

Pull the Plug on Stress

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These days, stress is even more rampant than it was in 1983, when Time magazine declared it to be “the epidemic of the eighties.” Stress is growing: According to a survey by CareerBuilder, an on-line recruitment site, the overall percentage of worker stress increased by 10% between August 2001 and May 2002. And stress hurts the bottom line: In 1999, a study of 46,000 workers published by the Health Enhancement Research Organization, or HERO, revealed that health care costs are 147% higher for those individuals who are stressed or depressed, independent of other health issues.¹ The study, which included employees from Chevron, Hoffman–La Roche, Health Trust, Marriott, and the states of Michigan and Tennessee, also found that health care costs generated by stress and depression exceeded those stemming from diabetes and heart disease—both stress-related illnesses.

But what exactly is stress? Generally speaking, “stress” refers to two simultaneous events: an external stimulus called a stressor, and the emotional and physical responses to that stimulus (fear, anxiety, surging heart rate and blood pressure, fast breathing, muscle tension, and so on). Good stressors (a ski run, a poetry contest) inspire you to achieve.

In common parlance, though, stress usually refers to our internal reaction to negative, threatening, or worrisome situations—a looming performance report, a dismissive colleague, rush-hour traffic, and so on. Accumulated over time, negative stress can depress you, burn you out, make you sick, or even kill you. This is because, as our research shows, negative stress is both an emotional and a physiological habit.

Of course, many companies understand the negative impact of cumulative stress and do their best to help employees counteract it. Some offer on-site yoga classes and massage; others provide stress management seminars; still others require workers to take a vacation every year. The problem is that the overall company culture, exacerbated by the stress in people’s private lives, works against such approaches. Stressed-out employees are unwilling to take precious time away from work, even for an hour, to partake of amenities that they—and their bosses—generally regard as optional. Moreover, those who use the employee wellness programs are the ones already most willing to confront their stress head-on. Those in the greatest need often don’t show up.

Since 1991, we have studied the mind-body-emotion relationship—specifically, the physiological impact of stress on performance, both at the individual and organizational levels. (Thoughts and emotions have different types of physiological responses, so we distinguish between thoughts, which are generated by the mind, and emotions, which are produced throughout the body.)

Our goal, in large part, has been to decode the underlying mechanics of stress. We’ve sought to understand not only how stress works on a person’s mind, heart, and other body systems but also to discover the precise emotional, mental, and physiological levers that can counteract it. Having worked with more than 50,000 workers and managers in more than 100 organizations, including Boeing, BP, Cisco, Unilever, Bank of Montreal, and Shell, we’ve found that learning to manage stress is easier than most people think. And stress reversal can do a lot of good for your organization.

Our research has spawned “inner quality management,” a system of tools, techniques, and technology that organizations can use to reduce employee stress and boost overall health and performance. In this article, we’ll use the story of someone we’ll call Nigel, a senior executive with whom we worked, to describe how these techniques reduce stress in the real world. Among the things Nigel learned was a specific technique for lowering his body’s stress response within a minute or two. Like Nigel, you can practice this technique virtually anywhere, even during a tense meeting or while laboring under a tight deadline. By doing so, you can reverse the toxic effect that stress has on your body, your mind, your mood, and your overall effectiveness and productivity.

Nigel’s Story

When we first met Nigel, he was a mess. A 52-year-old engineering executive at a global oil company in Britain, Nigel was irritable, pale, and occasionally short of breath. He had dark circles under his eyes, and he complained of stomach problems. In fact, he was under a terrific amount of stress. His company was in the grips of powerful geopolitical and competitive pressure. It also faced internal challenges resulting from global restructuring efforts, the intense demands to develop new sources of oil, and a string of acquisitions. In addition, one of Nigel’s managerial reports was making his life difficult, and his division’s performance was dropping. Unending international travel, combined with family concerns involving aging parents and a troubled teenager, took their toll. Though he had endured this situation for years, Nigel had no idea how much the unrelenting stress had affected his health and performance.

He did have a hint, however. For 15 years, Nigel had suffered from high cholesterol and high blood pressure. Since both conditions are significant risk factors for heart disease and stroke, Nigel’s physician prescribed a straightforward, but not so simple, treatment: Reduce your stress.

But how? The work environment was such that Nigel didn’t feel he could afford to take time out to exercise or time off to recuperate from stress. He also doubted that such strategies would provide lasting solutions. In fact, on those occasions when he was able to take time away from the office, he felt so flattened by exhaustion that he wound up getting sick. Moreover, even when he did manage to relax, he correctly guessed that his blood pressure would shoot up again as soon as he returned to work. He didn’t know what to do, and that sense of hopelessness discouraged him even more. Secretly, he even nursed fantasies about having a heart attack—at least if he landed in a hospital he could finally get some rest. Then, of course, he would chide himself for entertaining such ideas, knowing how much his company, his colleagues, and, most of all, his family depended on him.

Physiologically speaking, here’s what was happening to Nigel. As Daniel Goleman, Richard Boyatzis, and Annie McKee explain in their article “Primal Leadership: The Hidden Driver of Great Performance” (HBR December 2001), the brain’s mood-management center contains two limbic systems: first, the open-loop system that depends on connections to other people, and second, the closed-loop, self-regulating system that transmits neurological, hormonal, blood pressure, and electromagnetic messages among organs within the body. In Nigel’s case, constant stress had hijacked his closed-loop limbic system. This kept the emotional center of the brain, the amygdala—the locus of emotional memory—stuck in a perpetual state of fight or flight so that he never had a chance to fully recover.

The amygdala’s primary job is to eavesdrop on incoming sensory information, looking for a match between the memory of a previous experience and an event in the here and now. For example, if a colleague ignored or was curt with Nigel, his amygdala remembered the negative experience; then, when he received an e-mail from the same colleague, he would misread its intent as threatening because his brain had found a match.

Every time Nigel felt threatened, his automatic fight-or-flight response set off a chain reaction of roughly 1,400 biochemical changes. For example, cortisol, the so-called stress hormone, would flood his autonomic nervous system. Scientists have found cortisol to be a major culprit in heart disease and diabetes. Worst of all, Nigel’s body had, over the years, adapted to living in a perpetual state of stress. Simply put, his brain constantly strived to maintain a match to stressful patterns, which kept his blood pressure and cortisol levels constantly set at high. That’s why taking a vacation never really seemed to help him.

To stop this physiological chain reaction, Nigel needed to find a way to manage his stress from moment to moment and day by day. We taught him to practice a technique we call “freeze-frame.” It is based on the concept that conscious perception is like watching a movie, and we perceive each moment as an individual frame. When a scene becomes stressful, the technique allows you to freeze that perceptual frame and isolate it in time so you can observe it from a more detached and objective viewpoint—similar to pausing the VCR for a moment. Here are the five steps of the freeze-frame technique:

Recognize and disengage. Take a time-out so that you can temporarily disengage from your thoughts and feelings—especially stressful ones.

Breathe through your heart. Shift your focus to the area around your heart. Now feel your breath coming in through that area and out your solar plexus.

Invoke a positive feeling. Make a sincere effort to activate a positive feeling.

Ask yourself, “Is there a better alternative?” Ask yourself what would be an efficient, effective attitude or action that would de-stress your system.

Note the change in perspective. Quietly sense any change in perception or feeling and sustain it as long as you can.

Once Nigel mastered these steps, he was able to block the immediate stress response and, as a result, to get his mind, heart, and body systems to work in sync again. Within weeks of first studying the technique, Nigel conquered his habitual stress: His blood pressure returned to normal and stayed there, and his depression cleared. Nigel began to regain control of his life and take pleasure in his work. Within six months, he had become an effective leader again. Here’s what he did.

Step One: Recognize and Disengage

Seeing his own chaotic heart patterns convinced Nigel that he needed to make some changes—and soon. He began his stress reduction program with one small project: He focused on Martin, the exasperating manager who reported to him. Though Martin had started out as an effective manager, he had fallen behind on several deliverables, forcing the rest of Nigel’s team to pick up the slack. In addition, Martin had an irritating personal style. He talked too much, constantly about himself and always in a tone that alternated between whining and bragging. When he made presentations in group meetings, Martin would drone on without ever appearing to get to the point. Twice, Nigel became so irritated that he actually shouted at Martin to “get on with it!”

Nigel noticed that he felt irritated—and had the physical signs of stress, particularly a knot in his stomach—whenever he saw or spoke with Martin. To disengage from this stressful reaction, Nigel would recognize the stomach knot and then push a mental button, as if pausing his mental VCR. In other words, Nigel learned to freeze the irritation he felt whenever he thought of Martin. (This ability to instantaneously switch mental gears is something we practice all the time, just as we jump from mulling over an e-mail message, scanning the next item on our to-do list, and listening to a presentation.) Our research on stress response has shown that this simple process of recognizing and disengaging interrupts the amygdala’s ability to match patterns and helps us gain objectivity.

Step Two: Breathe Through Your Heart

Though many stress management techniques involve shifting one’s attention to a sound, phrase, or the breath, numerous studies have shown that you can produce physiological change by focusing on a specific part of the body as well. For example, biofeedback studies have demonstrated that by focusing on one of your hands, you can change its temperature without affecting your other hand’s. In our lab, we’ve observed that the mere act of focusing one’s attention on one’s heart actually produces a specific, physiologically calming effect. That’s because the heart—the most powerful organ in the body, whose rhythms affect the functioning of all others—sends far more information to the brain than vice versa.

Breathing techniques work because they modulate the heart rhythm pattern. By breathing at the ten-second rhythm, you coax the system into “coherence,” a term used in physics to describe the ordered distribution of power within a wave. The more stable the frequency and shape of the waveform, the more coherent the system becomes. In physiological terms, coherence describes the degree to which respiration and heart rate oscillate at the same frequency. When physiological coherence occurs, the brain associates it with feelings of security and well-being. That’s why simply taking several slow, deep breaths can quickly diminish the feeling of stress. (Shifting perception and behavior, however, requires more than regulated breathing, as we’ll see.)

The combination of focusing on his heart and practicing the breathing exercise immediately diminished Nigel’s feeling of stress because his amygdala had stopped running the physiological show. He felt calmer after practicing the heart focus and breathing step, and his stomach didn’t feel as if it were tied up in knots. That made sense physiologically, because the gut also has an extensive neural system that functions independently of the brain, and focused attention affects its rhythms as well.

In the beginning, Nigel made a point of breathing and focusing whenever he felt the most stress—particularly on his nightmarish daily commute and while listening to voice-mail messages from Martin. He would even practice the technique before meetings with Martin, and he began to notice his stress reaction diminish. As he practiced, Nigel noticed that he began to feel neutral, rather than aggravated, in the face of stressful experiences.

Step Three: Invoke a Positive Feeling

“The power of positive thinking” is a cliché, of course. But our research indicates positive feelings have a powerful physiological effect, pushing us to perform better. In the act of remembering a feeling, Nigel’s amygdala was reliving a good experience, matching the emotion he felt in the past to the actual occurrence in the present. And because his amygdala was becoming conditioned to the new emotional response, Nigel felt better physically—over time and with practice.

After six weeks, Nigel’s blood pressure returned to normal. His sleep also gradually became deeper and more refreshing, his energy levels rebounded, and his overall cardiovascular function improved by 65%. Nigel also discovered that by learning to modulate his heart rhythms, he increased his ability to think clearly. The cortical regions of the brain responsible for decision making, strategic thinking, creativity, and innovation were no longer blocked by the negative stress response.

Goleman, Daniel, Boyatzis, Richard, McKee, Annie, Primal Leadership: The Hidden Driver of Great Performance, HBR, 2001/Dec

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Causes and Effects

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In 2001, U.S. companies devoted \$9 billion to social causes. Few, however, approached their charitable activities with an eye toward enhancing their brands. Those that did committed talent and know-how, not just dollars, to pressing but carefully chosen social needs and then told the world about their cause and their dedication to serving it. Through the association, both the businesses and the causes benefited in ways they could not have otherwise.

Over the years, such cause-branding strategies have helped social causes enjoy financial rewards and unprecedented support both inside and outside companies. They've also helped corporations enhance their reputations, deepen employee loyalty, strengthen ties with business partners, and even sell more products or services.

In 1993, the cosmetics giant Avon committed itself to raising breast cancer awareness in the United States, particularly among medically underserved women, as an essential first step toward early detection of the disease. Avon's independent sales representatives now routinely distribute educational materials on their sales calls and participate alongside customers in fund-raising walks. All told, Avon has raised and contributed \$250 million for the cause.

ConAgra Foods, another leader in cause branding, has embraced the cause of combating child hunger by underwriting 100 after-school cafés now serving about one million hot meals each year. The program, called Feeding Children Better, also encourages employees to raise money and serve meals, donates products and trucks to food banks across the United States, and leads a national public-service advertising campaign to raise public awareness of child hunger.

In both these cases, the causes have acquired not only additional funds but a higher profile and a bigger cohort of supporters. Meanwhile, the companies have witnessed employees' increasing commitment to the causes and to their jobs. That's especially worthwhile at a time when a wave of corporate wrongdoing has left the public clamoring for good corporate citizenship. Companies like Avon and ConAgra Foods that demonstrate a sense of social responsibility stand out in a world of increasingly undifferentiated goods and services.

Indeed, going public with a cause program can make a company significantly more attractive to stakeholders. According to our 2001 Cone/Roper Corporate Citizenship Study, 88% of employees aware of cause-related programs at their companies feel a "strong sense of loyalty" to their employers. And 53% of employees at companies with such programs chose to work at the organizations partly because of their employers' expressed commitment to various social issues.

Consumers, for their part, increasingly shop with a cause in mind and consider a company's support of social causes when deciding which products to buy and recommend to others. Aware of that trend, County Line, a ConAgra Foods brand, conducts an annual Christmas promotion in which it lets customers know it will donate one cent to Feeding Children Better for every pound of County Line cheese sold. In the past three years, the program has raised more than \$210,000.

Despite its many advantages, cause branding does have limitations and pitfalls. It is not, for example, an

antidote to a damaged reputation. Rather, it is a way of making a strong brand even stronger. Nor can a cause ever turn a brand into something it's not. A tobacco company, for example, might love to affiliate itself with an organization dedicated to fighting smoking by minors, but the public wouldn't buy it, even if the organization's leadership did. And if a company supports a cause that's embraced by dozens of other firms but fails to claim a special piece of the cause as its own, it won't be able to differentiate itself in the marketplace. Companies typically make a bigger difference in a less popular area than a crowded one.

For more than a decade, we've been helping corporations create new cause-branding programs and evaluate existing ones, we've been interviewing chief executives, and we've been tracking Americans' attitudes and nationwide trends. More than anything else, we've learned that cause-branding programs must be approached with the same diligence as other long-term business and branding strategies. In these pages we introduce our findings, presented as four guiding principles, to help steer corporate executives through their own cause-branding efforts.

Select a Cause That Is Aligned with Your Corporate Goals

Most cause-branding programs should be, at their heart, about enhancing corporate brands in ways that are meaningful to key constituencies: customers, employees, communities, public officials, or suppliers. Avon's customers—primarily women over 30—didn't need to be convinced that breast cancer posed a threat to themselves or to women generally. But not every company can be like Avon and find a cause that fits its brand like a glove; that's okay, because it's not strictly necessary. The target audience for a product doesn't even have to be the prime beneficiary of the cause. ConAgra Foods' prime consumer is obviously not a child who goes to bed hungry, but the link between the company's product and its chosen cause is clear, and the association has helped win the loyalty of other stakeholders such as suppliers and retailers.

Indeed, almost any social cause can find a home in some cause-branding program. In the aftermath of the Columbine shootings in 1999, Chevrolet decided to put its muscle behind school-violence prevention and helping youth in general. Someone at the organization noticed that one of the victims had been the owner of a cherished vintage Chevy truck. But the alignment wouldn't have made sense if the program had not served one of Chevrolet's specific business objectives. In particular, the organization wanted to add the drivers of the future, who were worried about remaining safe throughout the school day, to its customer base. It also wanted to forge a stronger connection with its dealers, which serve as the business's entry point to local communities, so it decided to match dealers' cash contributions to local youth-development programs. The program, called Chevy ROCK (Reaching Out to Communities and Kids), reached a new audience and added a compelling facet to the Chevrolet brand. Chevrolet also sponsors the National Association of Students Against Violence Everywhere (SAVE) as part of Chevy ROCK. The automaker helps finance SAVE's school-violence prevention programs nationwide and funds their annual summit, which attracts more than 1,000 youths each year.

As it happens, most companies' chosen causes tend to cluster under the consumer-friendly umbrellas of education, health, and children. But some companies have successfully branched out and taken more risks. When Levi Strauss was considering taking up the cause of AIDS prevention in the early eighties, discussion of the syndrome still provoked dismay in middle America. Yet the company's image was edgy and nonconformist, and it was headquartered in San Francisco, a city where a relatively large proportion of the population was affected. So the organization went ahead. Not long ago, most companies would have avoided associating themselves with hard realities like AIDS, but those realities no longer seem quite so dissociated from customers' own lives. In the words of Kurt Ritter, the general manager at Chevrolet who launched ROCK, "We are Main Street America, but Main Street has changed."

Ritter puts his finger on another reason not to play it entirely safe: the problem of crowding. "You can jump in and help fight breast cancer," he says, "but you're going to be one of many. It's a relatively well-understood cause, whereas school violence is something that is not well understood and isn't well funded."

Avon coped with the problem of crowding when it first decided to become involved with breast cancer (more than 300 businesses have since gravitated to the cause) by avoiding any association with research, the focus of support at the time. The cosmetics company initially addressed underserved women's critical unmet need for access and screening. As other companies took up the themes of awareness and screening,

Avon, instead of abandoning the field, expanded its commitment by adding new, innovative programs such as the Avon Walk for Breast Cancer, thereby preserving its distinctive profile.

Avon notwithstanding, it's possible that the fit between brand and cause can be too close. Financial literacy is an obvious issue for banks to embrace—so obvious and overdone that most of the banks' multitude of programs no longer inspire employees or capture the public's attention.

ConAgra Foods set itself a somewhat easier task than Chevrolet did by selecting a critical social problem that would be a natural fit for a food company. It had a history of donating food to the needy, but when it took a systematic look at what was being done, it discovered that hunger, like breast cancer, was a fairly crowded field. None of the existing programs, however, went out of its way to help hungry children. Because ConAgra owns brands such as Healthy Choice, Butterball, and Orville Redenbacher's but isn't a consumer brand itself, the company's initial business goal was to strengthen ties with its employees and its retail and food-service customers. Since the launch of its Feeding Children Better program more than three years ago, over 100 ConAgra plants and facilities have contributed approximately 200,000 pounds of food to America's Second Harvest, a nonprofit organization that distributes donated food to hungry adults and children. Among retailers, Quizno's, a national chain of 2,000 restaurants, stood out by donating a portion of the proceeds from its sales of its turkey subs, made with Butterball ingredients, to the Feeding Children Better program.

The business objective of a cause-branding campaign can be anything from increasing sales, forging new business relationships, and improving customer loyalty to something as broad as enhancing overall reputation. The philanthropic objective could be raising awareness of a critical need, inspiring consumers and partners to take action, or raising money. But finding a single cause that satisfies both a business and a philanthropic objective, reconciles them, and at the same time does not clash with the brand identity is a highly complex undertaking. And if the business objective of the cause-branding program isn't also a strategic goal of the company, even the worthiest cause will fail to engage the energies of the company as a whole and demonstrate staying power. That should be a welcome truth, since it means that companies don't have to choose between altruism and self-interest. For a company even to consider putting its finite resources behind a cause, the competitive logic for supporting the initiative should be clear to senior executives in HR, marketing, sales, community relations, government affairs, and other key areas.

Keep in mind that it takes years to ameliorate a social problem and just as long to build a brand. "You have to make sure that senior management understands this is long term. Do not confuse this [commitment to a cause-branding program] with the monthly or the quarterly promotion plan," Ritter advises. Ronald McDonald House Charities, probably the world's most recognized cause program for well over a decade, has been in operation for almost 30 years.

First Commit to a Cause, then Pick Your Partners

A charity is an organization; a cause is a big tent. Under a cause's sheltering expanse, a host of charities can prosper. But unless you've chosen a cause before you've made your affiliations, your program will be too dependent on an organization's own evolution and staying power as the program begins to attract imitators. No question, partnering with charities is essential. Organizations like Habitat for Humanity and America's Second Harvest bring knowledge, credibility, advance intelligence, and hands-on experience. But the primary role of charities in any cause-branding effort should be to channel resources to people in need, not to shape the corporate brand. Moreover, any given charity should serve as only one link in a chain of participants. For example, Wal-Mart has a strong alliance with Children's Miracle Network, but it also sponsors other fund-raising, giving, and volunteerism efforts on behalf of almost 50,000 local community organizations through its Good Works program.

There are more than 850,000 registered nonprofit charitable organizations in the United States and tens of thousands more nongovernmental organizations (NGOs) around the world, each bringing its own philosophy, approach, and level of sophistication to fulfilling its mission. Such attributes can add up to an organizational identity just as indelible as that of any for-profit organization. When a nonprofit consciously shapes and publicizes its identity, it too has a brand. And when a corporation embraces a single charity in lieu of a cause, it runs the risk that the distinct character of the charity's brand will interfere with the

message the corporation is trying to convey.

A charity will have its own mission and priorities, which may not fully correspond with the corporate sponsor's goals. And it may have a dramatically different management style. It may have a decentralized structure that prevents it from controlling its programs at the grassroots level. It could also have many sponsors, some from the same industry, all competing for attention.

The selection of a cause poses fewer hazards, since the company is free to broaden, narrow, or otherwise redefine the cause as conditions evolve and a program makes headway. Though causes are broader than organizations, they shouldn't be sprawling. If your company decides to focus on education, it should consider what aspect of education to address—early childhood, K–12, scholarships, or some other area. Ronald McDonald House Charities started out by simply offering a nearby place where the families of ill children could stay. LensCrafters' Give the Gift of Sight initiative doesn't purport to cure blindness; it provides eyeglasses to underprivileged people. No company, however large, has the resources to "own" a cause as multidimensional (or as heavily supported) as combating cancer, but a company can succeed in moving to the front of people's minds when they think about the cause. Avon, for instance, is the first company that American women associate with the corporate fight against breast cancer.

Put All Your Assets to Work, Especially Your Employees

A serious commitment to a cause can sometimes warrant a significant financial investment. Many companies with cause programs, however, are not necessarily giving massive amounts of cash. Rather, they're strategically leveraging their resources, whether they be professional skills and technical knowledge or such physical assets as distribution networks.

ConAgra's Rapid Food Distribution System, for instance, draws on the company's command of information technology and logistics to help increase efficiencies in distributing donated food to the needy before it spoils or becomes unaccounted for. (An estimated 200 million pounds of food each year fail to reach intended recipients.) As ConAgra brings its electronic inventory-control systems to food banks and they start to use the dozens of new trucks the company is providing, the incidence of waste should substantially decline.

High employee engagement is not only a boon to any such cause-branding effort, it is sometimes the point. Timberland, for example, pays its employees for up to 40 hours of volunteer work each year. The program is one of the major factors landing the company on Fortune's 2003 list of Best Companies to Work For.

We said earlier that cause-branding programs enhance employee loyalty and aid recruitment. They can also make employees more enthusiastic about their regular jobs. That's one of the main reasons the best programs are a far cry from basic checkbook philanthropy.

The typical Fortune 500 company contributes 1.3% of pretax earnings to charity; best-in-class companies are devoting 5% or more. It's easy to say that companies should increase their giving, but what they really need to do is increase the types of support and better leverage their existing assets. Bringing skills and resources to a cause can inspire an entire community of employees, suppliers, customers, and public officials to make the cause their own. Each of these individuals in turn interacts with people further afield. Support for the cause then spreads, and the brand is more widely propagated.

To Bernie Marcus, cofounder of Home Depot, cause-branding efforts have to work that way. "Habitat International came to us in 1991.... 'Write a check to us,' they said, 'and we will distribute it to our affiliates.' But we said no. If we really want to have an impact in these communities..., then we have to build relationships." Throughout the United States, Home Depot's employees labor to build and rehabilitate affordable housing for the elderly and the poor. Like Marcus, leaders such as Wal-Mart's Sam Walton, ConAgra Foods' Bruce Rohde, Avon's Jim Preston, and Starbucks's Howard Schultz have all viewed their employees as brand ambassadors.

When cause branding has a volunteerism component, employees' positive feelings about their company are further reinforced. According to a 2001 National Employee Benchmark Study on volunteerism and

philanthropy by the research firm Walker Information, 62% of employees at companies with volunteer programs recommend their companies as places to work, while just 39% at companies without such programs recommend their employers. And among employees very involved with their companies' volunteer programs, 73% say their employer's support for their efforts has made them more committed to their jobs.

As we mentioned, employees can do a lot more than help with traditional efforts like fund-raising. Instead of donating money for a new gym floor at a Boys & Girls Club, for example, one Home Depot store actually enlisted employees to install the floor, helping serve the community while also giving workers training. Initiatives like these are apt to make employees feel personally responsible for social improvements, further strengthening their loyalty to causes and to their companies.

As Kurt Ritter says, "Supporting a social issue gives people a larger cause than the next monthly sales report...or the next quarter's profit statement. It makes people feel good about themselves. A company can't compete without great products, great advertising, great traditional marketing. But it has got to do something else on top of all those things."

Communicate Through Every Possible Channel

While the media confer greater credibility than a company's own publicity efforts do, they are rarely the most direct, or most available, vehicles for spreading word of your accomplishments. Much more effective than either is sponsorship of programs that customers can participate in and promote informally. The beauty of the Avon Walk for Cancer, for instance, which last year drew 600,000 existing and potential customers and Avon sales representatives, or Reebok's Human Rights Program, which holds a well-attended annual ceremony honoring courageous young activists around the world, is that it turns participants into ardent advocates for the brand.

Journalists are inundated with announcements of corporate activities and new grants, and they often view a corporation's involvement in social issues with skepticism. But they will respond to genuinely newsworthy, highly innovative, and substantive programs. For instance, ConAgra's purchase of defunct dot-com grocer Webvan's refrigerated trucks for food banks was reported in the Wall Street Journal and USA Today. Such reporting is unusual. Even so, local journalists often want to hear how programs affect their neighborhoods. For example, every single one of the 19 openings of ConAgra-funded Kids Cafes in 2002 was covered by local media.

According to the 2002 Cone Corporate Citizenship study, nine out of ten Americans want to hear about companies' charitable activities. But companies need to put their energies into accomplishing something—and building solidarity with partners—before looking for recognition. Too much time and money spent bragging about your philanthropic efforts is no better than being silent about them—and can even be damaging. When it came out that Philip Morris had spent \$75 million on good works in 1999 and then \$100 million publicizing them, much of the good those works had done for its brand disappeared. So skewed a ratio casts doubt on the sincerity of a company's commitment to a cause.

In short, media coverage and greater public awareness can be double-edged. Companies should expect their cause-branding programs to be scrutinized the way their labor, environmental, and other business practices are. The proliferation of Web outlets allows initiatives to take off, but it also allows damaging news to circulate more rapidly. Now more than ever, companies should be prepared to live by the standards they preach. This may entail changing internal policies, as Avon did by adding reimbursement for employee mammograms to its health benefits package when it launched its Breast Cancer Awareness Crusade.

The most successful programs use a range of internal and external communication channels, including the Web, annual reports, direct mail, and advertising. Target promotes its Take Charge of Education program through extensive in-store signage—at the register, on shopping bags, on receipts, as well as in creative print and television ads. And the U.S. Postal Service's semipostal stamp program uses the organization's signature product—stamps—as its medium of communication. The program takes part of the proceeds from sales of its Heroes of 2001 stamps and donates it to the Federal Emergency Management Agency. FEMA then distributes the money to the families of relief personnel who were killed or permanently disabled in the line of duty following the September 11 attacks.

The cause-branding efforts most likely to be accepted by the public and the media will appear neither improbable nor forced. A bad fit would be an organization that in accepting help from a particular donor betrays its principles. In March of this year, newspapers reported a recent alliance between the American Academy of Pediatric Dentistry and the Coca-Cola Foundation. It looked like the maker of soft drinks containing sugars and acids associated with tooth decay was cynically exploiting the bona fides of an organization dedicated to promoting healthy teeth.

Equally dangerous are situations in which a respected nonprofit seems to be endorsing a company's products for purely mercenary reasons. In June 1994, McNeil Consumer Products, a subsidiary of Johnson & Johnson, obtained a license to use the Arthritis Foundation's name and logo in marketing four of its over-the-counter analgesic products, for which it would pay an annual fee and royalties. In October of that year, the company and the foundation launched a nationwide multimedia advertising campaign. The attorneys general of 19 states subsequently alleged that various claims the campaign made, such as that a portion of the proceeds of each sale would go toward finding a cure for arthritis, were false and violated consumer laws. In a 1996 settlement, McNeil and the foundation agreed to reveal fully the nature of their financial arrangements in all their future advertisements.

Cause branding is a middle ground between the purely passive philanthropic practices of most corporations and the stringent approach set out by Michael Porter and Mark Kramer in their article "The Competitive Advantage of Corporate Philanthropy" (HBR December 2002). Porter and Kramer call for transforming the "competitive context" in which a business functions. By that they mean producing public and private benefits that are not simply related but inseparable. This is a worthwhile goal but also an ambitious one. We, too, believe companies should not "distance their philanthropy from the business"; likewise, we support programs to which companies apply their "unique assets and expertise." But we would hate to see otherwise eager companies hesitate to become more considered and strategic in their charitable efforts just because they are not ready for a commitment of this kind.

In today's world, companies cannot escape being viewed as forces in both the marketplace and in society. In the wake of recent scandals, their treatment of investors, employees, and the environment has become a matter of intense public concern. Cause branding is a way to turn corporate citizenship, generally thought of as a set of obligations, into a valuable asset. When the cause is well chosen, the commitment genuine, and the program well executed, the cause helps the company, and the company helps the cause.

Porter, Michael, Kramer, Mark, The Competitive Advantage of Corporate Philanthropy, HBR, 2002/Dec

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Are You In with the In Crowd?

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Dialogos

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At the core of your company, there is a group of people who seem to call the shots. More precisely, all the shots seem to be called for their benefit. It's as if the organization, beneath its formal statements of mission and purpose, has actually been set up to fulfill this group's needs and priorities. Everything else that the organization does comes later: satisfying customers, creating wealth, delivering products or services, developing employees' talents, returning investment to shareholders, and even insuring the company's own survival. They are means to the end of keeping the core group happy.

The core group won't be found on any formal organization chart. It exists in people's minds and hearts—indeed, the root of the word “core” is probably the Latin word *cor*, for heart. It comprises the cluster (or clusters) of people whose perceived interests and needs are taken into account, consciously or not, as decisions are made throughout the organization. In most organizations, talking explicitly about this group is taboo; its existence is a dirty secret that contradicts the vital corporate premise that we all have a common stake in the company's success. In fact, all employees do have a common stake in the company's success, but the company has a greater stake in the success of some employees than of others.

All organizations have core groups, but different organizations, depending on their histories and natures, have different types of core groups. In small start-ups, for example, the core group often consists of just the entrepreneurial founders, an angel-mentor or two, and a confidant. By contrast, a large and complex organization such as General Electric or Procter & Gamble can have hundreds of interlocking core groups, each active in its own division, department, or region. They vie with one another for the attention of the ultimate core group, the people in the CEO's kitchen cabinet. This group generally (but not always) includes the people at the top of the hierarchy. But it may also include people who—because they are respected, popular, successful, or manipulative, or because they control access to some critical bottleneck—have gained the loyalty and attention of others throughout the company.

When taking over a new company or division, smart leaders are quick to sort out who belongs to this in crowd. They recognize that an organization can be led only in a manner that is consistent with the perceived attitudes of the core group. Anything considered to run contrary to the group's interests will be resisted (because employees will assume that their jobs require them to resist it)—even if the group members themselves say otherwise. Thus, if you do not know who constitutes the core group in your organization, or what they stand for, you may find that leading will be extremely difficult—even if you are ostensibly the person in charge. And if you want to move the organization in a new direction, you may need to explicitly challenge the core group first, perhaps by removing some of its key members or persuading them to publicly and consistently embrace your goals. Otherwise, the rest of the organization will not go along.

For better and for worse, core groups are as inevitable as human nature. Where they function well, the entire organization moves naturally and smoothly toward high levels of performance, responsibility, and creativity. But, of course, with so much influence over decision making concentrated in the hands of such a powerful group, the possibility of abuse is real. In some cases, the core group becomes a kind of internal mafia that effortlessly (sometimes despite its own intentions) exploits the rest of the organization. This phenomenon explains why some companies can spend years scrabbling frugally for profit only to squander it all on ill-advised mergers. It also explains why, at some companies, the in-group lavishes upon itself pay

and perks that are entirely out of line with the firm's success.

This is not to say that core groups are inherently bad. In fact, behind every great organization is a great core group. The core group is best seen as an organizational resource, invisible but tangible. Executives who fail to take the core group's priorities into account risk not only their organization's performance but their own goals and, in some cases, their careers.

Consider Lothar, a senior manager and innovative researcher at a consulting firm that had recently split off from a much larger electronics corporation. The new board was still working out the details of the separation when Marianne, the CEO, made an exultant speech at a company celebration, thanking all the people who had helped launch the new firm. Brad, the head of human resources, followed her, colorfully recounting the details of the transition. During their toasts, neither Marianne nor Brad mentioned Lothar; they honestly forgot him. Somehow, during the spin-off (which Lothar had initially opposed), his status had changed. Indeed, only a few months after the festive evening, Lothar learned that he had been passed over for the job he had been promised as the head of research, and he had to scramble quickly to find another position at his old corporate parent.

Who sabotaged Lothar's career? No one did it deliberately. It's just that in the two years since the leaders of the consulting department had decided to form their own company, Lothar had gradually become a symbol of a past that the core group had rejected. Lothar had been one of the highest-performing managers and an emphatic advocate of the new company's values, but most people did not see him as enthusiastic or interested in the new firm. That was enough for the system, as a whole, to deny him legitimacy. Had Lothar understood this perception better—and earlier—he would have had time to carve out a new core group identity for himself and negotiate a new relationship with the organization. Although they may not know when they're part of the core group, people find out fast when they've been dropped.

Stories like Lothar's unfold in organizations all the time. Over the past 15 years, I have conducted interviews with dozens of senior executives who have found themselves enmeshed in what seem like mystifying organizational dynamics. To unpick those dynamics, it is necessary to examine the reasons for core groups' extraordinary influence in organizations. We must understand, for example, the forces that legitimize core groups, as well as the factors that guarantee their continuity. It is also important to grapple with what makes core groups dysfunctional and explore what can be done to make them healthier.

There's Always an In Crowd

No matter how large a core group may be, it always consists of a minority of the people in an organization. Indeed, in most organizations, it's unlikely that more than 5% of the people ever become members of a core group. Such groups vary dramatically from organization to organization. At the Body Shop, the core group is almost entirely composed of women; at Patagonia, it consists largely of mountain climbers. At most magazines I've known, either the production staff has core group status (in which case deadlines are sacrosanct and unchangeable) or the editorial staff does (in which case the magazine is exceptionally tolerant of last-minute changes).

In the best organizations, the core group members represent the unique values and knowledge that distinguish their companies from the rest. For example, only a few Coca-Cola executives have access to the vault where the secret syrup formula is kept. Of course, no one is worried that anyone will actually steal and use it. But the Coke formula has tremendous value as a talisman that separates Coca-Cola's core group from other members of the organization—and from the core groups of other companies. To have seen the Coke formula is truly to be part of a powerful and envied secret society.

Whatever the oil of anointment—whether it's seeing the Coke formula or getting invited to the CEO's house—the inner circle derives its power from the fact that life is too complicated without some such group to act as a symbolic lodestar. Think about it for a minute. The basic building block of organizations isn't the job, the team, the process, or even the share—it's the decision. People in organizations collectively make hundreds of thousands of decisions each day, usually without knowing exactly what the results will be. These decisions are made amid a maelstrom of competing jurisdictions, commitments, desires, and needs, including each decision maker's own self-interest. We make sense of a particular decision by asking

ourselves, consciously or not: "What would so-and-so think of this?" The organizational core group consists of the aggregate of all these individual so-and-sos.

Indeed, in some organizations you can hear the core group named in the decision-making process. When debating a new plan, for example, people will say, "John is really excited about it." Or, "Larry has a lot of heartburn about it." Or, "I don't want to be the one to tell Kevin we can't make it happen." (These are real quotes from a Cisco Systems employee who was describing how decisions at the company were made on behalf of core group members CEO John Chambers, chief financial officer Larry Carter, and then-senior vice president Kevin Kennedy.) These statements sound like comments about emotions, but they are actually hard-nosed assessments of the core group's readiness to act. It doesn't matter how good the plan is; if Larry has heartburn, it's not going to happen. That's not just because as CFO, Larry Carter has power. It is also because he is part of the group that matters in the company's decision-making process. In this way, the core group becomes involved in decisions even when none of its members is present.

Of course, at any given moment the organizational rank and file could conceivably shift its choices against one of the member's interests, and this would push him or her out of the core group. (This happens, sometimes, with lame-duck leaders whose tenure at the organization is clearly limited.) Even in the most authoritarian organizations, the people in command know they can't rule through the power of their positions alone. Young U.S. Army lieutenants, fresh from West Point, discovered this during the Vietnam War when they tried to pull rank. The veteran troops razzed these new guys, openly disobeyed them, and sometimes even killed them. In most organizations, the stubborn fact is that we can confer legitimacy on anyone but ourselves. Indeed, what people conventionally call leadership is, at bottom, the ability to get others to confer legitimacy on us—and thus to get others to put us in the core group.

That can be a complicated process. Different kinds of organizations confer legitimacy on different types of leaders, and a would-be core member must read his or her followers accurately. I recently learned of an editor at a small community newspaper who continually snapped at his subordinates. Finally, one of his assistants sent him an e-mail with an ultimatum: "Don't you ever tell me to shut up like that again." The next day, she walked in on him while he was chewing out another staffer. He snarled at that person and then without missing a beat turned to the assistant and said, "And you—shut up!" Sure, the editor apologized. Sure, the assistant forgave him. And, yes, they're both still working at the newspaper. The editor's formal power is intact, but his influence has been compromised. In a commodities trading company, his behavior wouldn't have affected his legitimacy. But in this context, the editor's rage was disastrous for his career. In fact, the word went around the office: A few more lapses and he would, in effect, be kicked out of the core group. He would no longer be able to get anyone to do what he asked them to. The core group can govern only with the consent of the governed. That's why smart core members understand that the connection with their followers requires deliberate attention and design, and they work at it. Otherwise, the organization is vulnerable to dysfunctional core group relationships.

How Core Groups Go Bad

Enron's collapse was compelling not just because of its speed and magnitude but because of what it revealed about core group dynamics. Enron's employees were unusual in the pride so many of them took in seeing themselves as part of the core group. Then in November 2001, it suddenly became clear that there was an inner core group—the people who were distinguished not by their ownership of stock but by their knowledge of the illicit partnerships that masked Enron's losses.

Enron may have been anomalous in the extent of the corruption in its inner circle, but if the truth be told, it's disturbingly easy for core groups to become dysfunctional. There are powerful dynamics at work in these groups that can tear at the very fabric of the organization. Most notable among them is a phenomenon that psychologist and management consultant Charles Hampden-Turner has labeled amplification. Amplification is the process by which a core group member's remarks, actions, and even body language are automatically magnified by his followers. In other words, the leaders' comments come across to others in the organization as louder, stronger, and more commanding than they seemed to him when he uttered them.

The phenomenon is universal. Recent psychological research has shown that children are uncannily in sync

with their mothers' moods and expressions and even their unconscious wishes. In a similar way, employees tend to pick up on the unspoken true interests of core group members. This has a positive side, of course. It is the reason, for example, that core group members can play big roles in fostering creativity: Core group members' attendance at a design meeting, even if they don't say anything, matters enormously in stimulating participants' creative output. Similarly, it matters which prototype cars auto executives seem most interested in driving, which software demos computer executives linger at, and which ideas executives in all industries mention to their peers. Others in the organization register these cues and act accordingly.

Unfortunately, it's not just creativity that can be rewarded this way. Deceit, inefficiency, moral cowardice, and general unaccountability can be rewarded, too. The core group reinforces whatever it pays attention to. A core group member who casually mentions a product might well discover three weeks later that someone has spent \$1 million introducing it. At one energy company, a boss was heard to remark in passing that it would be nice to have more open office space. Within a few days, contractors were tearing down the walls. A week later, the same boss complained that the place looked flaky, and the walls went up again.

In an organization where people eagerly try to smoke out the core group's needs and wishes—and then anxiously withdraw when they guess wrong—those in power infer that the organization lacks individuals who can take initiative. Or the core group simply concludes that staff members can't think for themselves. The rest of the organization, meanwhile, comes to believe that the core group members are self-centered, arbitrary, and oblivious. In such organizations, as the two sides lose their trust in each other, direct communication disappears. The only way to know where you stand is through the trappings of organizational politics: Who has the largest office or the largest staff? Who is invited to speak at a meeting? Who gets credit? Who gets publicly criticized or reprimanded? These bits of data are important indicators of whom the core group may or may not be grooming as potential members.

It's almost as if both sides are deliberately colluding to perpetuate a system in which they don't have to confront their stereotypes of each other, so they can spare themselves the difficult work of talking about the organization's real needs. In the endless (and often underground) bickering that ensues, various factions of the core group and their followers can get trapped in a vortex of suspicion and self-righteousness ("They just don't get it") that can escalate into paranoia and eventually into warfare. That's when the organization becomes truly dysfunctional; it is liable to damage its prospects because it is too torn by infighting to serve customers.

Getting the Group on Track

It's easy to dismiss that kind of toxicity as an inevitable by-product of core groups. But the core group can use its enormous power to shape the creativity, efficiency, and accountability of an organization for good as well as ill. There are many examples of organizations where the leaders make decisions better because they can draw on a well-functioning core group as a resource. This is not because the core group sets policy but simply because of the group's potential to establish an example for the rest of the organization. If the core group is going to be the means to move the organization forward, we need to know how to clarify its priorities.

A first step toward improving any core group involves reducing the level of distortion in the signals that are amplified. Politicians, diplomats, and psychiatrists have long been aware that they have to be exceedingly careful with even their most offhand remarks, because these can have huge effects on their listeners. Every U.S. president and treasury secretary quickly learns, for example, not to make casual remarks about currency exchange rates. And aristocrats have long practiced elaborate protocols for reducing misunderstandings when they interact with people of lesser status. A friend of mine once had dinner with England's Princess Margaret and a group of visiting Americans. A professional ambassador, Princess Margaret arrived at the gathering and quickly asked for a drink. She then lit a cigarette and immediately stubbed it out. She knew that her hosts would not feel free to drink or smoke until she had done so first.

Few business leaders have that instinct of noblesse oblige. To compensate, therefore, they need to make themselves more aware of the signals they send, both intended and unintended. This means not only knowing what messages they unconsciously convey about the types of programs they favor and the ideas they want. It also means being cognizant of how those messages are communicated. In many

organizations, conversation up and down the hierarchy is limited to sports talk and superficial inquiry. News of business realities travels only through projections and forecasts, which sends the message that if you see a discrepancy in these numbers, you may correct it—but don't try to talk about the reasons why a discrepancy appears. That would be getting too personal.

Often, the unconscious message is simply that core group members don't want to be disturbed or made uncomfortable. It takes a lot to disabuse people of that idea. A core group member's expression of even the slightest irritation has a tremendous impact on subordinates. Some senior executives try to compensate for this by demonstrating that they are willing to be uncomfortable. One consumer-products company CEO, for example, drags his direct reports through arduous mountain-climbing trips and desert safaris to shock everyone out of complacency. The intended message is: Our leaders are so passionate and involved that they will endure discomfort and even pain for the sake of high performance. Sure, subordinates come back talking about the life-changing, team-building experience they've had. But they all know what it means—if you really want to talk to this guy, you've got to let him drag you out to the Sahara first.

You can't break a core group pattern by convening a retreat or issuing a policy. You have to set an example and reinforce that example, time after time, action after action, for a year or more. The essential component of communication is trust, and trust is something that has to be earned; there are no shortcuts. One small step you can take is to demonstrate, through continual soft-spoken patience and receptiveness, that you really would rather get bad news than false good news. Once you've done that, you will have taken a giant leap toward ensuring the health of the core group.

Finally, organizational design plays a role in determining how healthy a core group is. In the most effective organizations I know of, the leaders create the largest possible core group, and members work under policies that combine access to inner-circle information with opportunities for taking actions whose results will affect the bottom line. In general, the more widely held financial information is, the less likely it is that the members of the core group will be able to enrich themselves at the expense of an organization's broader interests. Similarly, a core group that is diverse in terms of race, gender, and nationality will tend to operate more capably and with more awareness than one whose homogeneity sends a message that "the only people who count around here are people like us."

Of course, any kind of organizational engineering conducted for the sake of influencing core group dynamics needs a delicate touch and a deliberate design; a company should not just set up a raft of sinecures for the core group members to keep them happy. Nor is it easy for a core group to suddenly make itself open up to new members. In order for an inner circle to allow different types of people to enter, members must be willing and able to talk about misunderstandings and disagreements—subjects that homogeneous groups can avoid.

The Limits of the Law

Core groups are an inevitable part of any organization; there would never be business as usual without them. At their worst, core groups can become what management author Arie de Geus calls parasites, exploiting the company for their own benefit and generating the kind of corruption and abuse we have become sadly accustomed to. Corporate governance reforms that have emerged in response to those scandals have been designed to make the corporate in crowd more accountable to shareholders. Many of the proposals are worthwhile, but my experience suggests that most will not achieve the desired results unless they take into account the nature and role of core groups.

For a start, while corporations legally belong to shareholders, the psychological truth is that they will always belong to some inner group of managers. An organization's employees will put shareholder value first only if the core group sets an example of doing so and makes it clear that everyone else's job depends on following suit. Because the core group sets the organization's strategic direction, it can even help a company lead, rather than merely follow, the financial markets or its industry. When BP established its "new brand," Beyond Petroleum, the City of London did not approve. The stock price fell, reflecting investors' presumption that an established energy company with 100,000 employees or so around the world could not change its habits. At that point, BP's core group had to choose what kind of stand to take. Employees throughout the corporation could (and did) make personal decisions about how avidly to support the new

brand, but only the core group could establish an overall corporate point of view concerning, for example, when a viable infrastructure for distributing hydrogen-based energy was likely to be developed.

When core groups display independence, creativity, and power, the rest of the company follows. The same goes for when core groups take courageous stands; when they talk together openly and raise disputes for the sake of understanding them better; when they are diverse in their makeup and their thinking; when they forgo politicking, empire building, and exploitive behavior; and when they embody a sense of stewardship for the organization. Such behavior on the part of the company, in turn, creates value for shareholders, especially over the long term. But unless you are prepared to remove many of the members from the organization, these traits can't be engineered into the core group. In most situations, core groups take on such traits when they realize they will be rewarded for them—in part by the approval of regulators, but primarily by the group's own newfound ability to attract employees, customers, financiers, and shareholders.

Does Your Company Love You?

Welcome to the core group. There is no formal initiation, not even a celebratory lunch. There are no forms to fill out, and there's probably no change in your official job description. But everything is different now. The organization suddenly sees you as central to its fate. From now on, it will pivot and twist to give you what it thinks you want and need.

If you need a high-status position, the organization will find you one. When you travel, someone will meet you at the airport. The organization will boost your pay without waiting for you to ask for a raise. And if you have children who need watching, your company will set up a child care program. You won't even have to request it; it will be justified as a general benefit for all employees.

And the more you ask of your organization, the more it will do for you. It's as if the organization has fallen in love with you—a passionate, head-over-heels kind of love in which you are never far from the center of its thoughts. If you have ever started an organization, or if you have become part of the core group of an existing one, you know how exhilarating this kind of treatment can be. Drinks in the chairman's office after work...an invitation to join the golf club...the quiet extension of perks into retirement. Tony O'Reilly, when he was head of Heinz, used to give parties for his staff at his castle in Ireland. There would be plenty of drinking, and O'Reilly, who was famously clever, would lead the group in making up extemporaneous limericks. An invitation was a sign that you were in the core group. At GE, Jack Welch got key lieutenants to buy houses near him in Florida.

And yet the most significant and irresistible benefits are the intangible ones. Core group members are taken seriously in a way that few other people are. They are invited to solve problems, even when they don't have any special knowledge or skill. They are magically "in the know." They hear early—maybe earlier than their superiors—about new projects in other divisions that the CEO is championing. Their solutions are deemed brilliant because everyone sees to it that their solutions work. In fact, core members routinely receive credit for others' insights. "Nobody at Citibank was interested in anything," wrote Charles Ferguson in *High Stakes, No Prisoners*, "unless John Reed thought of it first." The lives of core members are a succession of peak experiences—often the kinds of epiphanies that money can't buy, that come only from access to remarkable people or once-in-a-lifetime events. Few of us get to experience it. We only hear stories from afar, glimpses of fairy-tale-like perks and privilege, where the organization lays the world at its lover's feet.

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Does Your Company Love You?; Textbox

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How the Quest for Efficiency Corroded the Market

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Just a few years ago, America's stock market was the envy of the world. Thanks to new technology, friendly regulation, and the innovativeness of the financial services industries, it was open to anyone, anywhere, anytime. On-line brokerages like E*Trade let individual investors buy and sell just a few hundred dollars' worth of stock from their homes or offices at the push of a button and for little or even no cost. A favorable tax regime on pension savings and sophisticated tools for retirement planning offered by the likes of Fidelity made it easy—even essential—for the average citizen to join the fun. Web sites like TheStreet.com and CBS MarketWatch kept stock market junkies up-to-date with breaking stories 24 hours a day, seven days a week. Americans poured into the market by the millions, and the more they invested, the more liquid, accessible, and attractive the markets became.

For a while, this seemingly virtuous circle worked economic wonders. In America's equity-hungry culture, a record number of start-ups were able to go public and grow rapidly. The telecommunications and networking industries—which supplied many of the enabling technologies for the financial markets—were notable beneficiaries. Companies like Cisco and Global Crossing became giants almost overnight. Not surprisingly, they used their newfound currency to finance ever larger acquisitions. Consider this sobering fact: Before 1990, the largest M&A deal was the \$25 billion bank-financed leveraged buyout of R.J. Reynolds by KKR. In 2000, AOL, which only went public in 1992, purchased Time Warner in a share swap for more than \$160 billion.

The world is a great deal less jealous today. Belatedly, investors have come to recognize that the vaunted business models of the new economy were more effective at consuming capital than generating it. And as the dust settles, it has become clear that irrational exuberance was not the only problem with America's financial system. A string of distressing news reports starting in October 2001 revealed that high-flying corporations such as Enron, WorldCom, Tyco, and Global Crossing had been misrepresenting their financial reports in an effort to boost reported earnings, leading to stock price crashes.

Inevitably, these scandals provoked a flurry of finger-pointing and hastily prepared regulatory reforms intended to guarantee that greedy, overpaid business executives and their tame accountants would never again dupe the innocent investor. The Financial Accounting Standards Board (FASB) reopened the debate on stock option accounting, one of the lightning rods of investor ire. Congress rushed through the Sarbanes-Oxley Act, which strengthened corporate audits and oversight, and imposed heavy penalties on corporate executives who misrepresented performance. The New York Stock Exchange announced a raft of changes to its rules for listed companies, including detailed requirements for board processes. The Chief Justice of the Delaware Supreme Court threatened in these pages to treat sloppy board oversight as a breach of directors' fiduciary duty.

Useful and wise as many of these reforms are, we cannot help but feel that they do not attack the real cause of the problems. Looking back over the evolution of the U.S. capital markets, it seems to us that the recent stock market and corporate governance failures are rooted in regulatory and market changes that began 20 or more years ago. These were intended to reduce the cost of financial information and increase liquidity, which the regulators believed would improve both investor access to the market and efficiency in pricing. The goal of liquidity was indeed achieved, but the changes also triggered a race for the bottom in

the auditing profession, destroyed the economics of investment analysis, and discouraged professional investors from relying on their own rational judgment.

It will take more than incremental steps to repair those breaches in the financial market's institutional structure. Fundamental and even radical reforms must be made to the way America's markets process the flows of information between consumers and providers of capital.

Auditing: A Race for the Bottom

So far, the debate about what went wrong with the auditing profession has largely focused on the potential conflicts that accounting firms faced as a result of having consulting relationships with many of their audit clients. We agree that it is an important point. But this is only part of the problem.

Historians will probably trace the decline in the accounting profession's reputation to two changes that took place in the mid-1970s. First, the Federal Trade Commission, concerned that the large audit firms were acting as a price-fixing oligopoly, pressured the then Big Eight to compete more aggressively with each other for audit clients. The competition, the FTC believed, would lower audit costs for U.S. businesses and simultaneously improve audit quality.

Second, a series of legal judgments made it easier for investors to sue companies and their auditors for errors in financial statements. Specifically, investors no longer had to show that they had relied on questionable accounting information in making investment decisions; instead, they could simply assert that they had relied on the stock price, which had itself been affected by the misleading disclosures. The judges reasoned that in an efficient market, all public disclosures would be immediately reflected in stock prices. The idea behind these judgments was to increase auditors' accountability for their work, thereby encouraging them to audit their clients more thoroughly. This "fraud on the market" theory certainly succeeded in empowering investors; through the 1980s and 1990s, auditors faced an increasing number of successful lawsuits by investors in firms that experienced large stock-price drops.

While the application of market principles to the audit profession succeeded in trimming costs and raising accountability, the impact on the quality of audits and industry dynamics has been disastrous, however unintended. For a start, the reforms triggered a fundamental shift in the philosophy of the audit profession. In an effort to contain costs and provide defenses against litigation, accountants have increasingly lobbied for precise, almost mechanical accounting standards and have developed routine operating procedures to reduce variability in their audits. One outcome is that, because regulators were attempting to legislate for all possible contingencies, standards have become overly detailed and lengthy—the roughly 2,300 pages of FASB standards in 1985 almost doubled to around 4,000 by 2002. Also, as Enron vividly illustrated, mechanical rules have encouraged companies to write contracts that satisfy the letter, but not the spirit, of a standard.

The deeper problem with a standardized approach to auditing, though, is that it enables auditors to abdicate their primary responsibility as processors of information. The auditors' statement that a company's accounts have been prepared in accordance with generally accepted accounting principles no longer implies, as it once did, that auditors have made the kind of broad judgment about the financial health of a company that investors need and expect accountants to provide. For example, Enron's auditors certified that its "special purpose entities" satisfied rules for off-balance-sheet reporting, but failed to either recognize or act on the fact that the company's financial statements did not represent its true financial position.

If the mechanization of accounting gave auditors the means to abdicate their responsibility, the industry's new competitive dynamics gave them the motive. Since audits were increasingly viewed as a commodity, severe price competition ensued. By the beginning of the 1980s, the large accounting firms had all concluded that profit margins on audits would be painfully thin, particularly relative to those on other financial services. Their response was to diversify into other businesses—notably consulting. More damaging, in the absence of differentiated audits, auditors became desperate to please clients. Indeed, audit partners' compensation and promotion became closely linked to maintaining cordial relationships with top corporate managers in hopes of retaining existing clients and attracting new ones.

The nail in the accounting profession's coffin will probably prove to have been the marked decline in the quantity and quality of people signing up for the job. In the early 1980s, U.S. universities awarded more than 50,000 degrees in accounting. Despite a boom in corporate activity, last year they awarded fewer than 40,000. Worse, fewer and fewer graduates from top schools go into auditing—just 3% of undergraduates from Wharton's prestigious undergraduate program in accounting actually joined the profession in 2002.

These regulatory and legal changes have tipped the auditing industry into a race for the bottom that serves only to discredit the profession. Investors and regulators have come to perceive that audit reports are unreliable and that auditors are beholden to their corporate clients. The narrow focus of audits has led managers to believe that the exercise is a regulatory hurdle to be overcome rather than a way to help their shareholders make better decisions. Inevitably, the greatest victims of this vicious dynamic are the audit firms themselves, as Arthur Andersen's troubles following the Enron scandal have so dramatically illustrated.

Investment Analysis: Where Conflicts Abound

While the auditor is supposed to provide an imprimatur for the quality of information, many investors rely on analysts for an interpretation of that information. We look to analysts to review industry trends, to assess company strategy and management strengths, and, of course, to forecast the performance of the companies they track. Based on this expert analysis, so the theory goes, investors make their decisions whether to buy, sell, or hold a particular stock.

The almost complete failure of Wall Street's army of highly paid analysts to predict the massive bankruptcies of Enron, WorldCom, and Global Crossing inevitably drew the spotlight of public scrutiny. What investigators found among the memos and e-mails of the country's leading brokerage firms painted an ugly picture of conflicting interests. Throughout the high-tech boom, public reports by top analysts like Salomon Smith Barney's Jack Grubman had routinely puffed up the prospects of companies that were also IPO clients of their employers' investment-banking arms, even as those analysts told their friends and colleagues that the companies were overvalued. It has not been a case of just a few rotten apples. Several academic studies have established that long-term earnings forecasts and investment recommendations are more likely to be optimistic when the analysts making them work for the lead underwriter of the companies they analyze.

To understand how investment analysts got into this mess, we have to go all the way back to May 1975, when the traditional system of fixed brokerage commissions was abolished. The primary goal was to reduce investors' trading costs, thereby making it easier for them to buy and sell stock. Markets in those stocks would become more liquid and therefore more efficient. This objective was achieved quite spectacularly—trading commissions for institutional investors today are a small fraction of their levels before 1975, and competition for business is intense. Discount brokerages like Charles Schwab have brought the same benefits to individual investors, who can now trade not only stocks but also hundreds of mutual funds over the Internet or the telephone quickly and inexpensively.

Unfortunately, the high fixed commissions that discouraged trading also paid the salaries of the research analysts that the brokerage firms employed. Brokerage houses did not charge their large institutional clients directly for the research reports they supplied; instead, the research costs were recovered through the commissions. When fixed commissions were eliminated, brokerage firms that focused on institutional investors became unprofitable. They were absorbed into Wall Street firms that had lucrative underwriting and investment-banking businesses. These investment banks exploited the synergy between research and underwriting, and by the early 1990s, internal payments from the underwriting arms of brokerage firms had become the primary source of funding for most research departments. The downside of this synergy is now apparent in the conflicts of interest faced by research analysts.

The recent scandals revealed other conflicts. It's understood that analysts must develop close relationships with the management of the companies they follow in order to get the data they need to prepare their reports. But if a relationship gets too close, the analyst may find it difficult to maintain objectivity. As recent academic evidence shows, the longer an analyst has followed a company, the more likely he is to make favorable earnings forecasts.

It all looked very different five years ago, when Wall Street analysts like Henry Blodget and Mary Meeker

were being hailed as the prophets of the new economy. Like most modern prophets, they didn't come cheap. In August 1998, for example, Salomon agreed to pay Jack Grubman, its star telecom analyst, a package worth around \$25 million to prevent him from leaving for Goldman Sachs. The money to be made in the profession attracted many of the top graduates from America's colleges and business schools. But if the funding pipeline from underwriting is switched off, can investment banks and brokerage houses find the money to attract the caliber of people that the profession has traditionally been able to recruit? Would they even want to try, given how discredited the profession has become?

Fund Management: Joining the Herd

Professional fund managers have been perhaps the biggest beneficiaries of market deregulation. By 2002, more than 60% of all stocks were owned by institutional investors. Part of this growth stems from the popularity of retirement accounts such as 401(k) plans, many of which end up invested in mutual funds. The popularity of retirement plans, in turn, stems from changes in tax laws designed to encourage people to take charge of their own savings. At the same time, competitive forces and advances in technology helped reduce the costs to small investors of buying and selling mutual funds.

These developments brought significant benefits. Investors could control their own savings, invest them at a relatively low cost, reduce risk through diversification, and move their funds at will. They could rest easy, knowing that the actual selection of securities was being handled by professionals, who were making long-term investment decisions based on expert analyses of the securities in question. But this begs an important question. Why were the professionals so completely blindsided by the crash? Even a cursory analysis could have alerted them to the gap between market prices and fundamental values.

The answer lies in the very qualities that made mutual funds so appealing. The low cost of switching between the funds triggered fierce competition among funds for attracting and retaining investors, which focused fund managers strongly on their funds' performance relative to that of comparable funds. Unfortunately, this competitiveness also made them less likely to perform and act on the kind of fundamental analysis that is a core part of their value proposition to investors. Consider the calculus of a fund manager who holds a stock but who, after careful analysis, estimates that it is misvalued. If she changes the fund's holdings accordingly, and the stock price returns to its intrinsic value in the next quarter, the fund will show superior portfolio performance and will attract new capital. However, if the stock becomes more misvalued for several quarters, she will underperform the competition, and capital will flow to other funds. By contrast, a risk-averse manager who simply follows the crowd will not be rewarded for detecting the misvaluation, but neither will she be blamed for a poor investment decision when the stock price ultimately corrects, since other funds made the same mistake.

Competition among risk-averse fund managers was not the only problem. As more and more people became financially literate, the notion that the market was efficient began to take hold. As the clichés had it, you couldn't buck the market and there was no free lunch. Investors who subscribed to these beliefs were naturally attracted to index funds, which invest in a balanced portfolio of securities tracking a particular index (like the Standard & Poor's 500). The new funds were even cheaper than regular mutual funds because, of course, the managers didn't have to undertake any research—stock selections were made for them.

First offered in the mid-1970s, index funds have grown steadily in popularity and now account for about a quarter of all mutual funds. What makes life harder for active fund managers is that index funds always track the benchmark, because they are the benchmark. This makes it difficult for active money managers to beat index funds on a consistent basis, in part because the cost of managing an index fund is so low. In addition, many investment managers subscribe to the idea that the market is efficient and resort to an investment strategy called "passive indexing," rather than put time and effort into independent analysis. If markets are efficient, why bother?

Not bothering, however, makes the market less efficient. An efficient market presupposes that most investors make rational, informed decisions in their own self-interest. If all professional investors are passive, that means that the market becomes driven by retail investors. If retail investors were all rational and informed in their decision making, that wouldn't be a problem. But there's a convincing body of

research suggesting that retail investors don't make rational, considered decisions. Instead, they display herd behavior, following the latest hot stocks. The fact that professional investors go along with the herd exacerbates the market's mood swings, making it an even riskier place for pensioners. Ironically, a belief in market efficiency and the proliferation of professional investment management services have only served to greatly undermine that efficiency.

How Can We Save the System?

The heart of the problem facing auditors, financial analysts, and professional money managers is that they currently lack adequate incentives to produce and use high quality information about companies' long-term fundamentals. Few of the reforms that have been introduced or are under consideration address the failings we have described. To save the auditing and investment analysis systems, completely new institutional arrangements are needed. Investment management can be rescued, we believe, but only if lawmakers are prepared to significantly raise the cost of buying and selling stock. Here are our proposals.

Enhance audit quality. Current policy initiatives—including strengthening audit committees, requiring CEO certification of financial statements, creating the Public Accounting Oversight Board, and restricting consulting activities of auditors—are all likely to make audits more independent and are certainly steps in the right direction. But they fail to meet the more fundamental challenge of shifting the basis of competition in auditing from price to quality because they leave the current arrangement, whereby managers pay the auditors on behalf of the shareholders, essentially unchanged. They do little to motivate companies to pay significantly higher fees for higher quality audits. This is particularly true for poorly governed companies that will not be in a hurry to pay more to auditors who dig up bad news. And without funding from higher audit fees, the profession will continue to fail to attract the kind of talented professionals who can judge businesses on the basis of economic reality rather than on narrow accounting rules.

So what measures should we be contemplating? In our opinion, the only way to rescue the credibility of the accounting profession is to completely redefine the lines of communication and responsibility in auditing. Essentially, the responsibility for hiring and paying auditors needs to be moved from company managers to some institution whose interests are not only more closely aligned with investors but which is also not itself involved in the audit process.

Organizations that match these criteria already exist: the stock exchanges. The availability of high quality information on corporate performance is critical to the effective functioning of these organizations. Without it investors cannot set rational prices, and the exchanges develop reputations for listing unreliable securities. As a result, stock exchanges have a strong incentive to ensure that listed companies provide high quality information to investors—which is precisely why they require listed companies to prepare audited financial reports.

Critics of our proposal could argue that stock exchanges are just as beholden to corporate managers as are boards of directors, since exchanges compete with each other to induce managers to list their companies with them. In addition, stock exchanges profit from turnover, which may create incentives for them to encourage "noise" trading. While stock exchanges' incentives are not perfect, we believe that, on balance, their reputations, which are based on an ability to create a safe market for investors, provide a powerful incentive to ensure that investor information is reliable. Putting stock exchanges in charge of audits, therefore, would trigger a race for the top rather than the bottom.

Another concern could be that stock exchanges are less informed than the board of directors about a firm's business and the actual work of the auditors and are thus less equipped to oversee the audit. While this is a legitimate concern, it can be addressed if our proposal is properly implemented. Stock exchanges would work with audit committees, rather than replace them, and we think that highly qualified full-time staff at the stock exchanges could become as informed as independent board members who spend but a few days a year on audit committee work.

A third potential concern, which could be raised by the stock exchanges themselves, is the impact of legal liability in the event of a series of massive audit failures, such as those at WorldCom and Enron. The litigation likely to follow such a series of failures could potentially bring down the exchange as well as the

audit firms involved. But such a crisis could only occur if there were serious problems of management control at the exchange. Losses from occasional audit failures could be covered through insurance and would probably be insignificant relative to the total cost of audits for all the listed companies. In the event of a massive control failure, the exchange could file for bankruptcy itself and be restructured by a new management team that would correct the problem.

Finally, would not our "single-payer" model mean that the stock exchanges would have tremendous bargaining power over audit fees, making it difficult for the audit industry to attract talent? We think the answer is a clear "no." First of all, audit firms already have little or no bargaining power, given the commodity-like nature of today's audits. But more important, although stock exchanges could exercise their bargaining power to reduce fees, it would not be in their interest to do so at the expense of quality. In fact, by demanding a more comprehensive and higher quality audit, the exchanges would actually allow audit firms to earn more revenue than they did before.

There are at least two distinct entities in product markets that successfully perform an oversight function similar to the one we propose for stock exchanges. In the public sector, agencies like the Federal Drug Administration and the Federal Aviation Administration oversee private companies' compliance with drug and aviation safety standards and conduct investigations into failures. The second model is the Audit Bureau of Circulations, a private nonprofit organization that vets the circulation statistics used by publishers and advertisers for contracting purposes. Both models have inspired trust and confidence that the companies concerned are held to high standards.

Improve company analysis. The model for our proposals for the investment analysis industry is the Consumers Union, an independent nonprofit organization established in 1936 that provides information on product quality and reliability. Over the years, through the publication of Consumer Reports magazine, the CU has established itself as the consumer's best friend. Today, it spends more than \$20 million a year on product testing. More than 100 experts work in the organization's 50 labs, conducting research in a variety of product categories including appliances, automobiles, chemicals, electronics, food, home environment, and home improvement. There are more than 4 million subscribers to Consumer Reports and millions more to its other publications and on-line reference service.

The CU improves the functioning of product markets in several ways. It gives consumers confidence in products that are not well-known brands. For example, when Toyota first introduced its small passenger cars in the U.S. market in the 1960s, it was a relatively unknown brand. Thanks in part to high ratings for its cars from Consumer Reports, within ten years Toyota was the number one imported auto brand in the United States. The CU is also the consumers' protector: Consumer Reports magazine was one of the first publications to alert consumers to the harmful effects of nicotine in cigarettes.

We propose the creation of a similar independent, nonprofit organization for the financial markets—an Investors Union, perhaps. We do not believe that the IU should conduct primary analysis of listed companies, however. Instead, we propose that the new organization rate the performance of the analysts at the various banks and brokerage houses by tracking the historical quality of their earnings forecasts, qualitative analyses, stock recommendations, and price forecasts, as well as their degree of independence. This approach would be more effective, at least in the near term, because it would build on the existing research infrastructure and requires only modest incremental investment. It would also preserve the benefits of competition among analysts.

Funding for the new IU could come from several sources. One could be through the direct sale of ratings to investors. A second could be through foundation grants and donations. The IU could also raise funds by publishing—like the CU—a periodic Investor Reports.

At first glance, these new ratings might seem redundant; the performance of investment analysts is already tracked by investors through, for example, Institutional Investor (II) ratings. But such ratings have proven to be unreliable: Now discredited analysts such as Jack Grubman, Mary Meeker, and Henry Blodgett were rated as All Star analysts by II not long ago. In fact, academic research shows that there is little sustained difference in forecast performance between II All Star analysts and the rest. Clearly, II ratings seem to reflect factors other than analysts' ability to perform high quality analysis.

Lengthen investor horizons. The primary problem with fund managers is that, in a marketplace focused on the short term, they have little incentive to make and act on their judgments about a company's or industry's long-term prospects. The most effective way to rescue the fund management profession, therefore, would be to reduce investors' incentive to trade so actively.

Fund companies are free to set their fee structures to reward long-term investment. In fact, several mutual funds do offer a graduated fee that starts high and declines over the holding period. However, the same funds also offer a fee that is lower than the starting graduated fee but that remains fixed over the holding period. Clearly, the aim of these menus is not so much to increase investors' time horizon as to attract investors with different investment horizons.

Another mechanism used to encourage long-term investing, commonly employed by hedge funds, is to impose penalties on short-term withdrawals. Hedge funds also reward their managers on the basis of absolute, rather than relative, performance. As a result of both these practices, hedge funds typically attract longer-term investors and frequently resort to short-selling stocks whose values are not justified by fundamental analysis. However, because short positions impose unlimited downside risk, even hedge funds tend to focus only on exploiting short-term misvaluations.

While both these industry innovations represent market-based solutions to the horizon problem, they have clearly had little impact on overall investment horizons. We suspect there are at least two reasons for this. Left to themselves, investors seem to prefer funds that leave them the option of short-term trading. Second, given the level of competition in the mutual fund industry, no single fund is able to change the nature of the game to impose significant penalties for short-term trading. This brings us to a public policy proposal on savings investments, much as it runs against the conventional orthodoxy.

Currently, capital gains on pension investments are not taxed, largely on the grounds that the exemption will encourage people to save more. We certainly don't wish to discourage saving, but we would also point out that short-term trading may impose greater costs on them than a tax would, because it makes the market a riskier home for savings investments. Our proposal, therefore, seeks to preserve the intended benefit of the tax exemption while discouraging a short-term approach to retirement planning.

We recommend a graduated tax on capital gains, which would decline as a function of the length of time an investment was held. Thus a saver who sells stock within a year of its purchase would face, say, a 35% tax bill. If she sells after a year but within two years, she pays 25%. After five years, the tax rate would fall to zero. Our proposal changes the current tax regime by increasing rates on medium-term gains and eliminating taxes on long-term gains. Gains would be considered realized either when investments are sold or when assets are transferred between funds. The rules would apply equally to nonretirement and retirement investments. We recognize that administering capital gains taxes on retirement assets is likely to be complex and needs further detailing. Still, our proposal strikes a compromise between those who would like to tax capital gains in the same way as ordinary income and those who advocate eliminating such taxes altogether, so it has the potential to attract bipartisan support.

One potential side effect of this tax proposal that might concern some is that it would shift investments toward established, dividend-paying companies and away from more entrepreneurial outfits. Also, by discouraging trading, even a graduated tax would decrease liquidity and flexibility for investors. In particular, it would hurt investors who are forced to liquidate their investments as a result of unexpected circumstances. But these worries are more than offset by the benefits to other investors and the economy as a whole. Increased investment switching costs will motivate investors to favor funds with sound long-term track records rather than chase hot funds whose performance is due to luck rather than fund manager talent. This means that mutual fund companies would be able to attract money for long-term investment and design compensation systems that motivate talented portfolio managers to perform and act on fundamental analysis. The benefits for the economy would be improved resource allocation and increased availability of patient capital.

A New Model for Audits; Textbox

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Supply Chain Challenges: Building Relationships

Scott Beth; David N. Burt; William Copacino; Chris Gopal; Hau Lee; Robert Porter Lynch; Sandra Morris; Julia Kirby
Intuit; University of San Diego's Institute of Supply Chain Management; Accenture; Unisys; Stanford University; Warren Co.; Intel; HBR

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Supply chain management is all about software and systems, right? Get the best technology in place, then sit back and watch as your processes run smoothly and the savings roll in.

If that's true, then why did Jeff Bezos raid Wal-Mart's bench, paying top dollar to bring best-in-class logistics expertise to Amazon? Supply chains, it seems, are really about talent, not technology, especially as the marketplace grows ever more complex. But how to get people to work together?

It's not easy. When Harvard Business Review recently convened a panel of leading thinkers in the field of supply chain management, people and relationships were the dominant topics of the day. Creating effective alliances between companies, for instance, is complicated. Purchasing managers are rewarded for wringing the best possible price out of suppliers—a practice that's not conducive to nurturing long-standing partnerships. Internal relationships can be even more difficult to manage, according to one of our panelists. We've long known that functional silos hinder communication and efficiency, but many companies still struggle to tear down the walls.

Our panel, led by HBR senior editor Julia Kirby, explored these and such other obstacles and opportunities in supply chain management as developing talent, the role of the chief executive, and the latest technologies. The few companies that have cracked these nuts are gaining ground: The gap between the supply chain leaders and the average performers is large and growing. The following is an edited transcript of the panel's conversation.

Julia Kirby: I suspect that priorities in supply chain management have changed quite a bit in the last couple of years, for a variety of reasons. There's the economic downturn and the plunge into overcapacity. There's also terrorism and war. So I'd like to start by asking, What are the priorities today? Has your focus changed?

Chris Gopal: One area that's quite different from what it was a few years ago is, of course, security. The government has imposed, and is in the process of imposing, new regulations and requirements, particularly on companies doing business overseas, and a lot of them are not prepared for it. We've all heard about the stories of a ship being held up at a major port—at Long Beach, California, say—because it's got cargo that has set off alarm bells.

Another current priority is getting the tools we need to create an adaptive and responsive supply chain strategy—which is important because most supply chain strategies start down the road to being obsolete almost as soon as they're published. Creating an adaptive strategy starts with modeling the supply chain and doing scenario planning. That allows you to more effectively manage risk and cope with changes and uncertainty in the market, which in turn increases cash flow and customer retention. And then, once you execute your strategy, you need to be able to redo it based on patterns and trends derived from real-time information. Companies need tools for this kind of continual innovation—and there are none today.

Sandra Morris: A big shift for Intel has been globalization. Our customer base is changing dramatically, not

just in terms of where they live but also who they are and how they operate. There's huge potential in China, for example, and growing markets in Russia and India. That drives a different type of supply chain requirement. For example, the companies that are building and shipping PCs in emerging markets are small resellers, small distributors, not the typical multinational corporation we've worked with for decades. Their needs are different.

William Copacino: If you think back three to five years, the major issue for many companies was not to run out of parts. Today we have significant global overcapacity in most industries. So a key issue is managing the supply base—including sourcing, supplier integration, and in-bound parts management.

I also see a shift in focus from planning to execution. But I personally believe that there are huge opportunities on the planning side—in matching supply and demand. People are missing out because their attention, frankly, is so focused at the transactional level. We are seeing a shift back to basics—to MES [manufacturing execution systems] and WMS [warehouse management systems].

And we are beginning to see a growing interest in radio frequency identification—RFID—for several reasons. The cost of both chips and reader-writers is coming down rapidly, so the cost of solutions is becoming more competitive; the capabilities are expanding; and the need is growing in areas like theft protection and security.

Scott Beth: A big issue for us is misalignment of materials technologies and product life cycles. Say you're building instrumentation products that will last ten to 15 years using semiconductor components and other materials that may be available in the market for only 18 to 36 months before they're discontinued. This situation presents me with three alternatives: I have to buy and store a 13-year supply of components—that's a lot of extra inventory. Or I'm forced to mortgage the future by pulling engineers off new product development to reengineer products that still have a life in the marketplace. Or I have to find brokers or others who are willing to take the risk of holding onto unique and rapidly aging parts.

Kirby: I'm struck that I'm not hearing you say, "Three years ago, the whole point of supply chain management was to increase speed, and now we're totally focused on cost reduction." Is that not happening?

Robert Porter Lynch: To some extent, it is. The most disturbing trend that I've seen, with the meltdown of the stock market, has been cost cutting as a knee-jerk reaction. A chief financial officer will call the supply officer and say, "Cut costs 15%; we've got to get our stock price up." That knee-jerk reaction is having wholesale effects throughout the supply chain in very negative ways. You start to see cost cutting become a substitute for much more important competitive-advantage issues. A principle in business is that you cut costs to survive, but you innovate to prosper.

Beth: We're under incredible pressure to reduce material costs. But just as much on my mind is dealing with suppliers who aren't going to make it through this business downturn—many basic-component manufacturers are going out of business. When you're relying on a partner for unique technology, what do you do when they say they're locking their doors next week? How do you (a) find another source and (b) predict the health of suppliers so you can anticipate a shortfall before it happens?

Hau L. Lee: Cost is important, and so is speed. But I and my colleagues have been studying companies that have been hugely successful in the long run. And we've discovered that those companies are great not because they were focused on cost or flexibility or speed but because they have the ability to manage transitions—changing market conditions, evolving technology, different requirements as a product moves through its life cycle. The companies that can adapt are, I think, the ones that will be here for the long term.

These days, companies also need to be able to handle one more type of transition, which is crisis management. Successful companies have been able to grab market share and sales out of crises, which often requires them to work effectively across functional boundaries. I cite you the example of Zara, a Spanish apparel company. After September 11, which was, of course, a time of mourning, this company was able to get its designers, supply chain partners, and manufacturers together and in two weeks launch a

new line of apparel featuring the color black. They got a tremendous sales lift as a result.

Companies like that have what I call the triple-A supply chain. They have agility, adaptability, and alignment. You need to align the interests of the functional groups and multiple partners so that you will be able to move forward in unison.

Kirby: But we've known for 15 years that functional silos get in the way. Are the barriers starting to come down at all?

Lee: I still find many big corporations where each of the different functions do not know what the others are doing. A company might have promotion plans or a special trade deal in place, and the supply chain people are unaware of it. Or the supply chain manager plans how much inventory to put in place or how much capacity to invest in and doesn't share that with the sales and marketing people. And so you may find yourself in a situation where the sales and marketing people are giving special deals on a particular product when, in fact, you're running up to the capacity limit.

There are a lot of great examples of this disconnect. The most celebrated is Volvo, which made a lot of green cars in 1995 and wasn't able to sell them. So the sales and marketing people started to secretly offer heavy discounts, rebates, and special deals on green cars to their dealerships. The supply chain people didn't know that, and when they saw the green cars selling, they doubled their production plan for them for the next year. Volvo had a lot of green cars at the end of that year.

Morris: We've created a capability—five people, very senior program managers, who can look horizontally across functions. They bring together executives or senior managers and facilitate discussions about the tensions between product division goals, supply network goals, and customer goals. We have lots of people who are deep in their silos. They're also really smart. So getting them together on a fairly regular basis to deal with strategic topics in a facilitated session has been a breakthrough for us. It's probably been one of the best investments we've made.

Lynch: Here's a data point. I'm the chairman emeritus of the Association of Alliance Professionals, and we did a survey last year of the critical issues concerning strategic alliance professionals throughout the world. We have 800 members. The number one concern these professionals had wasn't creating strategic alliances with other companies but creating alliances internally between the silos of their own company. For some reason, alliance professionals typically find it easier to create alliances with their major competitors than with other divisions in their own companies. We don't deal with our own internal integration. How do we integrate externally if we can't do it internally?

Gopal: Way back in 1980, some studies were done as to why MRP [manufacturing resource planning] systems failed in implementation. One of the key reasons was this concept of silos, individual departments with their own metrics. To illustrate this, they came up with something called the Beer Game, in which you simulate a sudden change in demand and need to get your supply chain back into equilibrium. So now I'm sitting here in 2003 listening to exactly the same point and exactly the same comment about what makes these relationships successful. Has anything changed? Are we still dealing with the same problems in different forms?

Copacino: Some companies are. But I think there's been a tremendous bifurcation of performance. In almost every industry, supply chain has become a much more important strategic and competitive variable. It affects all of the shareholder value levers—cost, customer service, asset productivity, and revenue generation. Yet we are seeing a growing gap in performance between the leading and the average companies. The best are getting better faster than the average companies across almost every industry. For instance from 1995 to 2001, Wal-Mart improved its inventory turns from 5.23 to 8.34. Its nearest competitor over that same time moved from 4.01 to just above five inventory turns, not even to the point where Wal-Mart started. And Dell operates with 64 to 100 inventory turns, more than two or three times most of its competitors. So, clearly, the performance gap is widening, and we see this happening in almost every industry segment.

The leading supply chain performers are applying new technology, new innovations, and new process

thinking to great advantage. The average-performing companies and the laggards have a limited window of opportunity in which to catch up.

Kirby: Robert mentioned that companies are having an easier time with external alliances than with internal ones. How are those external relationships evolving?

Lynch: The best companies I see are beginning to triage the supply chain. In other words, they'll separate vendors that provide commodities from preferred suppliers that they have good relationships with from strategic suppliers that they create alliances with. They manage the supply base through those three different elements in very different ways, using different metrics, different processes, different people, and different mentalities.

Beth: Absolutely. I think that we have to determine, in Intel's case, where contract manufacturers fall along that spectrum. Speaking frankly, I think there's a love-hate relationship between OEMs and contract manufacturers. People don't trust the pricing they get, or there's a sort of bait-and-switch approach, where your prices start out low and then begin to creep up.

Kirby: David, I see you nodding at this reference to trust. I know that issue is dear to your heart. What can you add?

David N. Burt: Trust is the basis of agility, of flexibility. Yet it's an incredible challenge to establish trust and maybe even harder to maintain it. Underlying the challenge is the question of how to institutionalize trust between buyer and supplier. I've got colleagues who maintain that trust can only be established between individuals. But a few souls like Robert and myself say we've got to be able to institutionalize trust. We've got to make it work so that when the founders of the alliance depart, the alliance continues. We've been looking at this at USD for over ten years, and we don't have the answer yet.

But it's important. As the world gets more complicated, when I sell a product, I may be selling a solution that requires input from four or five companies. How do they get along with each other? If suppliers don't trust each other, the customer will be whipsawed. Also, trust enables you to make fast decisions, which lets you be more innovative and get rid of unproductive work. Trust is a competitive advantage.

Beth: You also lose out on efficiencies when trust isn't there. A lack of trust causes companies to duplicate activities between its own operations and its outsourced partners. Too often, we outsource an activity and then keep a lot of the management systems for that activity in place to verify that certain things are being done.

Lee: The way to build trust and establish a harmonious relationship is the third A of my triple-A: alignment—align the interests of the multiple parties so that they have some common values and goals.

A good example of alignment comes from Saturn. Saturn recognized that to provide good service in terms of the end customer's experience, it wouldn't be enough to be good at replenishing and supporting dealerships, which Saturn calls "retailers." The retailers also needed to have the right inventory. But Saturn understood that the retailers weren't necessarily good at inventory planning and forecasting. So the company asked retailers to let it take over the job of inventory management, and in return it offered to share their risk. If you're out of stock, Saturn will get the part to you from another retailer, overnight. Saturn even measures its own employees on how well the retailers serve their customers, the end users.

The result is that Saturn is always ranked among the top three in J.D. Power's Customer Satisfaction Index, even though it's competing with luxury cars. And Saturn retailers have a superior inventory performance—its average dealer inventory turn is about 7.5 a year versus the industry average of 2.5. Everybody wins when you have the right alignment.

Gopal: I'd like to add a slightly different perspective. Trust is essential, of course. But before trust comes smart contracting. Trust is predicated on doing things jointly and in an aligned fashion over a period of time with no major surprises. However, to start with, the supply chain folks, who know the environment and the potential risks, need to get together with the people who develop the contracts so that managing risk—

planning for alternative scenarios—can be embedded in the strategy and the contract. The next step is metrics. Trust can only be engendered by considering the risks and having joint metrics, with penalties and incentives. And over time, trust develops. I know that Scott does a lot of work in managing risk, working with different types of contracts with suppliers to generate some of that trust. Scott, do you have anything to tell us about this?

Beth: Our expectations for suppliers are changing. In the past, the contract manager would put a contract in front of me and point to a 3% price reduction over last year. The vector is right, and it's my only choice, so I'd sign off on it. But now what I expect is a series of choices that trade off price, inventory, and responsiveness. Those are the kinds of trade-offs that I need to be able to think about.

But on the issue of trust and penalties: We started off with a penalty approach, a clause that says if you don't provide us with a certain level of responsiveness, we'll charge you. And that began to erode trust. So instead we created an escrow account. If either party violates the agreement, money goes into the account, which is then used to reinvest in the relationship—new information systems, joint team education, and travel to get our people together more often. The level of trust went way up when we took this change in perspective.

Burt: These types of contracts and processes are critical. A company in our benchmark study—a large consumer products company—buys, for example, enzymes for its soap from a small company in Denmark. There are numerous intellectual property issues related to developing new chemical enzyme technologies, so naturally there are concerns about sharing ideas. The two companies worked out master agreements ahead of time so that they could develop and share new technologies without always having to go back to the lawyers and sign new legal agreements. They both placed a great deal of emphasis on ethics and had a clear understanding about the procedures, about what was expected from whom. The relationship was so good, and Natalie, the supply chain manager from the American company, fought so hard within her company on behalf of the supplier, that the Danish company named its latest enzyme *Natalese* for her.

So the relationship counts, but so does the process. They had a clear process governing how to work together, which allowed them to be constantly innovating and kept the relationship healthy.

Morris: I agree that good contracts are absolutely essential, but we've also seen that you can develop trust over time by increasing access to information and to experts within the company. That's particularly been the case with our e-business efforts, such as automatic replenishment of the factories. It starts with a pilot, with one trusted supplier, and it grows over time to become the standard way we do business.

We've watched the same kind of relationship grow among suppliers as we've created information repositories for fabrication equipment. When we develop a new technology, we work for years and years with both our customers and our suppliers before that technology is available, so products exist that use the technology when it's ready to ship. That sometimes involves a number of suppliers sharing information with each other as well as with Intel. The process, which began with three or four people who were willing to take that risk with us—to be fellow travelers—has now become a common way that we exchange information and develop new products.

Lynch: Picking up on the idea of sharing with your partners in the value chain, there's an avenue of innovation that's just being completely missed, which is innovations that come from your suppliers. Dr. Burt did a study on this; I believe it was last year. And I think the average company said that 35% of its innovation came from the supply chain. Now, ask yourself, is that enough? Companies like Toyota are getting 60% of all their innovation out of the supply chain.

Here's a story. A client told me, "My largest customer is Johnson & Johnson. Every year, they come to me and they want a 5% to 15% price cut. I have piles of innovation to bring them. Every time I ask the supply chain manager, 'What about my innovations? Where do I take them?' He says, 'I'm not interested in that.' Why not? Because he's not rewarded for innovation. He's rewarded for cost cutting."

Another example: If you look at General Motors during the 1990s, warranty costs were higher than profits. Why were warranty costs so high? A lot of it is because GM wasn't looking to the supply chain for

innovation. Chrysler, meanwhile, took massive amounts of market share because it was taking innovation through the supply chain. So, the question is, Do we prize it? Do we even measure it? Do we recognize the impact of supplier innovation on our competitive advantage? On customer satisfaction?

Gopal: I'd like to go a level below all of that and say the companies I've seen that innovate best in the supply chain seem to be those that actually have the excellent people focused on the supply chain. I think it's a people issue, an issue of senior management focus and will. Michael Dell and his senior executives used to attend demand/supply-matching meetings. Dell executives are measured on joint metrics—they are (or at least they used to be) all measured on the same things—and that drives their focus on the supply chain as a competitive weapon.

Somebody once asked me about best practices. Well, knowledge is free. Everything that Dell, Wal-Mart, and 7-Eleven do is available somewhere on the Internet. Yet how many people can actually execute on it? The key is putting the system together right and making sure it works—managing risks and planning for contingencies through scenario planning, then executing and changing the strategy based on real-time trends.

Somebody also asked me about worst practices. I think the absolute worst practice is equating technology with the supply chain—the idea that “I buy a technology, so I've got a great supply chain.” Nonsense. Innovation comes down to the people, the tools, and what value senior management places on it. I'd like to ask Hau, How many students at Stanford go into management of the supply chain?

Kirby: I think a lot of people woke up to the talent component of supply chain management when Amazon quite visibly and famously raided Wal-Mart's supply chain management talent. That was a surprise to a lot of people who thought supply chain was mainly about technology and how much money you spent on distribution center design and the like. But is it really about talent, Hau?

Lee: I agree that people—and in particular the leadership—are a very important part of supply chain management. Toshifumi Suzuki, the chairman of Seven-Eleven Japan, spends a whole morning each week reviewing the previous week's supply chain performance. It shows his passion, and it shows his commitment and interest.

In terms of our students at Stanford, electives on supply chain used to be unpopular, but now we have to offer more sections. I know my colleagues at other schools are seeing the same thing. And it's because we have companies like Dell, Seven-Eleven Japan, and Zara that are hiring talented people and giving them opportunities for a great career path, showing them that supply chain is not about just managing within these four walls. And the difference is not in cost containment but in innovation and value creation.

Kirby: Scott, are you seeing that? Is your talent pool rising?

Beth: Yes. When I meet with a group of procurement professionals, I ask them about their backgrounds. In the past, I got primarily teachers, real estate agents, accountants, administrators, political scientists, sometimes a lawyer or two. Now I'm finding the population shifting toward supply chain professionals, people who are coming with that training.

Kirby: So talent is key. But what about technology? Is it not as fundamental as some people believe?

Burt: There are two schools of thought. One is that by getting the right software we can get rid of people. It's that simple. The other is that IT and other technologies are enablers, and they can be tremendous assets when you have the right people in place. But if your CEO or CFO thinks that you're going to get rid of people because you bought whatever software, I'm not sure it's a place you want to work.

Morris: Some amazing information technology has arrived on the scene, RosettaNet being one in the PC supply chain. It's a story of incredible cooperation among competitors—400 companies got together to define business processes at a pretty tactical level. How do we treat an order? How do we treat a return? How do we treat an advance-shipment notice? What fields do we need so that we can have machine-to-machine communication, allowing a distributor to connect to 35 suppliers and not have to create point-to-

point business processes and reconcile data on the back end on a daily basis?

Last year, we did about 10% of our transactions with customers using the RosettaNet standard. I don't think it will completely replace EDI, but we think over time it will become a standard way for us to connect, for certain types of transactions. It's more efficient, not because we think we can lower head count but because we can get people out of the day-to-day business of reconciling and touching purchase orders that should never be touched and get them to focus on higher-order service and strategies for the company.

Lee: Technology—hardware as well as software—is without question crucial in supply chain management. But technology can break the company as well as enable the company to be hugely successful. The distinction is in how people use their technology. Technology is an enabler. You can turn it into power and then receive C-level attention. It depends on the people.

Copacino: One of the critical findings out of our research was exactly that: The masters—the leading companies—are extraordinarily good at selectively choosing what technologies to implement. Others—the average-performing companies and the laggards—are broader and less selective in deciding what technology solutions to implement. And the masters are very disciplined in their implementation, focusing on process design and effective program management and change management.

Lynch: I would add that companies are much more cautious now about technology because there were so many implementation bumbles that drove companies up the wall. They are now much more careful to make sure that an implementation is going to go according to plan and it's going to meet the company's needs. Whereas three or four years ago, so many companies were implementing technology willy-nilly because they thought it was a cure-all.

Kirby: What about RFID? Is it real? Is it overhyped? What's the ROI horizon?

Copacino: We have seen a significant pickup in interest and successful pilots over the last six months. As prices come down, with chip prices that are now approaching 20 cents and will over time go to five cents, RFID becomes very valuable from a productivity point of view. Price points are coming down on reading equipment, too.

We are actively working on probably nine or ten applications, particularly in areas where there's concern about theft. But, more fundamentally, we're also seeing broader efficiency and operational improvements over traditional processes, methods, and technologies.

Gopal: The application is everywhere. Retail is one. Ford uses a real-time logistics system for visibility through triangulation. Container people use it for tracking. And I think, with Operation Safe Commerce, now it's going to be even more in demand. Adoption will go by industry. Five cents is a good-enough price point for some heavy industrial manufacturing. One cent will be good enough for very low-margin consumables, maybe. It's a question of economics and end-to-end visibility.

Lee: I think RFID will evolve much as e-commerce has evolved. When e-commerce first came out, it just automated existing processes and work flows. You could send a purchase order by the Internet or pay an invoice or communicate through e-mail. You were substituting an existing technology for a new one, but you were doing the same thing.

That's not the biggest impact of e-commerce. As Sandra described, the biggest value comes when you can do things like collaborate with your suppliers, as Microsoft did when it used the Internet to collaborate on the design for the Xbox. And you can also use e-commerce to change a process. For example, e-commerce can allow manufacturers to ship products directly to consumers, bypassing multiple layers of distribution channels. It's the process changes that create the greater value.

RFID will follow the same kind of evolution. Now it's mostly tracking. Instead of physically counting how many items you have on the shelf, the technology can read it, and you know instantly. You want to find out when an item left the store? You know instantly. This is automating an existing process that you're currently doing manually. That's the first level but not the biggest impact. I think the biggest value will come from

new applications that use the technology's intelligence. RFID can create a borderless supply chain when cargoes are equipped with tags showing the contents, so that customs clearance can be done almost automatically. RFID can also provide supply chain security when RFID tags are used to electronically seal containers and monitor movements of the containers, so that any tampering can be tracked.

Kirby: I have one more question, which touches on a number of things we've talked about today—sharing information with customers and suppliers, developing alliances, innovating with suppliers. My question is, When do we stop talking about the supply chain and start talking about the value chain?

Lynch: The problem with value chain is that most people haven't really started to think about it. It's not taught in the university; we don't have a value chain professor. It's like strategic alliances: It sort of grew organically. But in many industries, the leaders actually have shifted from supply chain to value chain, even if they haven't branded it that. Look at what Wal-Mart did to Kmart. That's a value chain story, not just supply chain. Some other companies are very good at managing the value chain as well. Southwest Airlines has it figured all the way out from the customer right back through the whole chain. Dell Computer is managing the chain from the customer all the way back through the supply networks. Another is Harley-Davidson. And Saturn, as Hau showed us.

I'm going to predict that within five years, we will have the battle of the value chains. And then it will shift to value networks after that.

Burt: Robert, I know it's always dangerous to disagree with you, but I'll put myself in jeopardy and point out that our recently approved master of science in supply chain management has a capstone course called Value Chain Management.

Gopal: I look at value chains and supply chains almost synonymously, and I'm trying to figure out the difference. The word "value" is one that I fundamentally distrust, having been burned by it in so many different environments. And I'm trying to figure out what you mean when you talk about value chain versus supply chain. Are they really different? I don't buy "new-name proliferation."

Copacino: You get into semantics on this. I was asked by the Council of Logistics Management to develop a definition of supply chain and logistics. We had six prominent people on the committee I formed, and we could not agree on a single definition.

But I take the same perspective that Chris does. I think that supply chain done right is a value chain. It's an integrated supply and demand chain or an integrated value chain. When you think about it that way, you use it to drive revenues and innovation and create value—not just to reduce cost. And that's where you start to get strategic advantage.

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Delusions of Success: How Optimism Undermines Executives' Decisions

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In 1992, Oxford Health Plans started to build a complex new computer system for processing claims and payments. From the start, the project was hampered by unforeseen problems and delays. As the company fell further behind schedule and budget, it struggled, vainly, to stem an ever rising flood of paperwork. When, on October 27, 1997, Oxford disclosed that its system and its accounts were in disarray, the company's stock price dropped 63%, destroying more than \$3 billion in shareholder value in a single day.

Early in the 1980s, the United Kingdom, Germany, Italy, and Spain announced that they would work together to build the Eurofighter, an advanced military jet. The project was expected to cost \$20 billion, and the jet was slated to go into service in 1997. Today, after nearly two decades of technical glitches and unexpected expenses, the aircraft has yet to be deployed, and projected costs have more than doubled, to approximately \$45 billion.

In 1996, the Union Pacific railroad bought its competitor Southern Pacific for \$3.9 billion, creating the largest rail carrier in North America. Almost immediately, the two companies began to have serious difficulties merging their operations, leading to snarled traffic, lost cargo, and massive delays. As the situation got worse, and the company's stock price tumbled, customers and shareholders sued the railroad, and it had to cut its dividend and raise new capital to address the problems.

Debacles like these are all too common in business. Most large capital investment projects come in late and over budget, never living up to expectations. More than 70% of new manufacturing plants in North America, for example, close within their first decade of operation. Approximately three-quarters of mergers and acquisitions never pay off—the acquiring firm's shareholders lose more than the acquired firm's shareholders gain. And efforts to enter new markets fare no better; the vast majority end up being abandoned within a few years.

According to standard economic theory, the high failure rates are simple to explain: The frequency of poor outcomes is an unavoidable result of companies taking rational risks in uncertain situations. Entrepreneurs and managers know and accept the odds because the rewards of success are sufficiently enticing. In the long run, the gains from a few successes will outweigh the losses from many failures.

This is, to be sure, an attractive argument from the perspective of executives. It effectively relieves them of blame for failed projects—after all, they were just taking reasonable risks. But having examined this phenomenon from two very different points of view—a business scholar's and a psychologist's—we have come to a different conclusion. We don't believe that the high number of business failures is best explained as the result of rational choices gone wrong. Rather, we see it as a consequence of flawed decision making. When forecasting the outcomes of risky projects, executives all too easily fall victim to what psychologists call the planning fallacy. In its grip, managers make decisions based on delusional optimism rather than on a rational weighting of gains, losses, and probabilities. They overestimate benefits and underestimate costs. They spin scenarios of success while overlooking the potential for mistakes and miscalculations. As a result, managers pursue initiatives that are unlikely to come in on budget or on time—or to ever deliver the expected returns.

Executives' overoptimism can be traced both to cognitive biases—to errors in the way the mind processes

information—and to organizational pressures. These biases and pressures are ubiquitous, but their effects can be tempered. By supplementing traditional forecasting processes, which tend to focus on a company's own capabilities, experiences, and expectations, with a simple statistical analysis of analogous efforts completed earlier, executives can gain a much more accurate understanding of a project's likely outcome. Such an outside view, as we call it, provides a reality check on the more intuitive inside view, reducing the odds that a company will rush blindly into a disastrous investment of money and time.

Rose-Colored Glasses

Most people are highly optimistic most of the time. Research into human cognition has traced this overoptimism to many sources. One of the most powerful is the tendency of individuals to exaggerate their own talents—to believe they are above average in their endowment of positive traits and abilities. Consider a survey of 1 million students conducted by the College Board in the 1970s. When asked to rate themselves in comparison to their peers, 70% of the students said they were above average in leadership ability, while only 2% rated themselves below average. For athletic prowess, 60% saw themselves above the median, 6% below. When assessing their ability to get along with others, 60% of the students judged themselves to be in the top decile, and fully 25% considered themselves to be in the top 1%.

The inclination to exaggerate our talents is amplified by our tendency to misperceive the causes of certain events. The typical pattern of such attribution errors, as psychologists call them, is for people to take credit for positive outcomes and to attribute negative outcomes to external factors, no matter what their true cause. One study of letters to shareholders in annual reports, for example, found that executives tend to attribute favorable outcomes to factors under their control, such as their corporate strategy or their R&D programs. Unfavorable outcomes, by contrast, were more likely to be attributed to uncontrollable external factors such as weather or inflation. Similar self-serving attributions have been found in other studies of annual reports and executive speeches.

We also tend to exaggerate the degree of control we have over events, discounting the role of luck. In one series of studies, participants were asked to press a button that could illuminate a red light. The people were told that whether the light flashed was determined by a combination of their action and random chance. Afterward, they were asked to assess what they experienced. Most people grossly overstated the influence of their action in determining whether the light flashed.

Executives and entrepreneurs seem to be highly susceptible to these biases. Studies that compare the actual outcomes of capital investment projects, mergers and acquisitions, and market entries with managers' original expectations for those ventures show a strong tendency toward overoptimism. An analysis of start-up ventures in a wide range of industries found, for example, that more than 80% failed to achieve their market-share target. The studies are backed up by observations of executives. Like other people, business leaders routinely exaggerate their personal abilities, particularly for ambiguous, hard-to-measure traits like managerial skill. Their self-confidence can lead them to assume that they'll be able to avoid or easily overcome potential problems in executing a project. This misapprehension is further exaggerated by managers' tendency to take personal credit for lucky breaks. Think of mergers and acquisitions, for instance. Mergers tend to come in waves, during periods of economic expansion. At such times, executives can overattribute their company's strong performance to their own actions and abilities rather than to the buoyant economy. This can, in turn, lead them to an inflated belief in their own talents. Consequently, many M&A decisions may be the result of hubris, as the executives evaluating an acquisition candidate come to believe that, with proper planning and superior management skills, they could make it more valuable. Research on postmerger performance suggests that, on average, they are mistaken.

Managers are also prone to the illusion that they are in control. Sometimes, in fact, they will explicitly deny the role of chance in the outcome of their plans. They see risk as a challenge to be met by the exercise of skill, and they believe results are determined purely by their own actions and those of their organizations. In their idealized self-image, these executives are not gamblers but prudent and determined agents, who are in control of both people and events. When it comes to making forecasts, therefore, they tend to ignore or downplay the possibility of random or uncontrollable occurrences that may impede their progress toward a goal.

The cognitive biases that produce overoptimism are compounded by the limits of human imagination. No matter how detailed, the business scenarios used in planning are generally inadequate. The reason is simple: Any complex project is subject to myriad problems—from technology failures to shifts in exchange rates to bad weather—and it is beyond the reach of the human imagination to foresee all of them at the outset. As a result, scenario planning can seriously understate the probability of things going awry. Often, for instance, managers will establish a “most likely” scenario and then assume that its outcome is in fact the most likely outcome. But that assumption can be wrong. Because the managers have not fully considered all the possible sequences of events that might delay or otherwise disrupt the project, they are likely to understate the overall probability of unfavorable outcomes. Even though any one of those outcomes may have only a small chance of occurring, in combination they may actually be far more likely to happen than the so-called most likely scenario.

Accentuating the Positive

In business situations, people’s native optimism is further magnified by two other kinds of cognitive bias—anchoring and competitor neglect—as well as political pressures to emphasize the positive and downplay the negative. Let’s look briefly at each of these three phenomena.

Anchoring. When executives and their subordinates make forecasts about a project, they typically have, as a starting point, a preliminary plan drawn up by the person or team proposing the initiative. They adjust this original plan based on market research, financial analysis, or their own professional judgment before arriving at decisions about whether and how to proceed. This intuitive and seemingly unobjectionable process has serious pitfalls, however. Because the initial plan will tend to accentuate the positive—as a proposal, it’s designed to make the case for the project—it will skew the subsequent analysis toward overoptimism. This phenomenon is the result of anchoring, one of the strongest and most prevalent of cognitive biases.

Anchoring can be especially pernicious when it comes to forecasting the cost of major capital projects. When executives set budgets for such initiatives, they build in contingency funds to cover overruns. Often, however, they fail to put in enough. That’s because they’re anchored to their original cost estimates and don’t adjust them sufficiently to account for the likelihood of problems and delays, not to mention expansions in the scope of the projects. One Rand Corporation study of 44 chemical-processing plants owned by major companies like 3M, DuPont, and Texaco found that, on average, the factories’ actual construction costs were more than double the initial estimates. Furthermore, even a year after start-up, about half the plants produced at less than 75% of their design capacity, with a quarter producing at less than 50%. Many of the plants had their performance expectations permanently lowered, and the owners never realized a return on their investments.

Competitor Neglect. One of the key factors influencing the outcome of a business initiative is competitors’ behavior. In making forecasts, however, executives tend to focus on their own company’s capabilities and plans and are thus prone to neglect the potential abilities and actions of rivals. Here, again, the result is an underestimation of the potential for negative events—in this case, price wars, overcapacity, and the like. Joe Roth, the former chairman of Walt Disney Studios, expressed the problem well in a 1996 interview with the Los Angeles Times: “If you only think about your own business, you think, ‘I’ve got a good story department, I’ve got a good marketing department, we’re going to go out and do this.’ And you don’t think that everybody else is thinking the same way.”

Neglecting competitors can be particularly destructive in efforts to enter new markets. When a company identifies a rapidly growing market well suited to its products and capabilities, it will often rush to gain a beachhead in it, investing heavily in production capacity and marketing. The effort is often justified by the creation of attractive pro forma forecasts of financial results. But such forecasts rarely account for the fact that many other competitors will also target the market, convinced that they, too, have what it takes to succeed. As all these companies invest, supply outstrips demand, quickly rendering the new market unprofitable. Even savvy venture capitalists fell into this trap during the recent ill-fated Internet boom.

Organizational Pressure. Every company has only a limited amount of money and time to devote to new projects. Competition for this time and money is intense, as individuals and units jockey to present their

own proposals as being the most attractive for investment. Because forecasts are critical weapons in these battles, individuals and units have big incentives to accentuate the positive in laying out prospective outcomes. This has two ill effects. First, it ensures that the forecasts used for planning are overoptimistic, which, as we described in our discussion of anchoring, distorts all further analysis. Second, it raises the odds that the projects chosen for investment will be those with the most overoptimistic forecasts—and hence the highest probability of disappointment.

Other organizational practices also encourage optimism. Senior executives tend, for instance, to stress the importance of stretch goals for their business units. This can have the salutary effect of increasing motivation, but it can also lead unit managers to further skew their forecasts toward unrealistically rosy outcomes. (And when these forecasts become the basis for compensation targets, the practice can push employees to behave in dangerously risky ways.) Organizations also actively discourage pessimism, which is often interpreted as disloyalty. The bearers of bad news tend to become pariahs, shunned and ignored by other employees. When pessimistic opinions are suppressed, while optimistic ones are rewarded, an organization's ability to think critically is undermined. The optimistic biases of individual employees become mutually reinforcing, and unrealistic views of the future are validated by the group.

The Outside View

But there's also a more formal way to improve the reliability of forecasts. Companies can introduce into their planning processes an objective forecasting method that counteracts the personal and organizational sources of optimism. We'll begin our exploration of this approach with an anecdote that illustrates both the traditional mode of forecasting and the suggested alternative.

In 1976, one of us was involved in a project to develop a curriculum for a new subject area for high schools in Israel. The project was conducted by a small team of academics and teachers. When the team had been operating for about a year and had some significant achievements under its belt, its discussions turned to the question of how long the project would take. Everyone on the team was asked to write on a slip of paper the number of months that would be needed to finish the project—defined as having a complete report ready for submission to the Ministry of Education. The estimates ranged from 18 to 30 months.

One of the team members—a distinguished expert in curriculum development—was then posed a challenge by another team member: "Surely, we're not the only team to have tried to develop a curriculum where none existed before. Try to recall as many such projects as you can. Think of them as they were in a stage comparable to ours at present. How long did it take them at that point to reach completion?" After a long silence, the curriculum expert said, with some discomfort, "First, I should say that not all the teams that I can think of, that were at a comparable stage, ever did complete their task. About 40% of them eventually gave up. Of the remaining, I cannot think of any that completed their task in less than seven years, nor of any that took more than ten." He was then asked if he had reason to believe that the present team was more skilled in curriculum development than the earlier ones had been. "No," he replied, "I cannot think of any relevant factor that distinguishes us favorably from the teams I have been thinking about. Indeed, my impression is that we are slightly below average in terms of resources and potential." The wise decision at this point would probably have been for the team to disband. Instead, the members ignored the pessimistic information and proceeded with the project. They finally completed the initiative eight years later, and their efforts went largely for naught—the resulting curriculum was rarely used.

In this example, the curriculum expert made two forecasts for the same problem and arrived at very different answers. We call these two distinct modes of forecasting the inside view and the outside view. The inside view is the one that the expert and all the other team members spontaneously adopted. They made forecasts by focusing tightly on the case at hand—considering its objective, the resources they brought to it, and the obstacles to its completion; constructing in their minds scenarios of their coming progress; and extrapolating current trends into the future. Not surprisingly, the resulting forecasts, even the most conservative ones, were exceedingly optimistic.

The outside view, also known as reference-class forecasting, is the one that the curriculum expert was encouraged to adopt. It completely ignored the details of the project at hand, and it involved no attempt at forecasting the events that would influence the project's future course. Instead, it examined the experiences

of a class of similar projects, laid out a rough distribution of outcomes for this reference class, and then positioned the current project in that distribution. The resulting forecast, as it turned out, was much more accurate.

The contrast between inside and outside views has been confirmed in systematic research. Recent studies have shown that when people are asked simple questions requiring them to take an outside view, their forecasts become significantly more objective and reliable. For example, a group of students enrolling at a college were asked to rate their future academic performance relative to their peers in their major. On average, these students expected to perform better than 84% of their peers, which is logically impossible. Another group of incoming students from the same major were asked about their entrance scores and their peers' scores before being asked about their expected performance. This simple detour into pertinent outside-view information, which both groups of subjects were aware of, reduced the second group's average expected performance ratings by 20%. That's still overconfident, but it's much more realistic than the forecast made by the first group.

Most individuals and organizations are inclined to adopt the inside view in planning major initiatives. It's not only the traditional approach; it's also the intuitive one. The natural way to think about a complex project is to focus on the project itself—to bring to bear all one knows about it, paying special attention to its unique or unusual features. The thought of going out and gathering statistics about related cases seldom enters a planner's mind. The curriculum expert, for example, did not take the outside view until prompted—even though he already had all the information he needed. Even when companies bring in independent consultants to assist in forecasting, they often remain stuck in the inside view. If the consultants provide comparative data on other companies or projects, they can spur useful outside-view thinking. But if they concentrate on the project itself, their analysis will also tend to be distorted by cognitive biases.

While understandable, managers' preference for the inside view over the outside view is unfortunate. When both forecasting methods are applied with equal intelligence and skill, the outside view is much more likely to yield a realistic estimate. That's because it bypasses cognitive and organizational biases. In the outside view, managers aren't required to weave scenarios, imagine events, or gauge their own levels of ability and control—so they can't get all those things wrong. And it doesn't matter if managers aren't good at assessing competitors' abilities and actions; the impact of those abilities and actions is already reflected in the outcomes of the earlier projects within the reference class. It's true that the outside view, being based on historical precedent, may fail to predict extreme outcomes—those that lie outside all historical precedents. But for most projects, the outside view will produce superior results.

Of course, choosing the right class of analogous cases becomes more difficult when executives are forecasting initiatives for which precedents are not easily found. It's not like in the curriculum example, where many similar efforts had already been undertaken. Imagine that planners have to forecast the results of an investment in a new and unfamiliar technology. Should they look at their company's earlier investments in new technologies? Or should they look at how other companies carried out projects involving similar technologies? Neither is perfect, but each will provide useful insights—so the planners should analyze both sets of analogous cases. We provide a fuller explanation of how to identify and analyze a reference class in the sidebar "How to Take the Outside View."

Kahneman, Daniel, Tversky, Amos, *Intuitive Predictions: Biases and Corrective Procedures*, TIMS Studies in Management Science, Vol. 12, 1979

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What Really Works

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The dot-com boom of the 1990s had changed the rules of business forever, it seemed; all you needed was a sexy IPO, cold nerve, and the magic carpet of momentum trading. But even as entrepreneurs and venture capitalists were dismissing traditional business models as antiquated and conventional business wisdom as old school, we found ourselves wondering if they were right. For years we had watched new management ideas come and go, passionately embraced one year, abruptly abandoned the next. "What really works?" we wondered. Our curiosity prompted us to undertake a major, multiyear research effort in which we carefully examined more than 200 well-established management practices as they were employed over a ten-year period by 160 companies.

Our findings took us quite by surprise. Most of the management tools and techniques we studied had no direct causal relationship to superior business performance. What does matter, it turns out, is having a strong grasp of the business basics. Without exception, companies that outperformed their industry peers excelled at what we call the four primary management practices—strategy, execution, culture, and structure. And they supplemented their great skill in those areas with a mastery of any two out of four secondary management practices—talent, innovation, leadership, and mergers and partnerships.

We learned, for example, that it doesn't really matter if you implement ERP software or a CRM system; it matters very much, though, that whatever technology you choose to implement you execute it flawlessly. Similarly, it matters little whether you centralize or decentralize your business as long as you pay attention to simplifying the way your organization is structured. We call the winning combination the 4+2 formula for business success. A company that consistently follows this formula has better than a 90% chance of sustaining superior business performance.

The 160 companies in our study—which we call the Evergreen Project—were divided into 40 quads, each comprising four companies in a narrowly defined industry. The companies in each quad began the study period (1986 to 1996) in approximately the same fiscal condition. Yet their fortunes differed dramatically over the decade. One company in each foursome emerged as a winner—it consistently outperformed its peers in the industry throughout our study period; one a loser—it consistently underperformed against its competitors; one a climber—it started off poorly but dramatically improved its performance once it applied the 4+2 formula; and one a tumbler—it began the decade in good shape then fell far behind. Over the ten-year period, investors in the winning companies saw their money multiply nearly tenfold, with total returns to shareholders of 945%. By contrast, the average loser produced only 62% in total returns to shareholders over the decade. (For more on our methodology, see the sidebar "The Evergreen Project: Our Research.")

Winners, losers, climbers, and tumblers—with startling consistency, their fortunes marched in lockstep with how well they performed on the 4+2 practices. Consider how Tennessee-based retailer Dollar General, a winner in our study, fared during our research period compared to Kmart. (The other companies in their quad were Target and the Limited.) Both companies were in roughly the same financial shape in 1986, but Dollar General grew steadily, showing healthy profits year after year. Meanwhile, Kmart floundered, its market share plummeting from 30% to 17% between 1990 and 2000. (We confirmed our findings in the five years following the study period.) Both companies' performance was directly linked to whether or not they adhered to the 4+2 formula. In the strategy practice, for example, Dollar General never wavered from

its focus, which was to provide quality products at a low price to low- and fixed-income consumers. Kmart, by contrast, couldn't seem to decide whether it was focusing on low- or middle-income consumers. What's more, it got distracted by a major foray into specialty retailing, moving even further from its core customers. At the same time, Kmart was trying to compete with Wal-Mart on price—a losing battle and in direct conflict with the organization's effort to go upmarket. (For an overview of how much value the companies in our study returned to their shareholders over the ten-year period, see the exhibit "How They Fared.")

The eight essential management practices we cite are not new, nor is their importance particularly surprising or counterintuitive. But implementing our formula for success is not as simple as it sounds. Companies can all too easily forget or ignore the basics, as we saw in the waning years of the last century. And succeeding at the eight business practices can be hard work. Maintaining a laserlike focus on strategy alone, year in and year out, can be grueling. Yet the winning companies in our study were running full tilt on six tracks at once—impressive when you consider that a single misstep on any of the six can be fatal. Indeed, some of the companies that were deemed winners during our ten-year research period have since stumbled in one dimension or another—for instance, Dollar General lost its focus on the values in its culture and, as a result, recently had to restate its earnings. It's much easier to be a tumbler than it is to remain a winner. Our research found that less than 5% of all publicly traded companies maintain a total return to shareholders greater than their industry peers for more than ten years. And so, it seems, there is value in being reminded from time to time what really works.

Excel at Four Primary Practices

The primary management practices—strategy, execution, culture, and structure—represent the fundamentals of business. But what does it mean to excel in these areas? There are myriad tools and techniques available to help executives master these practices. To improve execution, for example, leaders can employ TQM, Kaizen, or Six Sigma, among others. The conventional wisdom about what works best shifts with the times. Our research shows that while such tools and techniques are helpful and even necessary in streamlining execution, for instance, or developing strategy, there is no single, obvious choice that will bring a company success. There are, however, hallmarks of effective strategy, execution, culture, and structure—which virtually all of our 40 winners demonstrated for ten solid years. That's no small accomplishment, especially given the limited resources companies have and the unpredictable pressures they face.

Strategy Devise and maintain a clearly stated, focused strategy. You can succeed by competing on low prices, top quality, or great service. And it doesn't matter whether your strategic direction comes from the CEO, a consultant, or a collaborative executive team. The key to achieving excellence in strategy, whatever you do and however you approach it, is to be clear about what your strategy is and consistently communicate it to customers, employees, and shareholders. It begins with a simple, focused value proposition that is rooted in deep, certain knowledge about your company's target customers and a realistic appraisal of your own capacities.

Dollar General, for instance, consistently sold quality products at low prices to the low end of the market. It located its stores in small towns and low-income urban areas, priced items at rock bottom, and carefully selected its merchandise with its core customers in mind.

Target, a climber in our study, has risen to become the nation's second-largest discounter behind Wal-Mart. The company's climb is best understood in terms of its leaders' ability to clearly define and establish a highly focused strategy: Provide good value within a traditional department store experience. Its value proposition, "psychic comforts at value prices," is manifest to customers in the form of stores that are bright and clean, easy to navigate, and well stocked with quality products and unique, higher-end merchandise from designers like Michael Graves and Todd Oldham. Target chose a clear, viable strategy and stuck with it.

Now compare Target's consistency with the Limited empire, a retail winner-turned-tumbler that lost its focus on lifestyle-based fashion concepts. The company's branded stores originally sold very different merchandise, and shoppers knew what to expect from each. Express was designed for hip singles, the Limited targeted suburban mothers, and Lerner (which was part of the Limited's stable of brands until 2002)

served budget-minded career women. But by the early 1990s, the different stores were selling many of the same items, putting them in direct competition with one another and confusing customers.

And then there's Kmart. It struggled miserably throughout the years of our study. Successive CEOs tried to devise strategies that would make the company more competitive, but all of them lacked clarity and consistency. Kmart had always targeted low- and middle-income consumers, but when Wal-Mart and Dollar General began to eat away at this clientele, Kmart decided to pursue a more affluent, fashion-conscious consumer. That led to deals with Martha Stewart and Kathy Ireland—but it also prompted Kmart's disastrous detour into specialty retailing. At the same time, Kmart fudged its focus because it couldn't resist the urge to go head-to-head with Wal-Mart, cutting prices on thousands of items. Wal-Mart, as usual, refused to be undersold, so Kmart's price cuts failed to deliver new customers and simply reduced the company's earnings.

Staying clear on strategy means companies need to be careful how they pursue growth. Executives are often tempted to seize any opportunity to expand, sometimes pushing their companies into unfamiliar territory as a result. But moving into areas unrelated to the core business inevitably creates strategic drift. Confusion reigns, performance falters, profits evaporate. Our evergreen winners set aggressive growth goals—indeed, they grew twice as fast as the average company in their industries. But their primary aim was to grow the core business while at the same time expanding only into related markets.

Over time, ancillary businesses can become part of the core, allowing companies to gradually shift focus as market demands change. After all, while you need to stay clear on strategy—and the essence of what you do will change little over time—you still need to be able to fine-tune your focus in response to new technologies, social trends, or government regulations. Wal-Mart, for instance, stayed focused on providing everyday value to consumers and has continued to grow its core business. Meanwhile, it has also expanded into new and related businesses, like Sam's Clubs, and into new geographies, like the United Kingdom.

Execution Develop and maintain flawless operational execution. As with strategy, it's not what you execute that matters but how. We found no relationship between the degree to which a company embraced outsourcing, for instance, and its financial performance. Nor did success hinge on the extent to which a company invested in specific ERP, CRM, or supply chain management technologies and systems. That's not to say these tools and techniques aren't useful or productive; it's just that embracing them won't necessarily catapult your company to the head of your industry. Disciplined attention to operations is what really counts.

To be a steady winner, a company must increase its productivity by about twice the industry's average. During our research period, the mean productivity growth across all industries was about 3% per year; the winners in our study increased their productivity by 6% to 7% every year. New technologies play a role in productivity improvements, but such investments must always be judged by whether or not they significantly lower costs or boost output. Indeed, a hot new technology will not automatically enhance a business's performance any more than steroids can instantly turn ordinary athletes into gold medalists.

Kmart suffered from an inability to execute from the very start of the decade covered by our research. Wal-Mart and Target had raised the bar on store design, product availability, and customer service, and Kmart CEO Joseph Antonini knew his company needed to catch up. And yet the retailer was never able to fulfill Antonini's vision of clean, attractive stores and a revamped distribution system. The people closest to the customers—the store managers and employees—received inconsistent messages from the top team and poor support in trying to implement operational and technological changes. Vendors and customers continued to complain about shabby store displays and the fact that Kmart rarely discontinued items that didn't sell; unpopular merchandise would languish on the shelves while hot items were frequently out of stock.

By contrast, Dollar General regularly and ruthlessly reviewed every stockkeeping unit. On average, it replaced 150 to 200 items yearly. The company used sophisticated information technology at all its stores to accelerate the checkout process and to manage inventory scrupulously. And it continually tweaked its operations. For instance, former CEO Cal Turner, Jr., doubled the amount of space in the company's distribution centers, thereby reducing the number of runs the retailer's drivers would have to make, and

called for a redesign of Dollar General's stores. They now boast better merchandise-display systems, wider aisles, and a brighter, cleaner look.

Winning companies are realistic. They recognize that there is no way they can outperform their competitors in every facet of operations. So they determine which processes are most important to meeting their customers' needs and focus their energies and resources on making those processes as efficient as possible. They take the same critical eye to product and service quality as well. Evergreen winners deliver offerings that consistently meet customers' expectations, and they're very clear about the standards they have to meet. But they don't necessarily strive for perfection—unless perfection is explicit in their strategic value proposition, as it is at Federal Express and Tiffany. In fact, fully one-third of our winning companies offered only average product quality. Which goes to show that many customers don't care about a level of quality that goes beyond their needs and desires; they won't necessarily reward you for exceeding their expectations. They will, however, punish you severely if you don't meet their expectations. You tumble quickly when you fail on execution.

Culture Develop and maintain a performance-oriented culture. In some quarters of the business world, culture is still considered soft—it's not taken as seriously as, say, operations. In others, culture is considered important, but the emphasis is on making the work environment fun based on the theory that when employees enjoy themselves they're more likely to remain loyal to the company.

Our study made it clear that building the right culture is imperative, but promoting a fun environment isn't nearly as important as promoting one that champions high-level performance and ethical behavior. In winning companies, everyone works at the highest level. These organizations design and support a culture that encourages outstanding individual and team contributions, one that holds employees—not just managers—responsible for success. Winners don't limit themselves to besting their immediate competitors. Once a company has overmatched its rivals in, say, the effectiveness of its logistics, it looks outside the industry. Employees may ask, for instance, "Why can't we do it better than FedEx?" If the goal is unreachable, it still represents an opportunity for high-performing employees and managers: "If we can't be the best at logistics, why not outsource it to a partner that can?"

It should be obvious that the best way to hold people to such high standards is to directly reward achievement. But while nearly 90% of the winning companies in our study tightly linked pay to performance, only 15% of the losers did the same. The winners were scrupulous in setting specific goals, raising the bar every year, and enforcing those benchmarks. No bonuses, stock options, or other rewards were given when targets were missed. And the pay-for-performance commitment extended to the very top of the organization. During the period of our study, officers at steelmaker Nucor—a company that we classified as a winner—were rewarded largely through performance-based bonuses. Their base salaries were lower than those in the industry as a whole. They had no employment contracts, retirement programs, or annuities. And the amount of their bonuses depended on that year's return on stockholders' equity.

To complement any financial rewards, winning companies develop programs that recognize people's achievements and offer them opportunities to use their talents. Home Depot, for example, has gone to great lengths to give associates (a term universally applied to everyone from the janitor to executives on the top team) a sense of ownership over the stores. Rather than insist that each outlet stock identical merchandise and conform to a prescribed layout, Home Depot gives those responsibilities to store managers. The practice is somewhat inefficient financially, but it makes the associates' work more interesting, exciting, and rewarding. Kmart's Antonini, in sharp contrast, believed strongly in command-and-control leadership: He put all of the merchandising and design decisions for all 2,200 Kmart stores into the hands of headquarters staff, keeping store employees completely out of the loop.

Evergreen winners establish and abide by clear company values, giving employees a reason to embrace the organization. These are not vague niceties; winning companies write down their values in clear, forceful language and demonstrate them with concrete actions. Home Depot has identified seven core values, including providing excellent customer service, creating shareholder value, doing the right thing, and giving back to the community. The company has given millions of dollars in grants to hundreds of organizations in four areas: affordable housing, at-risk youth, the environment, and disaster preparedness and relief. Team Depot, which is made up of thousands of associates, reinforces the commitment by pulling together

volunteers to, for instance, rehabilitate housing for homeless and low-income families, build safe playgrounds, and run clinics to educate consumers in dealing with emergencies.

Structure Build and maintain a fast, flexible, flat organization. There's nothing wrong with bureaucracy per se. Procedures and protocols are necessary for any organization to function well. But too much red tape can impede progress, dampen employees' enthusiasm, and leech their energy. Winning companies trim every possible vestige of unnecessary bureaucracy—extra layers of management, an abundance of rules and regulations, outdated formalities. They strive to make their structures and processes as simple as possible, not only for their employees but also for their vendors and customers.

That said, no particular organizational structure separated the winners in our study from the others. It made little difference whether the companies were organized by function, geography, or product. And it didn't much matter whether or not they gave their business units P&L responsibility or their new businesses permission to adopt structures and processes distinct from the corporate norm. What did matter was whether the organizational structure simplified the work.

Dollar General, in its mission to transform a small family-run enterprise into a modern corporation with professional management, never developed superfluous layers of bureaucracy—what Cal Turner used to call “staff infection.” Its lean structure enabled it to shift gears quickly—a point of pride in an otherwise conservative corporate culture.

Nucor confined its management structure to four layers—foreman, department head, plant manager, and CEO—as compared to nine or more layers of management at other major steel companies. That streamlined structure was possible only because then-CEO Ken Iverson and his aides had pushed significant power and responsibility down the line to the plant managers and on to the foremen and frontline workers. As a result, managers at Nucor don't run meetings, write letters, and push paper. They answer questions from frontline teams and provide them with support and resources when they are asked—and only when asked, since the teams are assumed to be able to resolve most problems on their own. Managers at the steelmaker lead by staying out of the way.

Of course, frontline employees and managers can make good decisions only if they have access to relevant, up-to-date information. But sharing doesn't come easily, particularly in large businesses where divisions and departments compete for limited resources. Technical discoveries and best practices are held close to the vest. Just talking about how valuable knowledge sharing is won't be enough to overcome people's instinct to hoard. The winning companies in our study spent considerable time, money, and energy on programs and technologies designed to force open the boundaries and get divisions and departments cooperating and exchanging information—and it paid off. When he was CEO, Nucor's Iverson regularly toured the divisions, acting as a human sponge, absorbing news about the value being generated at different units and then disseminating it corporatewide. Nucor's department heads and plant managers are expected to be out in the shop on a regular basis, not just listening to problems but also keeping an eye out for ideas, technical developments, or new practices that might have wider application throughout the company.

Winning companies are convinced that their future rests not on the brilliance of their executives but on the dedication and inventiveness of their middle managers and employees. Decision making isn't bogged down by a lengthy chain of command, so employees are free to create and innovate. But such a structure isn't easy to maintain; bureaucracy has a way of creeping back into any organization. Texas-based insurer USAA calls the discipline of simplifying structure and processes “painting the bridge.” That is, once you've finished painting a bridge, prudent maintenance requires that you go back to the other side and start over. So it is with bureaucracy: Once a company has assessed all its core processes and scraped off the bureaucratic barnacles, it's time to begin again.

Embrace Two of Four Secondary Practices

Talent Hold on to talented employees and find more. The best sign we could find that a company had great talent was the ease with which any executives who were lost to competitors could be replaced from within. The winners in our study hired chief executives from the outside half as often as the losers did. They seemed to understand that it's much cheaper to develop a star than it is to go out and buy one. It's also

more reliable; you're getting a known quantity. What's more, worker continuity and company loyalty have taken on far greater importance post-Internet boom. So the winners that chose talent as one of their secondary practices demonstrated a distinct preference for developing and promoting their own stars and an ability to retain their top performers.

A commitment to promote from within is meaningless unless the company offers training and development that can prepare employees for new jobs in the company and creates conditions that encourage employees to enroll rather than penalize them for taking time away from their jobs. Not long ago, the assumption was that upwardly striving employees were solely responsible for preparing themselves for higher-level positions. No more. At pharmaceutical company Schering-Plough, for instance, between 75% and 80% of vacancies are filled from within, and more than 2,000 employees per year take production courses. Georgia-based Flowers Foods, one of the largest bakery foods companies in the United States, offers not only the usual training and education but also two programs that reinforce its commitment to employees' development. The first program prepares employees to become baking technicians. By providing workers with detailed knowledge about operations and equipment in its high-tech plants, the company prepares them to move off the production line and into technical roles. In the second program, Flowers sells its delivery routes to workers who have the requisite training and expertise to take them on. The goal is to give employees an opportunity to own their own businesses.

A talented employee can be just as valuable and hard to replace as a loyal customer. Yet many companies that go to great lengths to retain a customer won't lift a finger to hold on to a skilled, seasoned manager. About half the winners in our study excelled in the talent practice, and these companies dedicated major resources—including personal attention from top executives—to building and retaining an effective workforce and management team. It is a fallacy that companies must choose between promoting from within and hiring outside talent. Winning companies do both; a talent-rich environment tends to attract able people from outside a company.

Innovation Make industry-transforming innovations. What passes for technical achievement in most companies—marginal improvements to existing products, for example—would never satisfy organizations that excel at innovation. They're focused on finding altogether new product ideas or technological breakthroughs that have the potential to transform their industries. At these companies, innovation isn't just about turning out new products and services; they also apply new technologies to their internal workings, which can yield huge savings and can transform an industry. Innovation also includes the ability to foresee and prepare for disruptive events.

But the interesting thing about this practice is that despite voluminous research into which structures most effectively encourage innovation, we found no correlation between the sources the winners in our study used and the general sources of innovative business ideas. Neither internal R&D labs nor external labs, neither frontline employees nor management, neither customers nor suppliers were necessarily where winning companies found their key innovations. Any one of the winners might have relied successfully on one or more of those sources, but none proved essential to the winners as a group. What the group had in common was the ambition to lead the way with major, industry-changing innovations and a willingness to cannibalize offerings, resisting the temptation to wring every last cent out of an existing product before introducing another to take its place.

Schering-Plough, for instance, is a confirmed cannibal. It actively turns its prescription-only medications into lower-priced, over-the-counter ones, automatically displacing the originals. But sales of OTC drugs typically double or triple quickly. At Home Depot, as well, cannibalization is routine. When a store becomes so popular that employees can no longer maintain a customer-friendly atmosphere, the company opens another outlet nearby.

Given the copious literature on corporate innovation, it might be expected that most of our winning companies would have excelled at innovation. In fact, a bare majority did so—which underscores how difficult this practice is. Innovation is not to be entered into lightly.

Leadership Find leaders who are committed to the business and its people. It's no longer fashionable to accord celebrity status to the chief executive, but there are few events of greater significance to an

organization than its selection of a CEO. In a study conducted by one of us, it was shown that CEOs influence 15% of the total variance in a company's profitability or total return to shareholders. To put that into perspective, the same study found that the industry in which a company operates also accounts for a 15% variance in profitability. So the choice of a new chief executive is just as important as the choice of whether to stay in the same industry or enter a new one.

As vital as a company's senior leadership team can be, we found that some common beliefs about leadership actually had little to do with a company's becoming and remaining a winner. For example, it didn't matter whether the leader made his or her decisions independently or in collaboration with the top management team. It made little difference whether senior managers relied on quantitative or qualitative assessments to make key decisions. Nor was there any correlation between the personal characteristics of the CEO—whether he or she was viewed as a visionary or detail-oriented, secure or insecure, patient or impatient, charismatic or quiet—and a company's success.

Certain CEO skills and qualities do matter, however. One is the ability to build relationships with people at all levels of the organization and to inspire the rest of the management team to do the same. CEOs who present themselves as fellow employees rather than masters can foster positive attitudes that translate into improved corporate performance. When David Johnson was chief executive at Campbell Soup, a winner in our study, he constantly sought ways to reach out to employees. He organized rallies where he sometimes donned a red-and-white apron and chef's hat. He led managers on wilderness trips to build esprit de corps. Meanwhile, Kmart's string of CEOs failed to break from the company's top-down, strictly hierarchical culture. Even the best-intentioned among them made little effort to reach out to the front line.

Another important quality is the leader's ability to spot opportunities and problems early. Some leaders rely on intuition. Others create special groups within the organization assigned to stay abreast of changes in everything from politics to demographics. Still others engage outside consultants or academics to watch for changes in the marketplace. Though their methods vary, effective leaders help their companies remain winners by seizing opportunities before their competitors do and tackling problems before they become troublesome nightmares. Cisco's John Chambers is a good example. He was quick to realize when the Internet bubble burst that Cisco would have to write off inventory and otherwise restructure itself. His willingness to react swiftly allowed Cisco to bounce back much faster than its rivals did.

No discussion of leadership would be complete without mentioning the board of directors, not least because good boards tend to choose good CEOs. And what defines a good board? Our results suggest that most of the current recommendations being championed by governance-reform advocates don't matter. Only two characteristics really matter: The board members should truly understand the business, and they should be passionately committed to its success, which is best accomplished by giving members a substantial stake in the company's financial performance.

Mergers and Partnerships Seek growth through mergers and partnerships. Innovation is one way to drive growth. Pursuit of mergers and partnerships is another. While many of our companies engaged in some merger activity, only a small number (22%) were able to make this a winning practice. Our research indicates that companies that do relatively small deals (less than 20% of the acquirer's existing size) on a consistent basis (about two or three every year) are likely to be more successful than organizations that do large, occasional deals. The winners in our study appeared to make better choices: In the deals we analyzed, they created value in most of the deals they struck, generating returns in three years that exceeded the premium paid. By contrast, the losers destroyed shareholder value in most of the deals they did.

Winners and climbers shared no single motivation in their determination to buy or join with other organizations. Some were seeking cross-selling opportunities, others wanted economies of scale, while still others were simply chasing market share. What they didn't do was enter deals in order to diversify into areas far removed from their core business—generally a losing proposition.

A merger or acquisition makes sense only when the move leverages the buyer's or seller's existing customer relationships or complements both companies' existing strengths. In 1994, Cardinal Health, an Ohio drug wholesaler, took over Whitmire Distribution, based in California. It was Cardinal's 11th acquisition in a

decade, and it effectively doubled the company's sales. Cardinal had become an industry leader in quality service, and Whitmire had a high-quality customer base. The deal allowed Cardinal to bring its services to a new set of customers, lifting the company into the upper ranks of its industry.

As an alternative to an outright acquisition, some companies enter into partnerships, which can yield growth by allowing two companies to move into new businesses using the talents of both, uniquely combined. (Think of Dow Chemical's partnerships with Asahi Glass and Owens-Illinois.) Partnerships provide some of the same advantages that mergers do and lack many of the disadvantages. Partners aren't expected to accommodate all of each other's idiosyncrasies, for example. They remain separate entities, united in the expectation that their individual talents can be combined in a new business venture that will benefit both beyond what either might have gained alone.

The winners and climbers in our study didn't treat acquisitions and partnerships casually or as one-off deals. They invested substantial financial and human resources in developing an efficient, ongoing process for deal making—for instance, establishing dedicated teams comprised of individuals with the requisite investigative, financial, business, and negotiation skills. Winning companies often have codified principles—lessons drawn from experience—that enable them to more consistently choose the right partners and integrate them quickly.

Nike, for example, was a high flier at the beginning of our research period but lost sight of the business basics and became a tumbler. In its strategy practice, for instance, Nike failed to notice and respond appropriately when the tastes of its target customers—urban teenagers—shifted from sneakers to casual wear. In an attempt to regain market share, the company pushed into brand extensions, losing focus completely. And in its utter dedication to unlimited expansion, Nike lost sight of the primary practice of execution, neglecting to ride herd on workplace efficiency and cost controls.

But cautionary tales aside, we believe our study offers hope. In the hurly-burly of business competition, managers yearn for clarity, certainty, and solid directions for success. The 4+2 formula is intended to provide just that; it tells managers which management practices they need to focus on and which they can ignore. The formula is a true-north compass that works in any business climate.

The Evergreen Project: Our Research

The Evergreen Project began in 1996 and lasted five years. It grew from our shared obsession with two questions: Why do some companies consistently outperform their competitors? And which of the hundreds of well-known business tools and techniques can help a company be great? We decided to carry out a search for evergreen business success. The project involved more than 50 leading academics and consultants using well-accepted research tools and procedures to identify, collate, and analyze the experiences of 160 companies over a ten-year period.

We selected hundreds of businesses that varied in terms of their total return to shareholders (TRS). Responding to concerns from some managers who view TRS as irrational and prefer to be measured by their operating results, we conducted a rigorous analysis of the financial statements of all the companies in our study. We found that the winning companies as measured by TRS were also winners when compared against almost every other meaningful measure. Since an individual company's TRS may reflect not so much its own performance as the state of its industry, our research compared a company's TRS with that of its peers within the same industry.

From the initial list of companies, we selected 160 for detailed study. The vast majority had market capitalizations between \$100 million and \$6 billion. We left out failing organizations as well as big conglomerates with diverse businesses that could not be meaningfully compared with one another. We divided the 160 into 40 groups, each comprising four companies in one narrowly defined industry. To keep the playing field level, we made sure that as of 1986, the start of our ten-year study period, the four companies in each industry group were reasonably equivalent—similar to one another in scale, scope, financial numbers, TRS, and apparent future prospects.

Although they began the study period as peer businesses in their own industries, the companies soon parted ways. We classified the four in each industry to represent four archetypes: winners, climbers, tumblers, and losers. Winners outperformed their peers in TRS during both the first and second five-year periods. Climbers lagged behind their peers in the first period but moved up in the second. Tumblers outdid their peers during the first period and faltered in the second. Losers scored lower than their peers through both five-year periods.

By simultaneously studying companies whose performance changed, for better or for worse, we were able to separate cause and effect. We could identify which management practices actually worked. In other words, we could conclude that improving on specific practices guarantees a company's superior performance—and that fumbling at those practices is bound to worsen performance. Our study used three distinct methodologies to determine which management practices truly influence a company's performance:

We began with a survey methodology. We identified more than 200 management practices that were thought to influence business success—broad areas such as strategy, innovation, and business processes; and specific practices including 360-degree feedback, supply chain management, and the use of intranets. All publicly available information on the 160 companies was collected and read by coders trained to score each organization on all 200-plus practices on a scale of 1 (poor relative to peers) to 5 (excellent relative to peers). We verified the reliability of the survey by obtaining additional information from dozens of people familiar with the companies—knowledgeable outsiders, senior executives, and former executives who had been present during the study period.

We pursued in-depth studies of several of the management practices that we had concluded played a major role in enhancing or weakening a company's performance. This second set of studies, many of which were done at our request by academic experts, allowed us to verify and extend the larger survey findings. In each case, though, the experts had to test their ideas on the same 160 companies included in our study.

We collected and analyzed hundreds of documents concerning these companies—newspaper and magazine articles, business-school case studies, government filings, analysts' reports. Each company accumulated a stack of paper three inches high, adding up to 60,000 documents filling 50 storage boxes. Supervised by William Joyce, 15 graduate students at Brigham Young University's business school coded the documents. This third data collection included market-shaping information, such as the opinions of analysts and journalists. (This sort of buzz or conversation has a huge impact on investors' perceptions and thus on every public company's stock price.) The data from the coding process further verified the results of the first two sets of analyses.

Making 4 + 2 Work for You

Besides identifying the management practices that can significantly affect a company's performance, we've developed a list of behaviors that support excellence in each practice. The practices and accompanying mandates are outlined below.

Primary management practices

Strategy Whatever your strategy, whether it is low prices or innovative products, it will work if it is sharply defined, clearly communicated, and well understood by employees, customers, partners, and investors.

Build a strategy around a clear value proposition for the customer.

Develop strategy from the outside in, based on what your customers, partners, and investors have to say—and how they behave—not on gut feel or instinct.

Continually fine-tune your strategy based on changes in the marketplace—for example, a new technology, a social trend, a government regulation, or a competitor's breakaway product.

Clearly communicate your strategy within the organization and to customers and other external

stakeholders.

Keep focused. Grow your core business, and beware the unfamiliar.

Execution Develop and maintain flawless operational execution. You might not always delight your customers, but make sure never to disappoint them.

Deliver products and services that consistently meet customers' expectations.

Put decision-making authority close to the front lines so employees can react quickly to changing market conditions.

Constantly strive to eliminate all forms of excess and waste; improve productivity at a rate that is roughly twice the industry average.

Culture Corporate culture advocates sometimes argue that if you can make the work fun, all else will follow. Our results suggest that holding high expectations about performance matters a lot more.

Inspire all managers and employees to do their best.

Empower employees and managers to make independent decisions and to find ways to improve operations—including their own.

Reward achievement with pay based on performance, but keep raising the performance bar.

Pay psychological rewards in addition to financial ones.

Create a challenging, satisfying work environment.

Establish and abide by clear company values.

Structure Managers spend hours agonizing over how to structure their organizations (by product, geography, customer, and so on). Winners show that what really counts is whether structure reduces bureaucracy and simplifies work.

Simplify. Make your organization easy to work in and work with.

Promote cooperation and the exchange of information across the whole company.

Put your best people closest to the action.

Establish systems for the seamless sharing of knowledge.

Secondary management practices

Talent Winners hold on to talented employees and develop more.

Fill mid- and high-level jobs with outstanding internal talent whenever possible.

Create and maintain top-of-the-line training and development programs.

Design jobs that will intrigue and challenge your best performers.

Keep senior management actively involved in the selection and development of people.

Innovation An agile company turns out innovative products and services and anticipates disruptive events in an industry rather than reacting when it may already be too late.

Relentlessly pursue disruptive technologies to develop innovative new products and services.

Don't hesitate to cannibalize existing products.

Apply new technologies to enhance all operating processes, not just those dedicated to designing new products and services.

Leadership Choosing great chief executives can raise performance significantly.

Closely link the leadership team's pay to its performance.

Encourage management to strengthen its connections with people at all levels of the company.

Inspire management to hone its capacity to spot opportunities and problems early.

Appoint a board of directors whose members have a substantial stake in the company's success.

Mergers and Partnerships Internally generated growth is essential, but companies that can master mergers and acquisitions can also be winners.

Enter new businesses that leverage existing customer relationships and complement core strengths.

When partnering, move into new businesses that make the best use of both partners' talents.

Develop a system for identifying, screening, and closing deals.

How They Fared; Graph; The Evergreen Project: Our Research; Textbox; Making 4+2 Work for You; Textbox

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Capital Versus Talent: The Battle That's Reshaping Business

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In *The Grapes of Wrath*, John Steinbeck describes a confrontation between a tenant farmer and a tractor driver who is about to level the farmer's home because the farmer can't repay his bank loan. The farmer warns the driver that he will shoot him if he comes too close to the house. The driver points out that another man will be sent to knock it down even if the farmer kills him. "You're not killing the right guy," the driver says. The farmer asks him, "Who gave you orders?" He's not the right guy either, the driver tells him. "He got his orders from the bank." But, the driver adds, there's no sense in shooting the bank's president or its directors because they got their orders from the East. "But where does it stop?" the farmer wonders. "I don't aim to starve to death before I kill the man that's starving me." "Maybe it isn't men at all," says the driver. "Maybe the property's doing it."

The property's doing it again. For much of the twentieth century, labor and capital fought violently for control of the industrialized economy and, in many countries, control of the government and society as well. Now, before the wounds from that epic class struggle have fully healed, a fresh conflict has erupted. Capital and talent are falling out, this time over the profits from the knowledge economy. While business won a resounding victory over the trade unions in the previous century, it may not be as easy for shareholders to stop the knowledge worker-led revolution in business.

The rising global outcry over CEO compensation provides a hint of how fierce the battle between capital and talent will become. Most shareholders grumbled indulgently when CEO pay packages in the United States soared by 434% on average between 1991 and 2000. After all, investors were becoming wealthy, too, because corporate profits were rising and stock markets were booming. However, in 2001, incensed shareholders were stuck with a 35% decline in corporate profits and a 13% drop in Standard & Poor's 500 stock prices, while CEO salaries fell hardly at all. Shareholders have argued heatedly since then that companies must slash CEO compensation and end the decade of unapologetic greed. That many corporations with accounting problems had also adopted controversial compensation policies only strengthened investors' arguments.

Despite the fuss shareholders have kicked up, there is little to suggest that CEOs will be paid radically less anytime soon. CEO compensation has fallen in the past two years—by 16% in 2001 and 33% in 2002, according to BusinessWeek's Executive Compensation Scoreboard—but it will start rising again. In fact, even when the average pay fell, median CEO pay rose by 7% in 2001 and 6% in 2002. The reason compensation will go up is simple. In our knowledge-based economy, value is the product of knowledge and information. Companies cannot generate profits without the ideas, skills, and talent of knowledge workers, and they have to bet on people—not technologies, not factories, and certainly not capital.

In fact, capital is not as scarce as it used to be, especially in developed economies. But there is a shortage of talent, and it is becoming more acute in the United States. Ever since knowledge workers realized that demand for them was outstripping supply, they have been wresting a greater share of the profits from shareholders. Investors have indignantly fought back, but their returns will continue to slide. They may end up having to treat stocks like bonds, which people invest in for fixed returns rather than for capital appreciation, because investors provide only a generic factor of production (money). The irony of this situation will not be lost on labor, which found itself at a similar disadvantage when it began its struggle

against capital more than a century ago.

The First Great Economic War

The history of the twentieth century is, to paraphrase Karl Marx, the history of the struggle between capital and labor for the largest share of the profits from industrialization. The stage for this great economic war was set during the industrial revolutions of the eighteenth and nineteenth centuries, when numerous new products and technologies were invented. These technologies gave birth to factories, which were built with vast investments in machinery and equipment. Such smokestack plants also required large numbers of unskilled workers. In the growing cities of England and France, where industrialization began, and in the post-Civil War United States, there was no dearth of unskilled laborers, while wealth was relatively scarce. Robber barons pocketed the profits from large-scale manufacturing, while laborers lived in poverty.

The workers of the world fought back the only way they could: They united, albeit to different degrees in different countries. The process of collectivization resulted in the Bolsheviks taking control of Russia in 1917 and making capital subservient to labor—a step that was repeated by the Chinese Communist Party in 1949. In England and the United States, workers formed trade unions beginning in the early 1800s. The unions learned to use collective bargaining and industrial actions to demand higher wages and better working conditions for members. As the power of the unions grew, business retaliated by intimidating workers economically and even physically. For instance, companies would not hire or promote union members. The bloody battle that broke out between workers and police officers outside Ford's plant in Dearborn, Michigan, in 1932 was the climactic event of an era during which capital physically fought labor.

Despite business's efforts to break them, trade unions became a force to reckon with in America's automotive, mining, steel, and trucking industries by 1930. The unions gained the upper hand in 1935, when President Franklin Roosevelt's administration passed the National Labor Relations Act, which legally established the right to collective bargaining. A union member in 1933 earned 25% more on average than an equally skilled counterpart in a nonunionized industry; by 1950, he earned 40% more.

Around the same time, the nature of American business changed. In capitalism's early days, a small number of businesspeople, epitomized by John D. Rockefeller, Andrew Carnegie, Henry Ford, and J.P. Morgan, monopolized industry. However, after the end of World War I, business grew rapidly and organizations became bigger. That growth led to managerial capitalism, which transferred the control of companies to professional managers in the image of GM's Alfred Sloan—a trend that accelerated after the end of World War II. As companies financed their growth by issuing equity, shareholdings became widely dispersed and the titans lost their stranglehold on stock and companies.

Business intensified its fight against the unions in the 1970s by shutting down plants in highly unionized cities and setting up new ones in regions where workers were less organized. For example, Spain, Portugal, and Greece attracted investments from northern Europe. Similarly, plants and jobs migrated from rust belt states like Michigan, Pennsylvania, and New York to the sun belt. States like Georgia, Alabama, and Arizona, hungry for investment, had enacted laws that were more sympathetic to companies than unions. Employees in this region resisted organizing because the unions' rigid rules prevented people who worked harder from getting ahead of coworkers.

The emergence of low-cost competitors in the Far East and Latin America sounded the death knell for unions in the steel, automotive, textiles, and mining industries in the United States. Many companies shut shops or shifted plants to Asia and Mexico to stay competitive. Corporations also invested in automation to reduce their dependence on workers. The rise of the computer hardware and software industries, and the growth of the largely nonunion pharmaceuticals and telecommunication services sectors, further eroded the unions' power.

By the time Great Britain elected Margaret Thatcher as prime minister in 1979, the consolidation of power by business was complete. In his first year as U.S. president, Ronald Reagan handed the unions their most embarrassing defeat. When 13,000 members of the Professional Air Traffic Controllers Organization, demanding higher salaries, walked off the job in 1981, he gave them 48 hours to return. More than 11,000 refused, and Reagan fired them for life. Despite the union's dire predictions, the air-traffic control system in

the United States did not shut down and returned to normal operations within months. After this defeat, the trade unions were in full retreat. The bull market in the United States that ran from 1983 to 2000 (with a couple of hiccups) was the exclamation point punctuating capital's declaration of victory over labor in the twentieth century.

The New Battles

But a fresh conflict was already simmering in the 1980s. Since the 1920s, shareholders had forged a partnership with professional managers, the button-down-collar labor that helped them in the battle against the unions. However, it was a highly unequal partnership for most of the century. While the owners of capital shifted most of the burden of achieving business success to the custodians, they did not share the rewards with them. During the 1940s and 1950s, only a few top executives were paid sizeable salaries and bonuses: Workers gained more financially than managers did. Even when the unions' power declined, executives did not experience increased economic benefits. CEOs of large American companies were paid 33% less in 1980 than they were in 1960 for every dollar of earnings they produced for shareholders.

As capital celebrated its hard-fought victory over labor, the skirmishes with talent intensified. Some managers and academics chose to move into industries where they would not need financial backing to profit from their intellectual capital. Consider the number of management consulting firms, like Bain & Company and Monitor, that were set up in the 1970s and 1980s. Managers built these firms almost entirely with intellectual capital, just as lawyers and accountants had done. Consulting firms attracted bright professionals by offering higher starting salaries and signing bonuses than shareholder-owned companies did. Moreover, the firms split all the profits among key employees. By the mid-1980s, the consulting firms had defeated the industrial giants in the battle for talent: The majority of top business school graduates were seeking jobs at strategy consulting firms.

Other managers rushed to confront capital head-on instead of sidestepping it. In industries where shareholders' returns depended on key individuals (human capital) rather than the organization (structural capital), the stars began to demand, and get, more. Before the 1980s, for example, fund managers received a fixed annual fee of between 1% and 3% of the assets they managed. Growing tired of seeing clients earn huge returns on their advice, top fund managers demanded 20% of the annual increase in a portfolio's value (above a base return of 5% to 7%), in addition to a fixed fee. Clients agreed because fund managers had created hedge, buyout, and venture funds that delivered large returns. These top fund managers became seriously rich by the 1980s: Of the individuals on the Forbes 400 List of Richest People in 2002, 15 were principals of hedge, buyout, or venture capital funds.

A few capitalists had seen the warning signs, but they did not know how to nip the talent revolt in the bud. The chairman of Walt Disney Studios, Jeffrey Katzenberg, wrote a now infamous memo in 1991 about the spiraling irrationality of the movie business and leaked it to the media. Katzenberg argued that the studios put up all the capital and took all the risks, but movie stars, scriptwriters, and directors—the "talent," as that industry calls them—stripped off most of the profits. However, Katzenberg was part of the problem rather than the solution, as Disney's shareholders found out. He left the company in a huff in 1994 and for the next three years sought an out-of-court settlement of his severance package, based on an earlier contract that offered him a share of the studio's profits during his tenure. In 1997, Katzenberg sued Disney for \$250 million. After a messy two-year legal battle, Disney settled with Katzenberg for an extremely large, but undisclosed, sum.

Even über-capitalist Warren Buffett could not make much headway when he joined the battle against talent. In 1987, he invested \$700 million in the investment bank and commodities trader Salomon and fumed as his return on investment dropped to 10% by 1990. It did not escape Buffett's attention that the company had increased its employee bonus pool by \$120 million in 1990 while shareholder returns stagnated. When he became Salomon's chairman in 1991, Buffett slashed the bonus pool by \$110 million and boosted returns to shareholders. That turned out to be a hollow victory. Soon afterward, those hotshot investment bankers left Salomon in droves, and, without them, the company's fortunes fell. Salomon merged with Smith Barney, was bought by Travelers, then was absorbed by Citigroup—and eventually disappeared when Citigroup did away with the use of the Salomon brand in April 2003.

Talent's New Tactics

Tensions between capital and talent have escalated sharply since the 1990s because the nature of the economy has changed. As the Information Age supplanted the Industrial Age, managers sensed that knowledge would be more important than capital in producing wealth. Knowledge assets—the managers themselves—would soon be more valuable to a company than its capital assets. Because they invested skills and knowledge in companies, managers felt that they should earn returns on those investments. CEOs, in particular, began to flex their muscles. For every dollar of profit companies generated, CEO compensation more than doubled between 1980 and 1990 and then it almost quadrupled between 1990 and 2000.

Many managers used their increasing advantage against capital during the dot-com boom. As interest in Internet-related technologies and services grew in the mid-1990s, it sparked a worldwide wave of entrepreneurship. Software engineers and journalists from the United States to China went into business for the first time. Many gave up comfortable jobs in large corporations to cash in on their ideas—and themselves. They extracted millions of dollars by way of founder stock. Most of the wealth disappeared during the dot-com bust, but it sent an unmistakable message to shareholders: Entrepreneurial managers would no longer accept a simple wage.

Rather, as the fight over CEO pay shows, managers will aggressively seek a greater share of profits from companies. In addition to CEOs and top management teams, expert researchers, product developers, and brand builders will all demand slices of the pie they have helped create. This appetite will increase, with fewer managers likely to be content with a monthly salary and an annual bonus. Shareholders may well ask, Is there no end to it? The answer, unfortunately for them, is no. As investments in people add more to a company's competitiveness relative to capital investments, companies cannot reward only their shareholders with capital gains. They will have to reward key employees, too.

The ability of people to pressure the forces of capital differs from one country to another. Talent enjoys less power than capital does in developing economies, where wealth is scarce. However, smart people can often neutralize that disadvantage by shifting base. For instance, software engineers in capital-starved India cannot extract as much of the profits from shareholders as their counterparts in the United States can. Drove of Indian engineers therefore migrate to the United States every year to obtain a better price for their skills.

People can take on capital only when there is a mature market for ideas. Talented individuals in the United States have thrived because venture capital firms provide financial backing from a new breed of investor. These investors are risk friendly, adopt a long-term perspective, and, unlike shareholders, realize that they are investing in people. Entrepreneurs in Japan may not be able to find financial backing as easily because the major sources of capital have allied themselves with large business groups. However, the rise of Japanese venture capital firms such as Softbank will help talent overcome that barrier.

Can Capital Manage?

As shareholders react to the threat the talent class poses, they have taken one strategy right out of labor's book: collectivization. In the United States and Canada, the biggest shareholders are the pension funds, and they have banded together to fight the demands that managers make on companies. In Canada, for example, 19 pension and investment funds, with \$350 billion Canadian in assets, formed the Canadian Coalition for Good Governance (CCGG) in June 2002. The coalition has announced that it will use its powers to keep executive compensation in corporate Canada at "reasonable levels."

Shareholder coalitions like CCGG will lobby governments to pass laws that cap CEO salaries. Which political parties do you suppose will support them? The largest shareholders are pension funds, which primarily invest the savings of the working class. Clearly, it will be the Left that supports capital—especially because there is no love lost between the Left and CEOs. The talent class might be the modern equivalent of the "people" class, but its members are part of the richest segment of society. Thus, the Right will back the talent class. It's an interesting twenty-first-century twist because left-of-center parties had historically supported labor and right-of-center parties had supported capital.

Battle-scarred shareholders have several other strategies to combat talent, although it isn't clear they will be effective. Shareholders will continue to co-opt talent through stock-based compensation, believing that owning stock will inhibit managers from asking for greater compensation. It won't. Every manager believes that an increase in his or her compensation will lead to a negligible fall, if any, in the company's stock price. So, though managers may own stock in their companies, they will continue to ask for higher nonstock compensation as well.

Several corporations have moved back-office functions like payroll accounting to developing countries like India and the Philippines in the past decade. They are now shifting knowledge-heavy tasks like R&D as well because engineers and scientists are abundantly available in those countries. Relocating those functions will help companies beat back the demands of highly skilled professionals in the United States. However, the tactic may not work in the long run because multinationals and local companies will compete for the best people in those talent markets, which will erode salary differences. Already, the salaries of software engineers have shot up in Bangalore, the center of India's software industry, which has forced multinational companies to move their base of operations to other parts of the country.

Above all, shareholders will want to prevent managers from skimming the profits from the company's patents, brands, know-how, and customer relationships. That effort will pose a peculiar challenge because the shareholders' only allies in managing companies until now have been CEOs and senior managers—card-carrying members of the same talent class that has declared war on shareholder capitalists.

As Peter Drucker predicted in his 1976 book *The Unseen Revolution*, workers entered the capital market through pension funds so that they could get a share of the profits they help companies make. Ironically, by the time they did so, talent started taking more of the profits from capital. The continued rise of the knowledge worker will create tensions not just between talent and capital but between talent and labor.

As the talent class cashes in on the knowledge it creates, the knowledge-creation process will become a battlefield. Ultimately, both capital and labor may ask lawmakers to regulate the returns to talent just as policy makers regulated the returns to utilities in the twentieth century.

In the end, capital, labor, and talent will learn to live together as labor and capital did after the great battles of the past century. The manner in which capital and talent fight this war will decide the nature of the peace.

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The War Between Capital and Labor; Graph; Capital Versus Talent; Graph

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Do Something--He's About to Snap

Eileen Roche

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"Guess who I ran into at CVS last night?" Nicole Ianucci paused for effect, then leaned in toward her coworkers. "Max was there, in line at the prescription counter. I couldn't see what he was picking up, but you know what I think? I think he's having some sort of a breakdown. That would explain why he's been acting so weird lately."

"Oh, come on, Nicole," Derek scoffed. "The poor guy probably has a cold, and you've got him on antipsychotics. This is how rumors get started."

"I know everyone around here thinks I'm a drama queen," she whispered, "but honestly, doesn't he give you the creeps? I mean, I used to think he was just a harmless oddball, but haven't you noticed he's getting worse—like, ever since last Tuesday?"

No one had to be reminded of the significance of last Tuesday. That was the day a disgruntled office worker in Seattle had walked into his workplace, a .38-caliber pistol in each hand, and shot several coworkers before turning one of the guns on himself. Nicole continued, "These things always set off copycats. And they go interview the guy's neighbors, and it's always the same: 'He kept to himself,' or 'He was kind of a misfit.' Does that sound like anyone we know?"

As if on cue, Max Dyer walked by, ducking his head and concealing as best he could a paper plate bending under the weight of three bagels. It was easy to imagine this tall, awkward man as the kid nobody wanted to play with back in grade school. His beard needed trimming, his shirt was untucked, there were coffee stains on his pants, even the lenses of his glasses were speckled with dirt. When he was out of earshot, Nicole arched her brow and continued, "The man will not even make eye contact. I'm telling you, he's a freak."

"And what's with the stockpiling of food?" Paige chimed in. "He's always lurking around the kitchen, just waiting to scavenge any leftovers someone drops off after a meeting. I mean, really, have some self-respect."

Derek shrugged. "Okay, he is a little strange. I'll give you that. But guys, lighten up. So he's got a big appetite, and he's cheap—big deal. We've all got quirks. The fact is, he's a great programmer. Everybody's on edge because of all the layoff talk around here. Cut him some slack, would you?"

As Lynne Tabor walked toward the watercooler, she noticed three of her top programmers engrossed in conversation. Normally, she'd have thought nothing of it, but something about their expressions gave her pause. Nicole had that "sky is falling" look on her face, and Paige appeared to be annoyed. Derek seemed calm enough, but then, he was possibly the most laid-back man on the planet. "Please don't let Nicole be stirring up layoff rumors again," Lynne thought. "Morale's been low enough since the last round." Smiling brightly, she approached the group. "Hi, guys. What's up?"

They exchanged pleasantries, talked about the school play Nicole's daughter was in, and vented their horror at the Seattle shooting, which was all over the news. The conversation wound down with a status report on Derek's current project. In short, everything seemed fine, but Lynne had a nagging feeling that she was

missing something.

Odd Man Out

The recession had hit manufacturing giant MMI hard, Lynne reflected as she walked back to her office, and people were understandably jittery. Originally called Mailing Machines International, the company's name had been shortened 30 years ago when it expanded into other electronic office equipment. MMI had been good to Lynne: She'd started as an intern and was hired as a full-time programmer when she graduated from college. A few years ago, she was promoted into management. After 15 years at MMI, Lynne cared a great deal about the company, and particularly about her staff. But if MMI missed its quarterly targets again, there might very well be a second round of layoffs.

Lynne's unit had already lost two people, both of whom qualified for the early retirement package. But that meant the others had to pick up extra work, and long hours had become the norm. Luckily for her, Lynne had great people on her team—they worked hard, they helped each other out, and everyone seemed to get along. Everyone except Max, that is.

Max Dyer had a strong work ethic; she couldn't fault him there. He was always in the office before she got in at 7:00, and he was still there when she left most evenings. She was concerned about burnout with that sort of schedule, but the one time she brought it up with him, he had answered in his typical monosyllabic style. When she pressed him, he said he was fine and then asked if that was all she needed and if he could get back to work. Max was not one for idle chat.

In fact, he was pretty terrible in the "interpersonal skills" department—so bad that three years ago his position had to be reworked. According to his original job description, he was supposed to work with the engineers who designed MMI's mailing machines—he created software that mapped out the plans for assembling the parts. The plans were accessed at workstations by the workers on the production floor who built the equipment. The job itself was complex—no question—and Max had to field questions and revision requests from both the engineers and the production workers. But soon enough, both groups began asking Lynne to assign someone other than Max to their projects. They couldn't fault the quality of his work, exactly, but neither could they warm up to him as a collaborator. According to the engineers, in meetings at which he was supposed to be eliciting their requirements, he sat silent and let them do all the talking. It wasn't clear he was even listening, they complained, because his few comments were often non sequiturs. And when he did make a valuable contribution, it took some doing to find the thread between what he was saying and the topic at hand. The production workers were just as unhappy: They thought he talked down to them. When they pointed out problems with the plans—such as the schematic appearing on a different screen than the assembly instructions—he turned defensive, even belligerent.

Lynne remembered well the awkward conversation she'd had with Max at the time. His fidgeting and obvious unease in response to a series of questions about people and projects satisfied her that these weren't specific personality clashes; Max was socially inept across the board. So Lynne appeased the engineers and production workers by assigning Paige to their projects and managed to retain Max's programming expertise by rewriting his job description to call for less interaction with users. It seemed like the perfect solution at the time, especially considering that the whole IT industry was engaged in a war for talent. Paige was a winner, too, since her expanded role merited a raise.

Lynne was proud of the way she had handled that problem, despite some initial reservations she'd had about Max's compensation. Ideally, she would have reduced his salary to reflect the scaled-back nature of his job. But that, she knew, would have been adding insult to injury, and Max seemed more than a little humiliated about what others would perceive as a demotion. In the end, he had deserved the pay, anyway. He drove himself hard, increased his output, and got good performance reviews.

Lynne did worry that he had become even more antisocial, perhaps because his job no longer forced him to interact with people on a regular basis. Max never went to lunch with the other people on his team, and it was rare to hear him discuss weekend plans or current events with anyone. But she had more pressing concerns than one wallflower programmer. The most important thing was to keep the whole team focused and motivated.

Growing Unease

"You don't like pickles, do you?" Paige asked as she reached across to Nicole's lunch tray.

"Help yourself," Nicole replied. "I'm not really hungry, anyway. I'm worried sick about the whole Max thing."

"What's the 'whole Max thing'?" asked Sam, another programmer in their group. "Wait, don't tell me: He's wearing those sandals you hate so much, is that it?"

"She's convinced he's going to snap and take us all out with him. Isn't that right, Nic?"

"It's easy to laugh, Derek, and I hate to say it, but what if she's on to something?" asked George, one of the engineers. "Get this. I stopped by Max's cubicle the other day to drop off some printouts, and what do I find him doing? Pinning up a certificate from some shooting range. I guess he's been getting in some practice."

Paige's eyes widened. "Oh, my God!"

Sam hastened to calm her. "Hey, come on. I've been known to spend some time at the range. If you're a hunter..." But a note of uncertainty crept into his voice.

Paige jumped back in. "Did any of you hear him lose it on the phone last week? I don't know who he was talking to, but he totally flipped out. I swear, I thought he was going to hurl something across the room. Then he slammed down the receiver and just stormed out. It was scary."

"Hey, at least now we know that he does leave the building sometimes," Derek said, trying to lighten the mood. But it didn't work. Sam was starting to look as jumpy as the rest of them.

"Yeah," he said slowly. "Why is he always in the office? It's like he lives here now. Maybe that explains the stash of food at his desk."

"You know, I've stopped coming in most weekends," Paige admitted sheepishly. "I know we've got a ton of work to do before the next rollout, George—and I'll get it done, I will—but I just can't stand the thought of being here all alone with Max. It skeeves me out. He's got that 'bodies stashed in the basement' sort of look to him, doesn't he?"

Nicole scanned the table. "I'm not so crazy after all, am I? I'm telling you, Max is on the edge. And I don't want to end up a statistic."

An Unsettling Meeting

Lynne took a deep breath before launching into the explanation of why she had called Max into her office. "One of your coworkers has expressed some concern about you, Max. Apparently there was an incident last Thursday with a phone call?"

Max's head jerked back, almost as if he had taken a physical blow, and when he met her eye she was surprised at the intensity of his stare. She swallowed. "It sounds like you were extremely angry."

Max's expression turned to a sarcastic sneer. "Oh? They've been telling you things about my performance? Why doesn't that surprise me?"

It quickly became clear that Max believed the people around him were conspiring to make him look bad, if not to undermine his work outright. It made sense, he pointed out to Lynne. Layoffs were looming, and his output was higher than theirs. "The rats," he said, "are beginning to panic."

For the next several minutes, Lynne tried to get to the root of his suspicion and assure him that no one

wanted the team's performance to be compromised. But as she talked, she saw him regarding her carefully. At some point it occurred to her that he was trying to size her up. Was she on his side—or theirs?

As she closed the door behind him, she drew her first deep breath since the conversation had started. "My God," she thought, "that's real paranoia."

"And yet," she admitted to herself, "Max is absolutely right: They are out to get him."

Time for Action?

Lynne wasn't sure what to make of it, she explained to Gene Kozlowski, the vice president of human resources. Layoff anxiety she was ready for. And feelings of burnout? Yeah, those were expected, too. But fear for one's personal safety? She hadn't seen that one coming.

Gene took a swig of coffee. "Okay, let's have it. What's going on with Max? Last I heard, he was doing well ever since we took him off the process plans."

Lynne started by recapping the conversation she had had with Nicole the day before. A visibly upset Nicole had walked into her office and claimed that she was scared that Max might become violent. She had also said that Paige and Sam, as well as George in engineering, shared her concerns, and they wanted to know what Lynne was prepared to do to ensure their safety. Lynne had assured her that safety was, of course, her primary concern and then had asked Nicole to explain why she felt threatened. Nicole had listed a host of reasons, and Lynne had thanked her for her honesty and had promised to think seriously about what the next steps should be.

The problem was, none of Nicole's reasons held up very well under scrutiny. Even Nicole had admitted that Max had never made so much as a veiled threat to anyone in the office. Yes, he owned a gun, but so did lots of other MMI employees. He was definitely a loner, but was that really an indicator of future violent behavior? The fact that he had bought some type of prescription drug was hardly worth considering—except that it reminded Lynne that she needed to pick up her allergy pills on the way home. And that "explosive" phone call, as Nicole put it? Well, one outburst wasn't grounds for dismissal, which seemed to be what Nicole was looking for. Moreover, Lynne couldn't ignore the fact that Nicole had a well-known flair for the dramatic—she joked about it herself at times. Was this another case of her blowing things out of proportion?

On the other hand, the fact that Paige—and maybe others—had stopped working late or on weekends to avoid being alone with Max was a definite cause for concern. And Nicole was right when she pointed out that people here used the same words to describe Max that employees at that Seattle company had used to describe their gunman coworker. And Max had been looking more disheveled lately.

Lynne explained to Gene that after her meeting with Nicole, she had talked with Max about his coworkers' concerns. But instead of feeling reassured by their conversation, she had ended up feeling more anxious.

Her thoughts took another turn. "Isn't part of being a professional learning how to deal with all sorts of people, even those who make you uncomfortable?" she asked Gene. "It's not as if I'm asking Nicole and the others to like Max. I've got to think of the big picture here. What would happen if we did decide to get rid of him and he hired an attorney? Do we want to go down that road? But if we don't take action and something tragic happens—I just couldn't live with myself. I don't want to be the next workplace violence story on the news."

Lynne trailed off and shrugged. "So that's where things stand. I'm at a loss, Gene. I just don't see an easy fix—or even a hard fix," she smiled wanly. "I don't want anyone to feel like they're at risk, but I don't see how we can take action against a guy who hasn't done anything wrong."

Is Max a threat? Five commentators offer expert advice.

James Alan Fox is the Lipman Family Professor of Criminal Justice at Northeastern University in Boston.

In the wake of any episode of workplace vengeance, like the Seattle shooting described in this case study, employees in companies near and far commonly identify with the victims. More than just sympathizing, they may fear that similar rampages could occur within their own organizations.

The media reports that everyone at MMI is hearing are probably sprinkled with suggestions of an epidemic of workplace violence and most likely include some alarming statistics. Homicide is the leading cause of workplace fatalities for women, and second for men; more than 1,000 workers die each year in homicides on the job. The message is painfully clear: You had better watch out, because the next mass murderer may be working in your office! In this kind of hypersensitive climate, is it any wonder that Max Dyer is so frightening to his colleagues?

The scary statistics cited in newspapers and magazines are quite misleading, however. The vast majority of workplace homicides and assaults are the result of robberies at retail stores or of taxi drivers. Of the millions of Americans in the labor force, a few dozen die each year at the hands of disgruntled colleagues. There is a risk, to be sure, but a miniscule one.

Of course, there are reasonable steps we can take to make that risk even smaller—whether or not a layoff is coming, whether or not there is someone like Max around to stir up emotions and rumors. But it is important not to make the situation worse out of fear and panic.

Many supervisors try to minimize the risk of workplace violence by looking for warning signs, comparing employees with profiles found in books, pamphlets, and on the Internet. The typical workplace avenger is a reclusive, middle-aged white male who feels that his job and financial well-being are in jeopardy. Facing yet another disappointment or failure at work, he senses that his career is slipping away. He also believes that he is not to blame. Rather, it's the supervisor who gives him poor assignments or doesn't appreciate his hard work; it's his coworkers who get all the credit when profits go up; it's the human resources personnel who are out to get him.

Max's colleagues have surely spent too much time studying this profile. Undoubtedly, Max does exhibit certain disturbing characteristics. As a loner, he lacks the support systems that most of us depend on to help us cope with adversity. His long hours at the office suggest that he devotes too much of himself to his job and not enough to hobbies and other outside activities. Problems tend to arise when work is the only meaningful part of someone's life. Fortunately, Max has not indicated in any overt way that he is dangerous. His certificate of marksmanship may say more about what gives him a sense of pride than about any desire to harm his coworkers. Despite our wish to find safety in profiling, such prediction strategies are doomed to fail. Tens of thousands of disgruntled Americans in workplaces large and small are frustrated, never smile, and live alone. Yet very few will ever translate their inner feelings of anger into outward expressions of violence.

Treating Max like a ticking time bomb can actually do much more harm than good. If he senses that he is being targeted in a negative way, it could reinforce any feelings of persecution that he may already harbor. Singling him out could precipitate the violent outburst that it is designed to prevent.

The best strategy is to reach out to him, affirm his worth as an employee, try to involve him in group lunches and social events, and help him find balance in his life. These are the right things to do with all employees, not just the ones who scare us.

Ultimately, the best approach for reducing the risk of workplace violence is not to focus on the Max Dyers of the world—the oddballs, geeks, and misfits—but to focus on humanizing the entire workplace. Civility, respect, decency, and worker satisfaction must become a critical part of the bottom line.

Steve Kaufer is the cofounder of the Workplace Violence Research Institute in Palm Springs, California, and the coauthor of *The Complete Workplace Violence Prevention Manual*, which was published by the institute in 1997 and is updated quarterly.

After someone becomes violent in the workplace, people often come forward and say, "He was a nice guy,

but...," and then they list all these disturbing things about him that they had never reported to anyone. That's why I think Max's coworkers have taken a positive step by airing their concerns to management.

That said, they may be reading too much into the situation. They're trying to apply a profile to Max, and profiles don't work. They are thinking that if he does certain things—if he fits the profile—they should be concerned. But everybody has what you could call a baseline behavior. Max's baseline is being a little creepy and looking unkempt and wearing some of his lunch. That's not weird behavior for Max because he's always been that way. In most cases, the trouble starts only if the baseline behavior changes. Max's changes only a little in this case: He has one angry outburst, and he's started to spend more time at work—but perhaps he doesn't have a lot of outside interests or his workload is heavy. If it changes more dramatically—if his hair's going in 18 different directions and he looks like he slept in his car—then I would be concerned. For instance, I saw a situation in which a government employee moved out of his apartment and made no attempt to find another place to live. He used facilities at a campsite to clean himself up and slept in his car. His behavior said that he was not making any attempt to relocate, that perhaps he had other plans that would obviate the need for a long-term living solution.

Getting back to Max, Lynne Tabor has stumbled in the past by accommodating him rather than dealing with his unwanted behavior. She sent the message that it's okay for Max to be grumpy and cranky; the rest of the staff will work around him. She should counsel Max on his behavior. Chances are she'll find an underlying issue: a problem at home, an illness, the fact that he doesn't believe he's been treated fairly at work. If she can get to the heart of the matter, she'll be more likely to help him become a better colleague. But if she's walking on eggshells around him, afraid to take disciplinary action because she's scared he's going to do something, that's a huge problem.

Litigation is the outcome of almost every serious incident of workplace violence. In terms of liability, MMI is obligated to investigate now that it knows that employees are concerned about Max. If it doesn't, and Max does become violent, the plaintiff will use that information against MMI. On the other hand, the company might face a wrongful termination suit if it fires Max without building a proper case. Too often, especially when dealing with somebody who's a little weird, companies haven't built a strong case because nobody ever wanted to deal with the person. So when the last-straw incident occurs, there's nothing in the employee's personnel file. At that point, management either has to start from scratch or terminate the employee and hope the company doesn't get sued.

But in a case like this, particularly when the employee is fairly good—Max is performing his job, he's just strange—I think the company has to adopt more of a benevolent perspective than a punitive one. Lynne and Gene Kozlowski need to find out what's driving Max's behavior. They're never going to change his weirdness, but other issues have surfaced that seem to be getting worse: paranoia, anger, changes in his already odd appearance. Something is behind that, and they need to find out what. They should consider what MMI can do so that his behavior does not escalate. A lot of organizations have employee assistance programs (EAPs), for example, and they're great resources in situations like this. So, unless there has been a direct threat or a serious violation of company policy—like an assault or something else totally inexcusable—the best approach is the benevolent one. They should try to figure out what's going on with this guy and how to help him become a productive and collegial employee.

Christine Pearson is an associate professor of management at Thunderbird, the American Graduate School of International Management, in Glendale, Arizona. Christine Porath is an assistant professor of management and organizational behavior at the University of Southern California's Marshall School of Business in Los Angeles.

Max's behavior is costing MMI big bucks, in ways the company probably doesn't realize. According to our research on incivility in the workplace, about one-quarter of those who have to interact with Max will cut back their hours—as Paige has done—and another quarter will intentionally reduce their effort. Additionally, roughly one-third of Max's coworkers will spread rumors and withhold information, another third will avoid him, and many will engage in organizational deviance, behavior that violates the norms of the workplace and is harmful to the organization, its members, or both. Some people will sabotage their bosses out of anger for not correcting the situation, and one in eight will actually change jobs—but they'll never tell you why.

Given those numbers, Lynne can't ignore the situation. But before she can deal with Max, she needs to take a look in the mirror. As a manager, Lynne has fallen short: She's harboring an uncivil employee, colluding with office gossip, and running scared. But encountering a workplace avenger is less likely than being struck dead by lightning. So while Lynne needs to address the fear that's brewing at MMI, her most pressing problem is that employee relations have run amok because she didn't deal with Max years ago. By giving him a new job description and great performance evaluations, she has reinforced his antisocial tendencies and fostered costly norms of incivility. Now she's afraid to act because Max might hire an attorney and because he just might live up to the rumors.

At this point, Lynne should involve others at MMI in creating a written statement about employee interactions. It can be as simple as "At MMI, employees treat one another with respect," and it can be folded into an existing mission or values statement. (The breadth of incivility in Lynne's department suggests that no such statement exists; if it does, Lynne is in trouble for not holding her subordinates accountable.) Even if MMI is not willing to set a companywide norm, Lynne should do so in her division. Such a statement becomes a benchmark against which all uncivil behavior can be monitored and corrected before it damages organizational culture, employees, and customers.

Lynne should discuss three issues with Gene: creating the company policy, obtaining relevant details in Max's employment record that she may not be aware of, and enrolling Max in training programs to correct his interpersonal deficiencies. Lynne should then talk with the head of MMI's security to make employees' safety concerns known. She should also request a confidential criminal background check on Max as a precaution.

To put a stop to the incivility in her own area, she must meet with her direct reports to stress the importance of the new policy and the consequences for those who violate it, regardless of their special competencies. She should institute 360-degree feedback to track how employees treat one another. Lynne should also tell Nicole, in private, that her behavior violates the new policy and that she will be held accountable.

Lynne must also meet again with Max. Since their last conversation failed to uncover the reason for his unprofessional phone encounter—the only misbehavior that she could have disciplined legitimately—she should revisit that topic. Then she must explain that he needs coaching and training from HR, and together they can establish a timetable. This discussion should be framed as an effort to help Max so that his technical abilities will not be held back by his interpersonal incompetence. Lynne must explain that the standards for coworker respect that apply to all employees also apply to him. She should document this meeting and add it to Max's personnel file as a contract and as evidence of a corporate attempt to correct the problem, should Max ever hire an attorney. If, after these steps, Max's uncivil behavior continues or escalates, he should be fired.

Ronald Schouten, a psychiatrist and attorney, is the director of the Law and Psychiatry Service at Massachusetts General Hospital in Boston and president of KeyPeople Resources, a consulting firm in Boston specializing in corporate health, disaster management, and behavioral health services.

Workplace homicides are rare, but when they occur, their devastating effects extend beyond the loss of individual life. Family members and coworkers are also victims, and the organization itself can experience serious business repercussions from lost productivity and a damaged public image. As if that weren't enough, the situation is a legal minefield.

It is not surprising that Max's behavior makes his coworkers nervous, especially given the layoffs and the workplace shooting in Seattle. Such events raise anxiety and often lead to a lot of talk about profiles. But if workplaces were to exclude all employees with commonly cited risk factors (white men, 30 to 50 years old, like to work alone, have trouble getting along with others, can't accept criticism), they'd be practically empty.

Is Max a threat? His deteriorating behavior, difficulty accepting criticism, angry outbursts, and accusations that others are out to harm him are all risk factors, as is his involvement with guns—but only because it

proves he has access to weapons. The fact that Max has not threatened anyone is worth noting, but as research from the Secret Service has shown, it's important to focus not on whether someone makes a threat but on whether he or she poses a threat.

That puts Lynne in a difficult, but not uncommon, situation. What if Max has a documented mental health condition? She might be tempted to delay taking action for fear of a suit under the Americans with Disabilities Act (ADA) or a state equivalent. The ADA makes it unlawful for employers to discriminate against individuals on the basis of a current or past physical or mental disability. It also prohibits discrimination against those perceived to have a disability, even if they do not. But appropriate workplace interventions and discipline can be applied to disabled individuals—they are subject to the same workplace rules as nondisabled employees. Max is unlikely to have an ADA claim if Lynne handles him the way she would any other employee who disrupted the workplace. Additionally, she might fear a wrongful termination or defamation lawsuit if Max is let go or is escorted out of the workplace and portrayed as dangerous.

But if Lynne does nothing, and Max acts out Nicole's worst fears, MMI could face negligent hire or negligent retention lawsuits. There may also be federal and state Occupational Safety and Health Administration (OSHA) citations for failure to maintain a safe workplace. In fact, the stress of the situation may lead employees to seek workers' compensation.

Even so, many managers are reluctant to intervene, either because they don't want to intrude into an employee's personal life or because they fear that their action will push the person over the edge. But most struggling employees respond positively to good-faith inquiries about their well-being. And the concern that your action will topple someone over the edge is actually the strongest argument for doing something.

My advice to Lynne is to ask Max again if he's all right, comment on his apparent stress level, and engage him as a fellow human being. The next steps depend on his response. Under the best circumstances, he will acknowledge that he does not get along with people. Under the worst circumstances, he will become hostile and threatening. Most interactions like this lie somewhere between these extremes.

Policy and procedures for cases like Max's are important: Workplaces should have teams—with representatives from management, HR, legal, mental health, security, and public relations—to handle such crises. More important still is the ability to strike a balance between fear and denial while addressing everyone's interests in an objective, concerned manner.

Kaufer, Steve (co-author), *The Complete Workplace Violence Prevention Manual*, Workplace Violence Research Institute, 1997

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What Venture Trends Can Tell You; Forethought

William F. Meehan; Ron Lemmens; Matthew R. Cohler
McKinsey & Co.; GE Consumer Finance; McKinsey & Co.

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You can get whiplash watching the venture capital industry. Annual U.S. VC investments rocketed from under \$10 billion in the early 1990s to over \$100 billion in 2000, then plunged back toward earth when the bubble burst. It's not going to be a soft landing. With annual investments now well below \$25 billion, our projections show that a gradual shakeout is likely—one that in the worst case could force up to half of all current VC firms to close shop over the next several years.

Drawing on public and proprietary data, we analyzed past correlations of VC investments and returns with changes in GDP, Nasdaq returns, and productivity. Using statistical models, we applied those correlations to hypothetical future scenarios, yielding three projections for venture investment levels over the next three to five years. (See the exhibit "Predicting Venture Investments.")

Even the most optimistic projection suggests that the VC industry can profitably absorb no more than \$15 billion to \$20 billion in annual investment during the next several years. The two other projections, which we think are more realistic, suggest even less capacity for investment, between \$5 billion and \$15 billion annually. Currently, the industry is awash in money and is struggling to invest or return to limited partners an \$86 billion capital overhang, or cumulative excess in uninvested capital. The shrinking capacity to absorb investment, combined with this excess supply of capital, will likely lead to lower overall returns and an inexorable, gradual shakeout of existing venture firms. Most vulnerable are firms that raised their first funds during the bubble, a group that included 25% of all U.S. venture firms by the end of 2001. Nonetheless, history suggests that older, established firms are not immune.

Following the behavior and fate of the VC industry is important to executives outside the venture capital community as well as to industry insiders. For decades, venture capital has been a critical force in—and a leading indicator of—business innovation. VC investment activity provides outsiders with early signs of key trends emerging in high tech, communications, and biotechnology. These early signs can help executives monitor technology transitions that may fundamentally disrupt business processes and can, in some industries, help them track the growth of potential competitors and acquisition targets.

The conspicuous flow of venture capital into semiconductors and computer hardware in the early 1980s, for example, represented nearly 50% of all venture deals in the first half of that decade, foreshadowing the rapid expansion of business computing throughout the U.S. economy that followed. Similarly, the recent growth of VC investment in biotechnology and medical devices—22% of all venture funding in 2002 versus just 6% to 13% in the bubble years—presages the growing importance of life sciences for both medical and industrial applications.

Predicting Venture Investments

An analysis of the relationship between venture capital investments, Nasdaq returns, and GDP growth suggests three possible futures for VC investing. The first—Rational Exuberance—assumes 15% annual Nasdaq returns, 3.5% GDP growth, and a correlation between capital investment and GDP growth similar to the levels seen between 1995 and 1998. The second—'90s Optimism—assumes 10% Nasdaq returns, 3% GDP growth and an investment level–GDP correlation similar to the 1990–1994 period. The third scenario—Revert to the '80s—assumes 5% annual Nasdaq returns, 2.5% GDP growth, and an investment level–GDP

correlation similar to pre-1990 levels.

Predicting Venture Investments; Graph

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What Makes Global Firms Resilient? Forethought

Daniel Yergin; Gardiner Morse

Cambridge Energy Research Associates; HBR

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Daniel Yergin takes the long view. As chairman of Cambridge Energy Research Associates, an energy industry consulting firm, and author of the Pulitzer prize-winning book *The Prize: The Epic Quest for Oil, Money, and Power*, Yergin is an astute observer of the interplay of geopolitics, globalization, and energy markets. But his perspective on the global economy is rooted in history. His newest book, *Commanding Heights: The Battle for the World Economy*, written with Joseph Stanislaw, traces the arc of globalization from World War I to the present. Now a PBS and BBC television series, *Commanding Heights* reminds readers of the vitality of market capitalism and just how unpredictable and fragile markets are. Recently, Yergin spoke with HBR's Gardiner Morse about the future of globalization and the lessons energy companies have learned about managing through uncertain times. The following are edited excerpts of their conversation.

Energy companies are particularly attuned to risk reduction. What are some lessons those companies have learned that executives in other industries might benefit from?

The oil industry has been an international business for 140 years, and so it has learned to take the long view and take geopolitical risk very seriously. Oil companies know risk analysis isn't something you dip in and out of. You have to engage in it continually, so that you're not blindsided when the rules of the game suddenly change. That's why we do scenario planning with companies.

Many firms outside the energy business began the globalization process only quite recently, in the last ten or 20 years. Some were globalizing during the 1990s, when world trade was doubling and borders were opening up. It was a pretty optimistic time. So these relatively recent entrants into global markets might look to the energy industry's experience in making long-term global investments and coping with the slings and arrows—and surprises—of outrageous fortune. This may mean reducing risk through involvement with international financial institutions, such as the World Bank, or partnering with locals. One of the key lessons of globalization is that you need to work very hard not to have a parochial perspective. Don't try to apply your paradigm to societies in which the culture and the politics are different, and don't let your own experience and preconceptions prevent you from seeing things as they are. You also need staying power.

How does scenario planning work?

Scenario planning entails developing several possible story lines for the future. We are in a different era now than we were in the 1990s. A central question in scenario planning is "What happens to globalization in a new era of turmoil and conflict?" We are working with companies to look at the impact of three possible future scenarios on their business assumptions and strategies: "globality," which describes a well-functioning, international economy with expansion of trade, movement of people and ideas, and a rising standard of living; "leviathan," in which governments take back far more control over their economies and societies, and you see increasing regulation; and "fragmentation," a world divided, or even disrupted, by conflict and economic crisis.

You work through those scenarios; you identify the signposts, and you also try to visualize the surprises. As you explore the different scenarios, you ask, "What would fragmentation do to our business? Or "How would a leviathan environment affect our strategy?" This approach enables you to get a rich, objective

discussion going that reduces the influence of hierarchy in the open exchange of ideas and makes strategies more resilient. It might prepare you for a down cycle, or for a reversion to heavy regulation, or for the entrance of new competitors. And it helps you react more swiftly to change than your rivals. A few years ago, before the World Trade Center attack, the process might have highlighted risks that were not so evident then. Today, when many companies can see only risk, scenario planning could help them look beyond the siege mentality and identify and move on to new opportunities.

Is the second age of globalization over?

No, definitely not. It's just harder to operate globally than it was a few years ago, and the threats are more evident. Of course, history tells us that things can change abruptly. In the first age of globalization in the late nineteenth and early twentieth centuries, there was much optimism; it was the age of progress. Before the start of World War I, the pound sterling was the foundation of global commerce, world trade was growing at 33% a year, and the steam engine and the telegraph were shrinking the world. That world suddenly came to an end with an assassin's bullet in Sarajevo in 1914. It took almost 80 years to get back to a truly global economy. When we were completing the filming for the Commanding Heights television series, I was haunted by a comment made by Austrian economist Friedrich von Hayek, who is the counterpoint to Keynes in the first part of the series. Looking back to the First World War and what came after, Hayek observed, "We didn't know how fragile our civilization was."

What's over today is the extreme optimism, the exaggerations of globalization, the notion of a borderless world in which it was assumed, almost without even being articulated, that everyone aspired to be like Americans and would embrace markets in the way Americans do. We've seen that's not true in many parts of the world. It's evident even in Europe, where the entire notion of shareholder value is no longer so popular. What seems to be emerging as a deep cultural gulf between Americans and Europeans not only creates new risk for business but also could undermine the kind of collaboration that our complex international economy requires.

But the reality of globalization is still here. We're living in a much more interconnected world. The technology that underpins it is not going to regress or disappear. Think about the radio boom in the 1920s. RCA's stock went from a dollar a share to almost \$600 a share, and then, with the Great Crash of 1929, fell back to a pittance again. It was a speculative boom, but when it was over, radio was still there. It was one of the transformative technologies. Looking at the past few years, with the bust, the feverish speculation is gone. But the lasting impact of this second age of globalization will remain; and the new technologies, having come out of their IPO fevers, will continue to transform the way we live.

Which do you think will be the key growth sectors in the global economy 20 years from now?

They're going to be—despite the bust—information, communications, and biotechnology. The equally important question will be, "Who does what in the global economy in 20 years?" Will China be a source of services as well as a source of manufacturing? Will India's political institutions facilitate or prevent its much greater integration into the world economy? How will the aging of their populations constrain the roles of Germany and Japan in the international economy? Which developing countries will follow the example of East Asia and develop internationally competitive technological prowess? And, as with the Asian financial crisis and terrorism, the SARS epidemic forces us to think about the unanticipated risks of globalization.

Activists argue that multinationals harm developing economies. The message in Commanding Heights seems to be the opposite.

One of the key lessons of this era—which economists understand but the public really doesn't—is how truly beneficial is expanding world trade. Global poverty is much more likely to be ameliorated through trade in a growing and interconnected world than through isolationism. In the developing countries, trade is critical for reducing poverty. Thirty-five years ago, Singapore was so poor that people didn't know whether it would survive as an independent country. But it made the decision to cast its fate with the world economy, and today it has a higher per capita income than Britain.

Yergin, Daniel, *The Prize: The Epic Quest for Oil, Money, and Power*, Simon & Schuster, 1991 | Yergin,

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A Better Way to Innovate; Forethought

Henry W. Chesbrough

Harvard University Graduate School of Business Administration

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In a world of abundant knowledge, not all smart people work for you. The next big idea may spring from a maverick start-up or a researcher working for a competitor. For many companies in the innovation business, the response to these threats has been to circle the wagons tighter still, walling off their own R&D effort to keep competitors from stealing their best ideas.

These companies are enslaved by obedience to the old paradigm of closed innovation—the notion that the only good idea comes from within, that “if you want something done right, you’ve got to do it yourself.” Closed innovation embraces a strategy of vertical integration and exclusive control. For most of the twentieth century, this paradigm worked, and worked well. One has only to think of the Edison and Bell laboratories. But increasingly this isolationism stifles innovation. Information now flows cheaply and instantaneously over the Internet; smart people are more widely dispersed but more closely connected than ever before. Ideas bubble up in organizations of all kinds and sizes, not just in large research labs. And knowledge workers are ever more mobile, willing to take their ideas and talent to whatever firm will develop them.

In this world, companies must become nimble at “open innovation”—at accessing and exploiting outside knowledge while liberating their own internal expertise for others’ use. Not only can they benefit from ideas they harvest from outside, they can profit from sharing their ideas with others, even competitors.

Consider the story of Lucent’s battles with Cisco over telecom R&D. In the breakup of AT&T, Lucent inherited the lion’s share of Bell Laboratories and, along with it, a wealth of R&D expertise. Flexing Bell Labs’ muscle, Lucent launched many successful new products. But rival Cisco, lacking anything like a Bell Labs, managed to keep pace with Lucent and even occasionally beat it to market. How? It scanned the world for start-ups, investing in some, partnering with others, some of which it later acquired. In this way, Cisco matched the R&D output of perhaps the finest industrial research organization in the world without doing much internal research of its own. It simply looked beyond its own four walls.

The following table illustrates open innovation experiments that are already under way in a variety of industries to import innovative ideas and export intellectual capital. It’s too early to gauge the ultimate success of these efforts and others like them. But they show how forward-thinking companies are throwing wide their doors, even to rivals, and leveraging the power of external ideas.

Chesbrough, Henry W., *Open Innovation: The New Imperative for Creating and Profiting from Technology*, Harvard Business School Press, 2003

Open Innovation Experiments; Table

Document HBR0000020030718dz7100001