fifth Discipline: The Art and Practice of the Learning Organization* (New York: Doubleday Currency, 1990). For an insightful perspective on learning organizations on the factory floor, refer to D. Leonard-Barton, "The Factory as a Learning Laboratory," *Sloan Management Review*, 1992, 34, 23-38.

For a discussion of benchmarking refer to Alex Miller's 1998 book *Strategic Management* (New York: Irwin McGraw-Hill, pp. 142-143). Our examples are drawn from various sources, including O. Port and G. Smith, "Beg, Borrow—and Benchmark," *Business Week*, November 30, 1992, 74-75; J. Main, "How to Steal the Best Ideas Around," *Fortune*, October 19, 1992, 102-106; speech by Frank P. Doyle, (Executive Vice President, Corporate Executive office, General Electric Company) presented at the 63rd Edison Electric Institute Convention, Orlando, Florida, June 5, 1995; and W. C. Taylor, "What Happens

After What Comes Next," *Fast Company*, December-January 1997, 84-85.

For insightful perspectives on escalation refer to Joel Brockner's 1992 article, "The Escalation of Commitment to a Failing Course of Action," *Academy of Management Review*, 17(1), 39-61; and Barry Staw's 1976 article, "Knee-deep in the Big Muddy: A Study of Escalating Commitment to a Chosen Course of Action," *Organizational Behavior and Human Decision Processes*, 16, 27-44.

The discussion of systemic, behavioral, and political barriers draws on P. Lorange and D. Murphy's 1984 article, "Considerations in Implementing Strategic Control," *The Journal of Business Strategy*, 5, 27-35. In a similar vein, Noel M. Tichy has addressed three types of resistance to change in the context of General Electric: technical resistance, political resistance, and cultural resistance (refer to: N. M. Tichy, "Revolutionize Your Company," *Fortune*, December 13, 1993, 114-118). Examples from business practice of how these barriers can be overcome can be found in B. O'Reilly, "The Secrets of America's Most Admired Corporations: New Ideas and New Products," *Fortune*, March 3, 1997, 60-64; D. Sheff, "Levis Changes Everything," *Fast Company*, June-July, 1996, 65-74; W. Isaacson, "In Search of the Real Bill Gates," *Time*, January 13, 1997, 44-57; E. B. Baatz, "Motorola's Secret Weapon," *Electronic Business*, April 1993, 51-53; T. J. Tetenbaum, "Shifting Paradigms: From Newton to Chaos," *Organizational Dynamics*, 1998, 26(4), 21-32; and R. Mitchell, "Masters of Innovation," *Business Week*, April 10, 1989, 58-63. The quotations attributed to Percy Barnevik, Kenneth Lay, Chris Turner, and other individuals in this article draw on Gregory G. Dess and Joseph C. Picken, *Beyond Productivity* (New York: AMACOM, 1999).

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