Harvard Business Review
www.hbrreprints.org

ARTICLE COLLECTION

How will you get *peak* performance from your most creative thinkers?

Leading Creative People

Included with this collection:

Product 1867

Leading Creative People

Collection Overview

Who *most* determines your company's success? For many companies, it's the handful of creative people whose knowledge and skills lead to innovations that may bankroll the organization for years to come.

But managing creative people isn't easy. They don't want to be led. They don't care about titles and promotions. They're easily bored. And the process by which they pioneer new insights and ideas is complex and chaotic.

How to turn creative people's hot ideas into real business opportunities? You have to lead them in some counterintuitive ways. This HBR Article Collection provides potent guidelines. For example, ensure that all managers do hands-on work: When employees know their boss has actually done the work *they* do, they'll feel more comfortable discussing problems and pitching new ideas. And seek out the "unsung heroes" scattered throughout your organization who are fostering fresh notions for enhancing your firm's business practices. Then ensure that they prosper from championing their ideas.

Lead your creative people the *right* way, and you unleash their full potential. They *and* your company win.

The Articles

Harvard Business Review
www.hbrreprints.org

HBR Spotlight

How do you manage people who don't want to be led and may be smarter than you?

Leading Clever People

by Rob Goffee and Gareth Jones

Included with this full-text *Harvard Business Review* article:

Reprint R0703D

Leading Clever People

The Idea in Brief

Who *most* determines your company's success? **Clever people**—employees whose knowledge and skills enable them to produce disproportionate value for your firm. Think the pharmaceutical researcher who formulates a new drug, or the programmer who creates a new piece of code. Their single innovation may bankroll their entire organization for a decade.

To make sure clever people do their best work at your company, you must harness their talents. But that isn't easy: Clever people don't want to be led. They don't care about titles or promotions. And they're easily bored.

What to do? Goffee and Jones suggest leading this crew differently. Be a benevolent guardian, not a traditional boss—by protecting them from complex rules and politics. Create a safe environment where they can experiment—and fail. Respect their expertise while quietly demonstrating your own.

Lead your clever people the *right* way, and you unleash their full potential. They *and* your organization win.

The Idea in Practice

To get the most from your clever people, understand what makes them different. Unlike typical employees, they:

- Know their worth
- Know how to get funding for pet projects
- Expect instant access to higher-ups
- Are plugged into extensive knowledge networks
- Won't thank you for leading them well

To increase clever people's value—and prevent attrition:

- **Reduce administrative distractions.** Protect clever people from rules and politics associated with big-budget activities. For example, at a newspaper, the editor lets an investigative reporter skip editorial meetings. In a big consumer goods company, a leader filters requests for information from the head office so a consumer profiler can experiment with a new marketing plan.
- **Maintain diversity of ideas.** Avoid centralized management structures that stifle innovative thinking.

▶ Example:
Swiss pharmaceutical giant Roche encourages the clever people in its three companies to pursue different projects as they see fit. CEO Franz Humer tells them, "You do what you want [at Genentech], and we will do what we want at Roche, and in five years' time we will know. Sometimes you will be right and sometimes we will be right."

- **Make it safe to fail.** Effective leaders know that for every successful product, many will fail. Ideally, the successes will more than recover the costs of the failures. By helping your clever people live with their failures, you boost the chances of more successes.

▶ Example:
When three of Glaxo's high-tech antibiotics all failed in the final stages of clinical trial, chairman Sir Richard Sykes sent letters to the team leaders. He thanked them for their hard work but also their decision to kill the drugs. He then encouraged them to move on to the next challenge.

- **Let clever people pursue private efforts.** These efforts may generate new business opportunities for your firm.

▶ Example:
Google lets employees spend one day a week on Googlettes—their own start-up ideas. Result? Innovation at a speed that puts large bureaucratic organizations to shame. For instance, the Google-affiliated social networking Web site Orkut began as a Googlette.

- **Demonstrate you're an expert in your own right.** Show how your expertise complements or supports your clever people's expertise. You'll establish credibility with them.

▶ Example:
A marketing director at a brewer knew little about traditional brewing techniques. But he could quote details about his company's sales performance. His clear mastery of the business side gave him authority and credibility, so brewers respected his product development opinions.

How do you manage people who don't want to be led and may be smarter than you?

HBR Spotlight

Leading Clever People

by Rob Goffee and Gareth Jones

Franz Humer, the CEO and chairman of the Swiss pharmaceutical giant Roche, knows how difficult it is to find good ideas. "In my business of research, economies of scale don't exist," he says. "Globally today we spend $4 billion on R&D every year. In research there aren't economies of scale, there are economies of ideas."

For a growing number of companies, according to Humer, competitive advantage lies in the ability to create an economy driven not by cost efficiencies but by ideas and intellectual know-how. In practice this means that leaders have to create an environment in which what we call "clever people" can thrive. These people are the handful of employees whose ideas, knowledge, and skills give them the potential to produce disproportionate value from the resources their organizations make available to them. Think, for example, of the software programmer who creates a new piece of code or the pharmaceutical researcher who formulates a new drug. Their single innovations may bankroll an entire company for a decade.

Top executives today nearly all recognize the importance of having extremely smart and highly creative people on staff. But attracting them is only half the battle. As Martin Sorrell, the chief executive of WPP, one of the world's largest communications services companies, told us recently, "One of the biggest challenges is that there are diseconomies of scale in creative industries. If you double the number of creative people, it doesn't mean you will be twice as creative." You must not only attract talent but also foster an environment in which your clever people are inspired to achieve their fullest potential in a way that produces wealth and value for all your stakeholders.

That's tough. If clever people have one defining characteristic, it is that they do not want to be led. This clearly creates a problem for you as a leader. The challenge has only become greater with globalization. Clever people are more mobile than ever before; they are as likely to be based in Bangalore or Beijing as in Boston. That means they have more opportunities: They're not waiting around for their pensions; they know their value, and they expect you to know it too.

We have spent the past 20 years studying the issue of leadership—in particular, what followers want from their leaders. Our methods are sociological, and our data come from case studies rather than anonymous random surveys. Our predominant method consists of loosely structured interviews, and our work draws primarily from five contexts: science-based businesses, marketing services, professional services, the media, and financial services. For this article, we spoke with more than 100 leaders and their clever people at leading organizations such as PricewaterhouseCoopers, Electronic Arts, Cisco Systems, Credit Suisse, Novartis, KPMG, the British Broadcasting Corporation (BBC), WPP, and Roche.

The more we talked to these people, the clearer it became that the psychological relationship leaders have with their clever people is very different from the one they have with traditional followers. Clever people want a high degree of organizational protection and recognition that their ideas are important. They also demand the freedom to explore and fail. They expect their leaders to be intellectually on their plane—but they do not want a leader's talent and skills to outshine their own. That's not to say that all clever people are alike, or that they follow a single path. They do, however, share a number of defining characteristics. Let's take a look at some of those now.

Understanding Clever People

Contrary to what we have been led to believe in recent years, CEOs are not utterly at the mercy of their highly creative and extremely smart people. Of course, some very talented individuals—artists, musicians, and other free agents—can produce remarkable results on their own. In most cases, however, clever people need the organization as much as it needs them. They cannot function effectively without the resources it provides. The classical musician needs an orchestra; the research scientist needs funding and the facilities of a first-class laboratory. They need more than just resources, however; as the head of development for a global accounting firm put it, your clever people "can be sources of great ideas, but unless they have systems and discipline they may deliver very little."

That's the good news. The bad news is that all the resources and systems in the world are useless unless you have clever people to make the most of them. Worse, they know very well that you must employ them to get their knowledge and skills. If an organization could capture the knowledge embedded in clever people's minds and networks, all it would need is a better knowledge-management system. The failure of such systems to capture tacit knowledge is one of the great disappointments of knowledge-management initiatives to date.

The attitudes that clever people display toward their organizations reflect their sense of self-worth. We've found most of them to be scornful of the language of hierarchy. Although they are acutely aware of the salaries and bonuses attached to their work, they often treat promotions with indifference or even contempt. So don't expect to lure or retain them with fancy job titles and new responsibilities. They will want to stay close to the "real work," often to the detriment of relationships with the people they are supposed to be managing. This doesn't mean they don't care about status—they do, often passionately. The same researcher who affects not to know his job title may insist on being called "doctor" or "professor." The point is that clever people feel they are part of an external professional community that renders the organizational chart meaningless. Not only do they gain career benefits from networking, but they construct their sense of self from the feedback generated by these extra-organizational connections.

This indifference to hierarchy and bureaucracy does not make clever people politically naive or disconnected. The chairman of a major news organization told us about a globally famous journalist—an exemplar of the very clever and skeptical people driving the news business—who in the newsroom appears deeply suspicious of everything the "suits" are doing. But in reality he is astute about how the company is being led and what strategic direction it is taking. While publicly expressing disdain for the business side, he privately asks penetrating questions about the organization's growth prospects and relationships with important customers. He is also an outspoken champion of the organization in its dealings with politicians, media colleagues, and customers. You wouldn't invite him to a strategy meeting with a 60-slide PowerPoint presentation, but you would be wise to keep him informed of key developments in the business.

Rob Goffee (rgoffee@london.edu) is a professor of organizational behavior at London Business School in England. **Gareth Jones** (gjones@london.edu) is a visiting professor at Insead in Fontainebleau, France, and a fellow of the Centre for Management Development at London Business School. Goffee and Jones are also the founding partners of Creative Management Associates, an organizational consulting firm in London. Their HBR article "Managing Authenticity" was published in December 2005.

Like the famous journalist, most clever people are quick to recognize insincerity and respond badly to it. David Gardner, the COO of worldwide studios for Electronic Arts (EA), knows this because he oversees a lot of clever people. EA has 7,200 employees worldwide developing interactive entertainment software derived from FIFA Soccer, The Sims, *The Lord of the Rings*, and Harry Potter, among others. “If I look back at our failures,” Gardner told us, “they have been when there were too many rah-rahs and not enough content in our dealings with our people. People are not fooled. So when there are issues or things that need to be worked out, straightforward dialogue is important, out of respect for their intellectual capabilities.”

Managing Organizational “Rain”

Given their mind-set, clever people see an organization’s administrative machinery as a distraction from their key value-adding activities. So they need to be protected from what we call organizational “rain”—the rules and politics associated with any big-budget activity. When leaders get this right, they can establish exactly the productive relationship with clever people that they want. In an academic environment, this is the dean freeing her star professor from the burden of departmental administration; at a newspaper, it is the editor allowing the investigative reporter to skip editorial meetings; in a fast-moving multinational consumer goods company, it is the leader filtering requests for information from the head office so the consumer profiler is free to experiment with a new marketing plan.

Organizational rain is a big issue in the pharmaceutical business. Drug development is hugely expensive—industry-wide, the average cost of bringing a drug to market is about $800 million—and not every drug can go the distance. As a result, the politics surrounding a decision can be ferocious. Unless the CEO provides cover, promising projects may be permanently derailed, and the people involved may lose confidence in the organization’s ability to support them.

The protective role is one that Arthur D. Levinson, Genentech’s CEO and a talented scientist in his own right, knows how to play. When the drug Avastin failed in Phase III clinical trials in 2002, Genentech’s share price dropped by 10% overnight. Faced with that kind of pressure, some leaders would have pulled the plug on Avastin. Not Levinson: He believes in letting his clever people decide. Once or twice a year, research scientists have to defend their work to Genentech’s Research Review Committee, a group of 13 PhDs who decide how to allocate the research budget and whether to terminate projects. This gives rise to a rigorous debate among the clever people over the science and the direction of research. It also insulates Levinson from accusations of favoritism or short-termism. And if the RRC

Seven Things You Need to Know About Clever People

Leaders should be aware of the characteristics most clever people share, which collectively make them a difficult crew to manage.

1. They know their worth. The tacit skills of clever people are closer to those of medieval guilds than to the standardized, codifiable, and communicable skills that characterized the Industrial Revolution. This means you can’t transfer the knowledge without the people.

2. They are organizationally savvy. Clever people will find the company context in which their interests will be most generously funded. If the funding dries up, they have a couple of options: They can move on to a place where resources are plentiful, or they can dig in and engage in elaborate politics to advance their pet projects.

3. They ignore corporate hierarchy. If you seek to motivate clever people with titles or promotions, you will probably be met with cold disdain. But don’t assume this means they don’t care about status; they can be very particular about it, and may insist on being called “doctor” or “professor.”

4. They expect instant access. If clever people don’t get access to the CEO, they may think the organization does not take their work seriously.

5. They are well connected. Clever people are usually plugged into highly developed knowledge networks; who they know is often as important as what they know. These networks both increase their value to the organization and make them more of a flight risk.

6. They have a low boredom threshold. In an era of employee mobility, if you don’t engage your clever people intellectually and inspire them with organizational purpose, they will walk out the door.

7. They won’t thank you. Even when you’re leading them well, clever people will be unwilling to recognize your leadership. Remember, these creative individuals feel that they don’t need to be led. Measure your success by your ability to remain on the fringes of their radar.

should kill a project, the researchers are not only not fired, they are asked what they want to work on next.

Roche owns 56% of Genentech, and Franz Humer stands foursquare behind Levinson. Leading clever people, Humer told us, is especially difficult in hard times. "You can look at Genentech now and say what a great company," he said, "but for ten years Genentech had no new products and spent between $500 million and $800 million on research every year. The pressure on me to close it down or change the culture was enormous." Avastin was eventually approved in February 2004; in 2005 it had sales of $1.13 billion.

Having a leader who's prepared to protect his clever people from organizational rain is necessary but not sufficient. It's also important to minimize the rain by creating an atmosphere in which rules and norms are simple and universally accepted. These are often called "representative rules," from the classic *Patterns of Industrial Bureaucracy,* by the sociologist Alvin Gouldner, who distinguished among environments where rules are ignored by all (mock bureaucracy), environments where rules are imposed by one group on another (punishment-centered bureaucracy), and environments where rules are accepted by all (representative bureaucracy). Representative rules, including risk rules in banks, sabbatical rules in academic institutions, and integrity rules in professional services firms, are precisely the ones that clever people respond to best.

Savvy leaders take steps to streamline rules and to promote a culture that values simplicity. A well-known example is Herb Kelleher, the CEO of Southwest Airlines, who threw the company's rule book out the window. Another is Greg Dyke, who when he was the director general of the BBC discovered a mass of bureaucratic rules, often contradictory, which produced an infuriating organizational *immobilisme*. Nothing could be better calculated to discourage the clever people on whom the reputation and future success of the BBC depended. Dyke launched an irreverent "cut the crap" program, liberating creative energy while exposing those who had been blaming the rules for their own inadequacies. He creatively engaged employees in the campaign—for example, suggesting that they pull out a yellow card (used to caution players in soccer games) whenever they encountered a dysfunctional rule.

Recruiting People with the Right Stuff

Clever people require a peer group of like-minded individuals. Universities have long understood this. Hire a star professor and you can be sure the aspiring young PhDs in that discipline will flock to your institution. This happens in business as well. In the investment banking world, everyone watches where the cleverest choose to work. Goldman Sachs, for example, cherishes its reputation as the home of the brightest and best; a bank that seeks to overtake it must be positioned as a place where cleverness thrives.

For this reason, the CEOs of companies that rely on clever people keep a close watch on the recruiting of stars. Bill Gates always sought out the cleverest software programmers for Microsoft. From the start, Gates insisted that his company required the very best minds; he understood that they act as a magnet for other clever people. Sometimes he intervened personally in the recruitment process: A particularly talented programmer who needed a little additional persuasion to join the company might receive a personal call from Gates. Very flattering—and very effective.

Although you need to recruit clever stars, you must also make sure that your culture celebrates clever ideas. In an effort to create stars, some media organizations divide their employees into "creatives" and administrative support staff. That's a big mistake. It makes about as much sense as recruiting men only—you automatically cut your talent pool in half. The ad agency Bartle Bogle Hegarty doesn't make this mistake. Many of its most successful executives started as assistants but were given the space to grow and express their cleverness. Not surprisingly, BBH has long been regarded as one of the most creative ad agencies in the world. At the heart of its corporate culture is the maxim "Respect ideas, wherever they come from."

Letting a Million Flowers Bloom

Companies whose success depends on clever people don't place all their bets on a single horse. For a large company like Roche, that simple notion drives big decisions about corporate control and M&A. That's why Humer decided to sell off a large stake in Genentech. "I insisted on selling 40% on the stock market," he told us. "Why? Because I wanted to preserve the company's different culture. I believe in diversity: diversity of culture, diversity of origin, diversity of behavior, and diversity of view."

For similar reasons, Roche limits its ownership of the Japanese pharmaceutical company Chugai to 51%. By keeping the clever people in all three companies at arm's length, Humer can be confident that they will advance different goals: "My people in the Roche research organization decide on what they think is right and wrong. I hear debates where the Genentech researchers say, 'This program you're running will never lead to a product. You are on

If clever people have one defining characteristic, it is that they do not want to be led. This clearly creates a problem for you as a leader.

the wrong target. This is the wrong chemical structure—it will prove to be toxic.' And my guys say, 'No, we don't think so.' And the two views never meet. So I say to Genentech, 'You do what you want, and we will do what we want at Roche, and in five years' time we will know. Sometimes you will be right and sometimes we will be right.'" Maintaining that diversity is Humer's most challenging task; there is always pressure within a large organization to unify and to direct from above.

Companies that value diversity are not afraid of failure. Like venture capitalists, they know that for every successful new pharmaceutical product, dozens have failed; for every hit record, hundreds are duds. The assumption, obviously, is that the successes will more than recover the costs of the failures. Take the case of the drinks giant Diageo. Detailed analysis of customer data indicated an opening in the market for an alcoholic beverage with particular appeal to younger consumers. Diageo experimented with many potential products—beginning with predictable combinations like rum and coke, rum and blackcurrant juice, gin and tonic, vodka and fruit juice. None of them seemed to work. After almost a dozen tries, Diageo's clever people tried something riskier: citrus-flavored vodka. Smirnoff Ice was born—a product that has contributed to a fundamental change in its market sector.

It's easy to accept the necessity of failure in theory, but each failure represents a setback for the clever people who gambled on it. Smart leaders will help their clever people to live with their failures. Some years ago, when three of Glaxo's high-tech antibiotics all failed in the final stages of clinical trial, Richard Sykes—who went on to become chairman of Glaxo Wellcome and later of GlaxoSmithKline—sent letters of congratulation to the team leaders, thanking them for their hard work but also for killing the drugs, and encouraging them to move on to the next challenge. EA's David Gardner, too, recognizes that his business is "hit driven," but he realizes that not even his most gifted game developers will always produce winners. He sees his job as supporting his successful people—providing them with space and helping them move on from failed projects to new and better work.

Smart leaders also recognize that the best ideas don't always come from company projects. They enable their clever people to pursue private efforts because they know there will be payoffs for the company, some direct (new business opportunities) and some indirect (ideas that can be applied in the workplace).This tradition originated in organizations like 3M and Lockheed, which allowed employees to pursue pet projects on company time. Google is the most recent example: Reflecting the entrepreneurial spirit of its founders, Sergey Brin and Larry Page, employees may spend one day a week on their own start-up ideas, called Googlettes. This is known as the "20% time." (Genentech has a similar policy.) The result is innovation at a speed that puts large bureaucratic organizations to shame. The Google-affiliated social-networking Web site Orkut is just one project that began as a Googlette.

Establishing Credibility

Although it's important to make your clever people feel independent and special, it's equally important to make sure they recognize their *inter*dependence: You and other people in the organization can do things that they can't. Laura Tyson, who served in the Clinton administration and has been the dean of London Business School since 2002, says, "You must help clever people realize that their cleverness doesn't mean they can do other things. They may overestimate their cleverness in other areas, so you must show that you are competent to help them." To do this you must clearly demonstrate that you are an expert in your own right.

Depending on what industry you are in, your expertise will be either supplementary (in the same field) or complementary (in a different field) to your clever people's expertise. At a law firm, the emphasis is on certification as a prerequisite for practice; at an advertising agency, it's originality of ideas. It would be hard to lead a law firm without credentials. You can lead an advertising agency with complementary skills—handling commercial relationships with clients, for instance, while your clever people write great copy.

A man we'll call Tom Nelson, who was the marketing director of a major British brewer, is a good example of a leader with complementary skills. Nelson was no expert on traditional brewing techniques or real ales. But he was known throughout the organization as "Numbers Nelson" for his grasp of the firm's sales and marketing performance, and was widely respected. Nelson had an almost uncanny ability to quote, say, how many barrels of the company's beer had been sold the previous day in a given part of the country. His clear mastery of the business side gave him both authority and credibility, so the brewers took his opinions about product development seriously. For example, Nelson's reading of market tastes led to the company's development of low-alcohol beers.

Leaders with supplementary expertise are perhaps more commonplace: Microsoft's Bill Gates emphasizes his abilities as a programmer. Michael Critelli, the CEO of Pitney Bowes, holds a number of patents in his own name. Richard Sykes insisted on being called Dr. Sykes. The title gave him respect within the professional community to which his clever people belonged—in a way that being the chairman of a multinational pharmaceutical company did not.

But credentials—especially if they are supplementary—are not enough to win acceptance from clever people. Leaders must exercise great care in displaying them so as not to demotivate their clever employees. A former national soccer coach for England, Glenn Hoddle, asked his star player, David Beckham, to practice a particular maneuver. When Beckham couldn't do it, Hoddle—once a brilliant international player himself—said, "Here, I'll show you how." He performed the maneuver flawlessly, but in the process he lost the support of his team: The other players saw his move as a public humiliation of Beckham, and they wanted no part of that. The same dynamic has played out many times in business; the experience of William Shockley is perhaps the most dramatic, and tragic, example (see the sidebar "The Traitorous Eight"). How do you avoid this kind of situation? One highly effective way is to identify and relate to an informed insider among your clever people—someone willing to serve as a sort of anthropologist, interpreting the culture and sympathizing with those who seek to understand it. This is especially important for newly recruited leaders. Parachuting in at the top and accurately reading an organization is hard work. One leader we spoke to admitted that he initially found the winks, nudges, and silences of his new employees completely baffling. It took an interpreter—someone who had worked among the clever people for years—to explain the subtle nuances.

• • •

Martin Sorrell likes to claim that he uses reverse psychology to lead his "creatives" at WPP: "If you want them to turn right, tell them to turn left." His comment reveals an important truth about managing clever people. If you try to push them, you will end up driving them away. As many leaders of extremely smart and highly creative people have learned, you need to be a benevolent guardian rather than a traditional boss. You need to create a safe environment for your clever employees; encourage them to experiment and play and even fail; and quietly demonstrate your expertise and authority all the while. You may sometimes begrudge the time you have to devote to managing them, but if you learn how

The Traitorous Eight

Ineffective leadership of clever people can be costly. Consider the cautionary tale of William Shockley, a London-born research scientist who worked at Bell Labs after World War II. In 1947 Shockley was recognized as a coinventor of the transistor, and in 1956 he was awarded a Nobel Prize. He left Bell Labs in 1955 and founded Shockley Semiconductor Laboratory, in Mountain View, California. His academic reputation attracted some of the cleverest people in electronics, including Robert Noyce and Gordon Moore (of Moore's Law fame). Shockley was blessed with a brilliant mind. Noyce described him as a "marvelous intuitive problem solver," and Moore said he had a "phenomenal physical intuition." But his leadership skills fell far short of his intellectual brilliance. On one occasion Shockley asked some of his younger employees how he might stoke their enthusiasm. Several expressed a wish to publish research papers. So Shockley went home, wrote a paper, and the next day offered to let them publish it under their own names. He meant well but led poorly.

On another occasion, Shockley instituted a secret "project within a project." Although only 50 or so people were employed in his laboratory, the group assigned to work on his new idea (which, according to Shockley, had the potential to rival the transistor) was not allowed to discuss the project with other colleagues. It wasn't long before rumblings of discontent at Shockley's leadership style turned mutinous. The situation deteriorated and a disenchanted group—"the Traitorous Eight"—left to found Fairchild Semiconductor in 1957. Fairchild revolutionized computing through its work on the silicon transistor. It also threw off a slew of clever people who went on to start up or develop some of the best-known companies in the industry: Bob Noyce and Gordon Moore (Intel), Jerry Sanders (Advanced Micro Devices), and Charlie Sporck (National Semiconductor) were all former employees of Fairchild.

Through his poor leadership, Shockley inadvertently laid the cornerstone of Silicon Valley. He brought together some of the best scientists in the field of electronics, many of whom might otherwise not have remained in the region. And he created conditions that provoked his brilliant employees to strike out on their own.

to protect them while giving them the space they need to be productive, the reward of watching your clever people flourish and your organization accomplish its mission will make the effort worthwhile.

Reprint R0703D
To order, see the next page
or call 800-988-0886 or 617-783-7500
or go to www.hbrreprints.org

Leading Clever People

Further Reading

ARTICLE

How to Kill Creativity
by Teresa M. Amabile
Harvard Business Review
May 2000
Product no. 3499

When it comes to managing creative people, it's just as important to know what *not* to do as what to do. Creativity gets killed much more often than it gets supported. The problem isn't that managers smother creativity intentionally—it's that the business need for coordination and control that can inadvertently undermine employees' ability to put existing ideas together in new and useful ways.

How to avoid stifling your people's creative talents? Balance coordination and control with creativity-nurturing practices. For example, help employees broaden their expertise—their technical, procedural, and intellectual knowledge. The broader their expertise, the larger the intellectual space they have to explore and solve problems. And fire up their intrinsic motivation—their abiding interest in certain activities or deep love of particular challenges. Guidelines for stimulating intrinsic motivation include matching people in diverse work teams, telling them the company's goals but letting them figure out how to achieve them, allocating sufficient time and other resources to projects, and letting creative people know that what they do matters.

Harvard Business Review
www.hbrreprints.org

Over many years, the leaders of SAS Institute have distilled a set of principles for getting peak performance from creative people. Among them: Value the work over the tools, reward excellence with challenges, and minimize hassles.

Managing for Creativity

by Richard Florida and Jim Goodnight

Included with this full-text *Harvard Business Review* article:

Reprint R0507L

Managing for Creativity

The Idea in Brief

Your company's most important asset? **Creative capital:** the arsenal of creative thinkers whose ideas turn into valuable products and services.

Creative employees pioneer new technologies, birth new industries, and power economic growth. But the process by which they do all this is complex and chaotic. How to manage your firm's creative capital so it delivers maximum value—increasing efficiency, improving quality, and raising productivity? Apply software giant SAS's three-pronged strategy, say Florida and Goodnight:

- **Help employees do their best work** by engaging them intellectually and eliminating distractions.
- **Make all managers responsible for sparking creativity,** removing arbitrary distinctions between "suits" and "creatives."
- **Engage customers as creative partners** so you deliver superior products.

The payoff? SAS's results say it all: 28 straight years of revenue growth. A subscription renewal rate of 98%. And an employee turnover rate of just 3%–5%, compared with a 20% industry average.

The Idea in Practice

SAS's strategies for maximizing creativity:

HELP EMPLOYEES DO THEIR BEST WORK

Creative people excel when you present them with on-the-job challenges. Give each type of employee the form of mental stimulation that most engages him or her.

▶ Example:
SAS's developers thrive on intellectual stimulation. So the company sends them to industry- and technology-specific conferences, where they hone their programming skills. It also maintains a healthy training budget so developers can keep up with cutting-edge technologies.

But as much as creative people like to feel challenged, they don't want to have to surmount unnecessary obstacles, so SAS also strives to eliminate hassles off and on the job.

▶ Example:
SAS provides perks—including on-site dry cleaning, exercise, and medical facilities—that make it easy for employees to handle everyday errands and chores. These benefits make employees more productive *and* improve retention.

MAKE MANAGERS "CREATIVES"

Ensure that *all* managers do hands-on work: You'll send the message that everyone's on the same team, striving to provide a superior product. When employees know their boss has actually done the work *they* do, they ask more questions, put more faith in their boss's decisions, and feel comfortable discussing problems and pitching new ideas.

▶ Example:
SAS's CEO writes software code for some of its products. The director of SAS's on-site health care center is a nurse practitioner who sees her own patients one afternoon a week.

Managers can further spark innovation by:

- Bringing groups of employees together to exchange ideas
- Asking lots of questions
- Procuring materials that employees need
- Avoiding penalizing people for making honest mistakes

ENGAGE CUSTOMERS AS CREATIVE PARTNERS

Ensure that people throughout your organization hear customers' voices loud and clear. Customers will tell you why your company's products or services aren't ideal and how to make them better. And they'll work with you to improve them.

▶ Example:
Every day, SAS gathers—and acts on—customer complaints and suggestions through its Web site, over the phone, and through annual users' conferences. It prioritizes complaints and comments and routes them to the appropriate experts, incorporating as many suggestions as possible when developing next versions of software. It has taken action on about 80% of all customer requests.

Over many years, the leaders of SAS Institute have distilled a set of principles for getting peak performance from creative people. Among them: Value the work over the tools, reward excellence with challenges, and minimize hassles.

Managing for Creativity

by Richard Florida and Jim Goodnight

A company's most important asset isn't raw materials, transportation systems, or political influence. It's creative capital—simply put, an arsenal of creative thinkers whose ideas can be turned into valuable products and services. Creative employees pioneer new technologies, birth new industries, and power economic growth. Professionals whose primary responsibilities include innovating, designing, and problem solving—the creative class—make up a third of the U.S. workforce and take home nearly half of all wages and sala-ries. If you want your company to succeed, these are the people you entrust it to. That much is certain. What's less certain is how to manage for maximum creativity. How do you increase efficiency, improve quality, and raise productivity, all while accommodating for the complex and chaotic nature of the creative process?

Many academics and businesses have made inroads into this field. Management guru Peter Drucker identified the role of knowledge workers and, long before the dot-com era, warned of the perils of trying to "bribe" them with stock options and other crude financial incentives. This view is supported by the research of Harvard Business School's Teresa Amabile and Yale University's Robert Sternberg, which shows that creative people are motivated from within and respond much better to intrinsic rewards than to extrinsic ones. Mihaly Csikszentmihalyi at Claremont Graduate University in California has documented the factors that generate creativity and its positive effects on organizations, advancing the concept of "flow"—the feeling people get when their activities require focus and concentration but are also incredibly enjoyable and rewarding.

While most students of the creative process have focused on what makes *individuals* creative, a growing number of thinkers such as Andrew Hargadon at the University of California, Davis, and John Seely Brown, former chief scientist of Xerox, are unlocking the social and management contexts in which creativity is most effectively nurtured, harnessed, and mobilized. Eric von Hippel of MIT and Henry Chesbrough of the University of California, Berkeley, have called attention to the critical role played by users and customers in the creative process and to a new model of "open innovation." Duke University's Wesley Cohen has shown that corporate creativity depends upon a firm's "absorptive capacity"—the ability of its research and development units not just to create innovations but to absorb them from outside sources. Business history is replete with examples of companies—from General Electric and Toyota to the design-intensive Electronic Arts, Pixar, and IDEO—that have tapped into the creativity of workers from a wide range of disciplines, as well as the creativity of users and customers, to become more innovative, more efficient, or both.

Despite such insights and advances, most businesses have been unable to pull these notions of creativity together into a coherent management framework. SAS Institute, the largest privately held software company in the world, is a notable exception. Based in Cary, North Carolina, SAS has been in the top 20 of *Fortune*'s 100 Best Companies to Work For list every year it's been published. The employee turnover rate hovers between 3% and 5%, compared with the industry average of nearly 20%. The governments and global corporations that rely on SAS's sophisticated business-intelligence software are overwhelmingly satisfied: The subscription renewal rate is an astounding 98%. And in 2004, the company enjoyed its 28th straight year of revenue growth, with revenues topping $1.5 billion.

What's the secret to all this success? As an academic and a CEO, the two of us approach this question differently, but we've come to the same conclusion. SAS has learned how to harness the creative energies of *all* its stakeholders, including its customers, software developers, managers, and support staff. Over the past three decades—through trial and error as well as organic evolution—SAS has developed a unique framework for managing creativity, one that rests on three guiding principles: Help employees do their best work by keeping them intellectually engaged and by removing distractions. Make managers responsible for sparking creativity and eliminate arbitrary distinctions between "suits" and "creatives." And engage customers as creative partners so you can deliver superior products.

These principles are driven by the premise that creative capital is not just a collection of individuals' ideas, but a product of interaction. As University of Chicago organization theorist Ronald Burt has shown, long-term relationships between employees and customers add to a company's bottom line by increasing the likelihood of "productive accidents." Thus, when SAS nurtures such relationships among developers, salespeople, and customers, it is investing in its future creative capital.

Managing with a framework like SAS's produces a corporate ecosystem where creativity and productivity flourish, where profitability and flexibility go hand in hand, and where hard work and work/life balance aren't mutually exclusive.

Help Workers Be Great

Creative people work for the love of a challenge. They crave the feeling of accomplishment that comes from cracking a riddle, be it technological, artistic, social, or logistical. They *want* to do good work. Though all people chafe under what they see as bureaucratic obstructionism, creative people actively hate it, viewing it not just as an impediment but as the enemy of good work. Do what you can to keep them intellectually engaged and clear petty obstacles out of their way, and they'll shine for you.

Stimulate their minds. SAS operates on the belief that invigorating mental work leads to superior performance and, ultimately, better products. It does not try to bribe workers with stock options; it has never offered them. At SAS, the most fitting thanks for a job well done is an even more challenging project.

An *InformationWeek* survey of tens of thousands of IT workers confirms that theory: On-the-job challenge ranks well above salary and other financial incentives as the key source of motivation. This is no surprise—since the pioneering work of Frederick Herzberg, managers have known that learning and being challenged motivate workers more than money or fear of disciplinarian bosses. What's different about SAS is that it goes to uncommon lengths to find the right intrinsic motivator for each group of employees.

Artists are inspired by the desire to create beauty. Salespeople respond to the thrill of the hunt and the challenge of making their quotas. Whatever the particular incentives, companies can take steps to help employees realize their goals. To ensure that its salespeople could

Richard Florida (florida@gmu.edu) is the Hirst Professor of Public Policy at George Mason University in Arlington, Virginia, and the author of *The Flight of the Creative Class* (HarperBusiness, 2005). **Jim Goodnight** (jim.goodnight@sas.com) is the CEO of SAS Institute in Cary, North Carolina.

SAS recognizes that 95% of its assets drive out the front gate every evening. Leaders consider it their job to bring them back the next morning.

make their quotas, for example, SAS developed a product-knowledge management system and created the position of sales engineer. That person's job is to answer staff questions and solve technical problems, so the sales reps can spend more time chasing down leads and less time digging up product specs.

Since developers thrive on intellectual stimulation, SAS sends them to industry- and technology-specific conferences, where they can hone their programming skills and build relationships within the larger software community. SAS stages its own R&D expos, where SAS developers share their work with the nontechnical staff. The company also encourages employees to write white papers and collaborate on articles and books in order to showcase their knowledge. And SAS maintains a healthy training budget so individuals can keep up with cutting edge technologies. When employees return to the office, they are energized to apply what they've learned to their own projects.

Another way SAS keeps employees engaged is by frequently updating their tools. With the most advanced third-party productivity tools on the market, it's hard to get bored. Homegrown defect-tracking tools and source-control tools are continually refined, as well, and help workers do their jobs efficiently. In all cases, form follows function. As much as leaders at SAS value technology, they strongly believe that it's people who make technology useful, not the other way around. If a tool is constrictive or makes people change their preferred ways of working, then it gets scrapped. The goal is always the same—to help workers be great.

That holds true for all types of positions. Everyone working on the SAS campus is an employee; the company doesn't outsource any job functions. Whether you're a chef or a programmer, a groundskeeper or a director, you are a full member of the SAS community, and you receive the same benefits package. SAS recognizes that 95% of its assets drive out the front gate every evening. Leaders consider it their job to bring them back the next morning.

Minimize hassles. In the creative economy, time is precious. And as much as creative people like to feel challenged, they don't want to have to surmount unnecessary obstacles. The former situation inspires greatness; the latter, migraines—hardly an ideal condition for creative thought. So SAS takes great pains to eliminate hassles for workers wherever and whenever it can, both off and on the job.

People who are preoccupied wondering "When can I fit in time at the gym?" or "Is that meeting going to waste my whole afternoon?" can't be entirely focused on the job at hand. The more distractions a company can remove, the more its employees can maximize their creative potential and, in turn, produce great work. *The Oprah Winfrey Show, 60 Minutes,* and lots of newspaper and magazine articles have publicized the perks SAS lavishes on its employees, but the company isn't just doling out treats willy-nilly. There's a deliberate process for choosing which benefits to offer (or, put another way, which distractions to eliminate). First, by conducting annual surveys and fielding employees' suggestions, HR finds out what people need. Next, it determines whether SAS can reasonably meet each need, asking, "Will we get enough of a return in terms of employee time saved to merit the investment?" If the answer is yes, SAS provides the benefit. If it's no, the company explains why. Even when SAS says no, it earns workers' trust and respect by engaging in a dialogue rather than issuing a seemingly arbitrary decision.

SAS has said yes to quite a lot. On campus, it has medical facilities for employees and dependents. Additionally, there's a Montessori day care center, and children are welcome in the company cafeteria, so families can eat lunch together. There are also basketball courts, a swimming pool, and an exercise room on-site, all of which make it easier for employees to fit a workout into their day. The company's Work-Life Department provides educational, networking, and referral services to help employees choose the right colleges for their teenagers, say, or find the best home health aides for their parents. Massages, dry cleaning, haircuts, and auto detailing are offered on-site and at reduced costs. (But SAS doesn't have, for instance, a doggie day care center because the numbers didn't add up.)

Obviously, the perks cost the company something, but think about the net gain. Not only do the benefits make workers more productive, but they also help retain those workers, reducing the company's expenses for recruitment and replacement. SAS saves about $85 million a year in such costs, according to Stanford University's Jeffrey Pfeffer, a leading

Creativity can't be shoehorned between the hours of nine and five. The Muses don't always show up on time for appointments.

scholar of talent-based organizations. It takes roughly six months to get a new worker up to speed in terms of technical knowledge, but it takes years for the employee to truly absorb a company's culture and forge solid relationships. By retaining workers, SAS protects and continues to enrich long-standing relationships among sales and support staff, developers, and customers—and it is in these relationships that creative capital resides.

Of course, there are other, less tangible advantages. Having health care on-site, for instance, reduces the amount of time employees are away from work for doctor visits. And medical conditions are generally caught earlier—because if it's not a hassle to set up an appointment and there's no need to travel across town, most people will see a doctor in the earlier stages of illness. As a result, employee productivity is bolstered, and less time is lost for medical reasons.

Likewise, subsidizing two-thirds of the cost of day care is an investment for SAS, not an unnecessary expense. It helps parents afford to come back to work, which means both the company and the employees win. SAS acknowledges and respects that employees have lives outside the office. The corporate philosophy is, if your fifth grader is in his first school play, you should be there to see it. SAS has earned a spot on *Working Mother*'s list of best companies so many times that professionals are lining up to apply.

SAS takes equal care to reduce administrative and other on-the-job hassles for its employees. At SAS, you won't find two-hour weekly staff meetings slotted into everyone's day planner. People meet when demands warrant it, not because "it's time." The CEO has been known to stand up and leave the room when a meeting becomes unproductive. The informal culture fosters impromptu discussions, and one of managers' responsibilities is to make sure the people who need to be sharing information are talking to one another.

It's not just useless meetings that SAS is out to eliminate—it's also outdated beliefs about proper ways of working. Take the standard workday. Creativity is a fickle thing. It often can't be shoehorned between the hours of nine and five; the Muses don't always show up on time for appointments. It's more important to capture the innovative insight—whenever it strikes—than to keep rigid work hours. To support the creative process and meet the demands of family life, flexible workday guidelines encourage people to start each day at whatever time is best for them. Some SAS jobs do require set schedules. Landscapers, for instance, arrive at 6 am to get the bulk of their work done before the sun gets too hot. But in general, flexibility is appropriate, and it yields more output from workers, not less.

Although the press has played up the company's 35-hour workweek, the truth is, employees often put in extra time to complete a project or fulfill a responsibility. But make no mistake: This is a far cry from some Silicon Valley start-up. The company actively discourages people from working 70-hour weeks. "After eight hours, you're probably just adding bugs" is a company proverb, repeated often enough by the CEO and others that managers take it seriously. SAS encourages employees to disconnect from work for a time and then come back recharged. Creative people can be trusted to manage their own workloads; their inner drive to achieve, not to mention accountability among colleagues, compels a high level of productivity.

We're All Creatives

Few companies place as high a value on an egalitarian work culture as SAS does. There's no artificial dichotomy between suits and creatives because everyone there is a creative. The fact that the CEO still writes code is well known, but all of SAS's managers do hands-on work. Gale Adcock, the director of SAS's on-site health care center, for instance, is a nurse practitioner who sees her own patients one afternoon a week. The willingness—even eagerness—of managers to roll up their sleeves and delve into the "real" work of the organization sends an important message: We are all on the same team, striving toward the same goal of providing a superior product.

The importance of that point cannot be overstated. Knowing that your boss thoroughly understands and respects the work you do—because he or she has actually done it—has many positive outcomes. In addition to feeling that your contributions are appreciated, you'll probably be less hesitant to ask questions, because you know your manager "gets it," and you'll have more faith in your boss's decisions. Business life abounds with stories about managers who've failed to earn the respect of professional, technical, and other creative employees: the university president with no scholarly credentials, the law school administrator who's not a member of the bar, the movie studio executive who provokes a rebellion among directors, actors, and other talent.

Because colleagues at SAS earn one another's respect by producing excellent work, not by having a position near the top of the org chart, people aren't overly concerned with titles. Consequently, it's not in keeping with the corporate culture to withhold constructive criticism of higher-ups or hide problems from them; doing so would just result in an inferior product. In fact, most of SAS's leaders have an open-door policy. People are free to pop in to talk over an issue or pitch a new product idea. And the CEO might stop by your office to ask you questions about the project you're working on.

As egalitarian as they may be, creative companies must find the right role for their managers. At SAS, that role is to spark the creativity of the people around them. Managers do that, first, by asking lots of questions. As Carl LaChapelle, director of the Display Products Division, explains, "If you tell everyone, 'Here is how to do it,' then all you are really measuring is their typing skills."

The managers also bring groups of people together to facilitate the exchange of ideas and to spur innovation. For example, a number of years ago, the CEO believed so strongly in the importance of creating Enterprise Guide—a Windows-based forecasting application for business analysts—that he moved developers from various units down to the basement of one building so they could collaborate on the project full-time. To help shepherd it along, the CEO kept a satellite office in this Skunk Works area. Having him there not only motivated the team but also broadcast the company's commitment to the effort.

Finally, the managers clear away obstacles for employees by procuring whatever materials they need. Larnell Lennon, who leads the software-testing team, describes his job as "Go get it, go get it, go get it." When his people come to him asking for a software package or financial support, he doesn't pepper them with questions. If it's a reasonable request, he takes care of it. He knows he doesn't have time for anything less than complete trust in his employees, and vice versa. If the outcomes aren't up to snuff, that's a different matter. But in his seven years in the position, he says, he hasn't been given one reason to mistrust his people.

That's not to say that SAS never has difficulties with employees. With its enticing array of benefits, SAS is bound to attract a few people who would rather enjoy the perks than do the work. The company uses rigorous hiring practices to prevent such candidates from getting in the door; applicants may have to wait months for a decision while the company conducts a thorough vetting.

Once they make the cut, they enter a highly collaborative work culture. And since peers as well as managers are technically savvy, it becomes clear pretty quickly when someone isn't performing up to expectations. That person is given a corrective action plan and can either try to improve his or her behavior in the next three months or leave immediately with a parting compensation package. Either way, the process serves both the company and the employee well. Some have described SAS's philosophy as "Hire hard, manage soft." But "Hire hard, manage open, fire hard" is more apt. SAS, in other words, takes a relaxed approach toward controls; but the culture is allergic to couch potatoes.

There's absolutely no penalty for making honest mistakes in the pursuit of better products, though. Experimentation is crucial for breakthroughs, and some paths are bound to be dead ends. In fact, senior research and development director Deva Kumar gets upset only when people *don't* do something, because stasis can't lead to new insights. A few years back, SAS announced a new video game division, and managers let developers migrate there. When the department ended up failing, the developers were welcomed back where they came from. Even though the initiative didn't succeed, it taught management some valuable lessons and reminded employees that their company supported them, earning their loyalty.

Keep the Customer Satisfied

So far, we've shown how SAS keeps workers stimulated and provides perks that make employees at most other companies green with envy. We've described a management system that builds collegiality and trust. In the business world, though, it all boils down to deliverables. There are plenty of companies whose

It's important to make sure people throughout the organization hear customers' voices loud, clear, and unfiltered—so they're as unambiguous as a stock quote.

supposedly enlightened, "new age" management policies led them straight to financial ruin—and where new management came in and imposed neo-Taylorist controls in an attempt to undo the damage. Ultimately, if you don't build a product that people want (or, better yet, need), you won't be around for long. Engaging customers—the final piece of the management framework—is what keeps SAS from turning into a country club for talented techies.

Every company needs a constituency that holds its feet to the fire. For publicly held companies, it's Wall Street. Sure, they have customers, too, but Wall Street is so quick and ruthless that, in practice, it's hard to do the right thing by customers if the Street wants something else. SAS needs discipline as much as any company, but being private, it gets that from customers. That has big advantages, the greatest of which is this: While the stock price just tells you thumbs-up or thumbs-down, a customer tells you why, and how to get better, and will work with you to improve. But because the message from customers is more nuanced, it can also be more ambiguous. It's important, therefore, for management to make sure people throughout the organization hear customers' voices loud, clear, and unfiltered—so they're as unambiguous as a stock quote.

Day in and day out, SAS gathers—and acts on—customer complaints and suggestions through its Web site and over the phone. The company also solicits feedback once a year through its Web-based SASware Ballot, which asks users about additional features they would like. SAS prioritizes complaints and comments and routes them to the appropriate experts. Problems and suggestions are tracked in a database. When it's time to develop the next version of software, SAS resolves all recorded glitches and incorporates as many suggestions as feasible. For most of the company's 29 years, it has implemented the top ten customer requests. It has taken action on approximately 80% of all requests fielded.

Additionally, SAS collects feedback at an annual users' conference, which is quite unlike the usual sales-pitch-in-disguise event. Jeffrey Pfeffer described it as more like a Grateful Dead show than a standard software-industry hole-mending session. What it is, really, is a hotbed of creative energy. It's a forum for two groups of mutually respectful stakeholders to challenge each other to improve and innovate.

Imagine for a moment the vast creative potential of millions of users—highly intelligent professionals hailing from diverse disciplines and 110 countries. (SAS provides software to 96 of the top 100 companies on the *Fortune* Global 500, and to 90% of all 500.) This is the biggest and best focus group that loyalty can buy. Since these customers have access to all the latest software on the market, they're in a unique position to think comparatively about what the product they need should do, as well as what it shouldn't do. According to SAS's marketing creative director, Steve Benfield, it's difficult to develop software "when you don't have some external validation of one particular set of ideas over another…. But finding out what resonates with those beyond the office walls—that's gold!"

Creative capital is generated every time SAS's employees and customers interact. Consultants and technical support staff don't just troubleshoot; they collaborate with users to invent new solutions. Salespeople don't just sell software; they build long-term relationships and, in the process, learn surprising things about their clients' needs. SAS might be the only company that prints the names of its software developers in product manuals. Customers can—and do—call them up. And because employee loyalty is so high, the developers actually answer the phone: They haven't moved down the road to start-up number seven.

In large part, SAS can thank its subscription-plan business model for these regular interactions between employees and customers, and for its relatively stable revenue flows in a volatile industry. Customer loyalty is so high that the company saves money on advertising and other sales efforts. As a result, fully 26% of SAS's budget gets channeled directly into research and development. The average for high-tech companies is 10%. A well-funded R&D department leads to better products, which leads to happier customers, which leads to—you can see where this is going.

Another factor in customer allegiance is SAS's devotion to creating bug-free products. Users of most software products have been conditioned to accept glitches as inevitable in new releases; imagine their surprise (and gratitude) when that isn't the case. Twenty years ago, a particularly costly coding mistake was made at SAS. The product was sent to market, and fixing the error proved to be enormously expensive for customers and technical support staff alike. Lesson learned. These days, SAS performs some of the most robust premarket testing in the business. Testing teams run through a product from a developer's standpoint, a salesperson's standpoint, and a customer's standpoint. If the product isn't painless to evolve, sell, and use right away, SAS goes back to the drawing board.

SAS doesn't waste time and money patching up what it could have gotten right from the start. An ounce of prevention is worth a pound of, well, tech support. That doesn't mean support people aren't needed. But those creative professionals should be spending most of their time working with users to find ways to make the products and relationships better, not untangling messes that could have been avoided. By all accounts, that's exactly what happens. The average wait time on the tech support line is 34 seconds. And more than three-quarters of customer issues are solved within 24 hours. These are motivated employees providing first-rate solutions to very happy customers.

• • •

The creative economy is here to stay, and companies that figure out how to manage for creativity will have a crucial advantage in the ever-increasing competition for global talent. We believe that executives can look to SAS's management principles for guidance in boosting innovation, productivity, and business performance. If you leverage the intrinsic motivation of creative workers by stimulating their minds and minimizing hassles; if you raze barriers between managers and workers by ensuring that your managers are creatives, too; if you tap into the creative talents of your customers instead of looking just to your workers for new ideas; and if you nurture long-term relationships with users and employees alike, you will increase your creative capital manifold.

There's a virtuous cycle in play at SAS. How quickly other corporations can readjust the way they manage their own creative workers will determine how gracefully we are all able to transition into the creative age.

Reprint R0507L
To order, see the next page
or call 800-988-0886 or 617-783-7500
or go to www.hbrreprints.org

Further Reading

ARTICLE
America's Looming Creativity Crisis
by Richard Florida
Harvard Business Review
October 2004
Product no. R0410H

The need to grow creative capital is not simply a competitive issue for individual companies. It's an economic challenge for the United States as a whole. This earlier article by Florida details the loss of creative capital in the United States and explains how business can intervene. As the United States tightens its borders to students and scientists—and subjects federal research funding to ideological and religious litmus tests—other nations are stepping in to lure that creative capital away. Ireland, Canada, Australia, New Zealand, Denmark, and others are spending more on R&D and shoring up their universities in an effort to attract the world's best—including Americans. If even a few of those nations draw away just a small percentage of the creative workers from the United States, the negative effect on its economy will be enormous.

To defend the U.S. economy, the business community must take the lead in ensuring that global talent can move efficiently across borders into the United States, that education and research are funded at radically higher levels, and that we tap into the creative potential of more and more workers. The reason? Wherever creativity goes, economic growth follows.

Harvard Business Review
www.hbrreprints.org

Who's Bringing You Hot Ideas (and How Are You Responding)?

by Thomas H. Davenport, Laurence Prusak, and H. James Wilson

Included with this full-text *Harvard Business Review* article:

Reprint R0302D

Who's Bringing You Hot Ideas (and How Are You Responding)?

The Idea in Brief

Your company's product innovations quickly lose their competitive value, as rivals copy them. So how will you keep your firm at the head of the pack? Nurture those unsung heroes in your organization who generate **management innovations**.

Scattered throughout your organization, these **idea practitioners** foster fresh notions for enhancing your company's business practices—whether it's managing knowledge, improving quality, redesigning processes, or leveraging technologies. Perhaps someone in manufacturing has devised a unique idea for streamlining operations, while someone in marketing may be advocating new approaches to customer management.

Idea practitioners not only envision new realities, they use savvy change-leadership tactics to embed them in your organization's practices. Results? Your company differentiates itself from competitors, workers strive to excel, and business performance soars.

How to ensure that your idea practitioners dedicate themselves to *your* company—rather than taking their hot management notions to rival firms? Let them know you've taken note of their existence. Give them freedom to pursue innovative ideas. Reward them with attention. And publicly back their ideas.

The Idea in Practice

STRATEGIES FOR CULTIVATING IDEA PRACTIONERS

Recognize them
To spot idea practitioners in your company, look for these distinctive behaviors:

- **Scouting** for ideas in management literature and at business conferences—even looking outside business for new problem-solving approaches.
- **Packaging** ideas by framing them in terms of key themes—innovation, efficiency, effectiveness—that decision makers value.
- **Selling** ideas to senior executives, the rank and file, and middle managers.
- **Implementing** ideas; for example, by participating in early, small-scale experiments.

Idea practitioners also display specific personality traits: **optimism**, a **passion for ideas** in general, and **self-confidence**.

Carve out roles for them
Consider creating formal units dedicated to exploring new business ideas. Also carve out roles that leverage idea practitioners' strengths. Ensure that they end up in a good position after an idea has run its course or becomes embedded in your organization. If idea practitioners don't prosper from championing ideas, others won't see the value in pushing ideas.

Give them license to pursue ideas
Set them loose within the limits of explicitly stated corporate values. You'll help them feel more comfortable taking risks within clear boundaries.

Reward them
Idea practitioners are motivated primarily by intellectual stimulation and seeing ideas transformed into action. Reward them by hearing them out, visibly supporting their ideas, and publicly acknowledging their achievements. Motorola, for example, annually announces new recipients of its Dan Noble Fellow Award and recognizes a broader group of valued technologists by naming them to its Science Advisory Board.

Back their ideas
The single greatest factor determining whether ideas catch on in a company is the perception of CEO backing. Signal your support for a hot idea through organizationwide memos and management-team meetings where participants discuss how they're using the idea.

Create an idea-friendly culture
To ensure that good ideas flourish, communicate the importance of embracing new ideas to risk-averse managers in your organization. Also encourage tolerance for the inevitable failures that come with exploration of new ideas.

Who's Bringing You Hot Ideas (and How Are You Responding)?

by Thomas H. Davenport, Laurence Prusak, and H. James Wilson

There's an unsung hero in your organization. It's the person who's bringing in new ideas about how to manage better. Mind you, we're not talking about product and service innovations. The people who cook those up—and they are heroes of the organization, too—are celebrated loudly and often. We're talking about the person who, for instance, first uttered the phrase "intellectual capital" in your hallways, believing that better management of knowledge assets could yield a competitive advantage. Or perhaps it was the notion of "real options" as an antidote to overly risk-averse capital investment analysis. Or, depending on how long the person has been around, maybe it was even "total quality management."

Exactly who are these people in your particular organization? You probably already know. It's the middle manager you called when you decided to include something about process redesign or balanced-scorecard management in your letter for the annual report. It's the smart executive who advised you on which consulting firm to employ for help with e-commerce and who seemed to know all about each one's strengths and weaknesses. It's the first person who comes to mind when you need a strategic thinker to do a special project. Come to think of it, it's that manager who just sent you a conference binder on a topic you've expressed some interest in.

As much as you might wish you did, you don't have many such people. And they're more important than ever because fresh ideas about management are more critical than ever to enhancing business performance, to motivating workers, and to revitalizing your organization. Product innovations are copied quickly and easily today, leaving managerial innovation as an important way for companies to differentiate themselves. So shouldn't you be doing more to manage your idea people to get the benefit of this peculiar talent of theirs—or at least to keep them from leaving?

A New Type of Practitioner

For the past couple of years, and less formally for our entire working careers, we've been studying the people who bring management ideas into organizations. As management researchers and authors, we’ve always worked with such people as “customers” and long ago had to admit that any impact we had on actual management practice was owing to their translation and implementation efforts. Rather belatedly, we’ve come to recognize them as a distinct type of practitioner. That is to say, they share a common way of working and resemble their counterparts in other organizations more than they resemble their own colleagues. We tested this notion by identifying and interviewing 100 of them in various organizations, industries, and locales. The group was diverse—it included, for example, a chief financial officer of a global manufacturer, a chief learning officer of an investment bank, and a chief operating officer of a large U.S. government agency. But sure enough, we found a surprising degree of commonality in how these “idea practitioners” go about their work.

The similarities begin with how they scout for ideas. All of them, not surprisingly, are avid readers of management literature and enthusiastic participants in business conferences, and many are friendly with business gurus. They approach all their sources with open minds; they’re neither cynical nor overly credulous. The philosopher William James once wrote, “The art of being wise is the art of knowing what to overlook,” and this is a discerning group. They are extraordinarily attuned to the zeitgeist—the often opaque economic, social, or technological environment that can determine whether an idea will thrive or quickly perish. In our interviews, too, we discovered that idea practitioners tend to value an interdisciplinary perspective, looking to fields outside business for new approaches to solving problems. When we interviewed Lawrence Baxter two years ago at Wachovia Bank, for example, he was reading a book on superstring theory in physics. He, like others we interviewed, believes a singular focus on management theory is “very limiting.”

Scouting for ideas is only the first phase of a four-part process by which these practitioners infuse their organizations with new ideas. The next phase is packaging an idea with promise for broader organizational consumption. Idea practitioners add to, subtract from, or otherwise translate the ideas they want to introduce, tailoring them to fit their organizations’ specific needs. Often this is a question of, as one of our interviewees put it, “building a logic between the idea and the firm.” The most successful idea practitioners are able to gear ideas to the issues executives care about and express them in terms of the key themes—such as innovation, efficiency, or effectiveness—that executives stress in their rhetoric. At Whirlpool, for example, the senior management passionately believes in and communicates the idea that innovation is the key to the company’s future success. When Antonella Padova, an idea practitioner, wanted to bring knowledge management to Whirlpool, she realized she would need to tie the concept to innovation—as opposed to, say, cost efficiency. She personally believed knowledge management would prove valuable in many ways, but to ensure that the idea got traction, she hitched it to a train already leaving the station.

No business idea takes root within an organization purely on its own merits. Instead it has to be sold—to senior executives, to the rank and file, to middle managers. In this third phase, idea practitioners advocate for new ideas: They build marketing campaigns, find early adopters, and work to persuade other leaders and managers to “put some skin in the game.” One way they do this is by illustrating the competitive pressure to change. Dave Barrow of British Petroleum told us, “What is universally helpful in gaining executive support is benchmarking data.” Another made the same point, calling it “show and tell.” He told us, “I like to call it benchmarking, but basically you’re finding users who are using or doing whatever it is you want to show and putting them on the stage.”

Finally, all good idea practitioners have some hand in the fourth phase: making it happen. Most are well versed in the principles of change management and understand the importance of rolling out a new idea simultaneously from the top down and the bottom up. As one manager told us, “I try to work both sides toward the middle in terms of ideas, but this means you must participate in a dance.” They realize that their advocacy must reach from the boardroom to the grassroots level of the organization—and sometimes beyond. One idea practitioner who works with franchisees told us that at her organization new ideas often must rest on a “three-legged stool.” The

Thomas H. Davenport is the director of Accenture’s Institute for Strategic Change in Cambridge, Massachusetts, and a management professor at Babson College in Wellesley, Massachusetts. **Laurence Prusak** is a senior adviser to McKinsey & Company, based in Boston. **H. James Wilson** is a researcher and writer at Accenture’s Institute for Strategic Change. They are the authors of the forthcoming book *What’s the Big Idea? Creating and Capitalizing on the Best Management Thinking* (Harvard Business School Press).

company's employees, owner-operators, and suppliers all have to buy in to a different way of working. Idea practitioners also know when their work is done. They are usually involved in early, small-scale experiments, but when those take off, they get out of the way and let others execute.

People who do these four things—scouting, packaging, advocating, and implementing ideas—are properly called practitioners because, by sharing practices and a common body of knowledge, they learn from one another how to better advance what they do. Indeed, one of the surprising findings in our study was how many of these people are repeat offenders. Dave Barrow at BP, for example, has worked on a variety of special projects involving government relations, network computing, crisis management, capital productivity improvement, and human resource processes in engineering. Mike Burtha, an idea practitioner at Johnson & Johnson, has helped introduce new concepts in process improvement, quality management, and knowledge management. Each has been able to apply lessons learned in successfully championing one idea to those that follow.

A Certain Kind of Person

Idea practitioners don't share only their processes; they also share personality traits. Optimism is one quality we observed in nearly all our interviewees. That's notable because it's quite easy to be cynical about the business-idea business. Many executives are quick to dismiss the endless stream of new practices and approaches as fads or as opportunism and media hype gone mad. But where cynics see only consultants hungry for billable hours or academics jockeying for tenure and speech deals, idea practitioners see the true potential of new business ideas. They see the possibility of a better way and hold out a belief that people and organizations can change.

Idea practitioners are also devoted to ideas in general. Most of the people we interviewed are well educated, often with liberal arts backgrounds, and are clearly not lacking in basic brainpower. One entered Harvard at 14, for example, and completed a PhD program at 20. They are well versed in the art and science of management, but most also subscribe to a variety of nonbusiness, idea-focused publications. They are intellectually restless and passionate about ideas for their own sake. At the same time, they don't come across as fanatical, or as fadmongers. Most seem quite mild-mannered at first blush. In fact, several attributed their success partly to their reasonableness: "Cultivating a moderate image is important," one noted. "Lecturers and zealots always fail." Some said they try to ensure that an idea, and

Do Ideas Make a Difference?

In its heyday, Westinghouse was an innovative giant—at least in terms of its products and services. The company brought to market the electric power plant, air brakes, the shock absorber, nuclear power, commercial radio, radar, frost-free refrigerators, and many other less dramatic innovations. Yet despite its vibrant product history, Westinghouse is effectively dead as a company, its businesses dismantled and sold off. Its decline came as no surprise, because its financial performance had languished for many years.

As an interesting comparison, General Electric, Westinghouse's competitor since the late nineteenth century, is currently one of the world's most valuable corporations. Over the past two decades, the company has delivered more than 20% growth to shareholders each year. Like Westinghouse, GE became a diverse conglomerate, and several of its businesses overlapped with Westinghouse's: broadcasting, power generation, industrial equipment, financing, and so on. Why did GE rise to the top of the industrial heap, while its onetime powerful rival sank into the graveyard? Many factors were at work, but surely one is their different approaches to business improvement. Westinghouse had innovative products, but the only business notions it pursued involved financial analysis, acquisition and (more often) divestiture, and a late-in-the-game approach to quality. GE under Jack Welch in the 1980s and 1990s trumpeted the business innovations of "Work Out," "boundarylessness," "speed, simplicity, and self-confidence," "Six Sigma," and "digitization," among other ideas. Welch's letter in GE's annual report became a reliable place to find the management ideas that would reshape the business landscape over the subsequent months and years.

GE's world-class idea practitioners, including Noel Tichy and Steve Kerr, would not only stir up corporate initiatives but also help embed them into the company's "operating system," or way of managing itself. Key initiatives continue to be discussed and monitored at year-round meetings in which senior executives and idea practitioners from GE and outside companies gather to discuss the best new ideas in management. And once GE embraces an idea, management sticks with it and doesn't treat it as a fad. Globalization has been through more than a dozen annual cycles. Six Sigma has gone through five; services orientation, six; and e-business, three.

No business idea takes root purely on its own merits; it has to be sold.

its success in the enterprise, doesn't get tangled up in their own personalities. Hubert Saint-Onge, who shepherded various ideas at Canadian insurer Clarica, argues that idea practitioners should "allow organizations to reach their own conclusions" and that they should "become invisible" to the process as individuals.

Idea practitioners must be self-confident because putting new business ideas in place is difficult and often politically charged. Every organization is full of senior managers who are happy with the status quo and who don't want threatening new ideas coming in from left field. At the same time, the manager who lives to fuel his own ego is destined to fail as an idea practitioner. We have known of several people (though they're not included in our sample) who would appear frequently at conferences to discuss their organizations' efforts at reengineering, customer relationship management, and so forth. Some even wrote an article or two. But when we'd visit their companies and ask about these individuals, we'd get dirty looks and muttered curses in reply. Or we'd ask, "What's going on with your 'knowledge superhighway' project or your 'customer relationship reengineering,'" and we'd get blank looks. Such people are great at publicizing their own work, but not as good at bringing others on board.

Finally, idea practitioners tend to be boundary spanners. They have the personal networks within their organizations to know whom to enlist in their efforts. These networks often give them a nearly direct line to the CEO. World Bank employee Steve Denning, for example, formed a collegial relationship with a VP who worked closely with CEO Jim Wolfensohn. This helped Denning vault knowledge management to the top of that organization's agenda. Because of their networks, idea practitioners don't have to resort to door openers like "I'm from corporate, and I'm here with a better idea."

Outside their organizations, these people are likely to show up on conference agendas, as members of communities of practice, and as sponsors of multicompany research programs. Gene Meieran at Intel, for example, is the senior sponsor for the company's relationships with MIT. He works both with the business and engineering schools there and with special programs such as the Media Lab and Leaders for Manufacturing, a joint business and engineering program. At one point, Meieran even became the director of research for the program with a faculty designation. He's on advisory boards at Purdue and the University of New Mexico, and he also "hangs out" at Berkeley, Stanford, and Michigan.

Care and Feeding of an Idea Practitioner

It's far from clear how many idea practitioners a given organization needs. But it's safe to say that every company should have at least a few—and that the better these people perform in that role, the more competitive the organization will be. In our study, we looked at how some companies enable and others hobble their idea practitioners. We asked our interviewees what makes their life difficult, what motivates them, why they left some companies, and why they've stayed at others. Based on our research, we have seven pieces of advice to offer.

Recognize their existence. It's your obligation to determine just who is playing this role in your organization. It might take some digging; they're likely to be scattered around the place. There may be someone in manufacturing who's spotting operations-oriented ideas, while someone else in marketing may be on the lookout for new approaches to innovation and customer management. Your strategic-planning function ought to be good for at least one strategy maven. Find out who your idea practitioners are, and then let them know you've taken note.

Carve out roles for them. Some organizations have begun to create formal units to deal with new business ideas. Ericsson, for example, has a group dedicated to importing and implementing approaches to business improvement. This structure recognizes that some people are better at propelling new ideas along than others, and they should be freed from other duties to do so.

Still, almost all of the idea practitioners we know have other jobs and play their idea roles somewhat on the margin. They are most often found in staff functions like strategy, IT, or HR, which may not be ideal—at least not initially—given the difficulty of making change happen from corporate. We have seen companies establish high-ranking corporate offices for idea practitioners—Hubert Saint-Onge's role as senior VP of strategic capabilities at

Clarica is an example. But that approach seems to be wisely reserved for those individuals who have already earned the respect of the organization. We suspect that the best approach would be to identify a capable idea practitioner and carve out a role to leverage his or her strengths, rather than to establish a formal idea-oriented role and then look for candidates to fill it.

However you structure the role, as leader, you must ensure that the idea practitioner ends up in a good position after the idea has run its course or becomes embedded within the organization. If idea practitioners don't prosper from championing ideas, then people in the organization won't see the value in pushing ideas. At General Electric, for example, senior managers try to ensure that the business unit leaders of idea initiatives emerge with good jobs. Gerry Podesta, who led the e-business initiative at GE Plastics, for example, was promoted to head of GE Plastics for the Americas after e-business was embedded within other business functions.

Give them license. Idea practitioners need freedom to pursue ideas. But this doesn't mean they should be given carte blanche by top management from day one. One of our interviewees noted: "New people come into the company—maybe right out of business school—and they think it would be really cool to go to conferences and work with external gurus. But it doesn't work that way. You have to earn your stripes as someone who can…actually do something with the idea when it comes inside."

The best way to set idea practitioners loose is within the bounds of explicitly stated values and leadership-driven initiatives. At Johnson & Johnson, for example, the values of the organization are clearly articulated in the company's famous credo. Mike Burtha feels that the credo gives him a framework for exploring new business ideas and makes him more comfortable taking risks. "For me, it provides a relevant foundation for my idea generation process," he says. "As long as I'm staying in that framework of values, I know I'll be okay."

Reward them…carefully. Idea practitioners, like everyone, need reward and recognition. But throwing too much money and power at them might be counterproductive—if only because such rewards will attract wannabes, who lack the intrinsic motivation integral to the role. Idea practitioners are primarily motivated not by money or power but by intellectual stimulation and the excitement of seeing ideas transformed into action. Some we talked to, in fact, felt they could have been more successful in traditional terms had they been less passionate about ideas.

Whatever you do with regard to cash and perks, don't fail to reward idea practitioners with attention. Your willingness to hear them out, and to visibly get behind an idea, is a powerful motivator—and your disregard counts as a penalty. Your public acknowledgment of their roles in bringing important ideas to the organization may be the highest reward you can give. It may even make sense to adopt a practice commonly employed by technology and engineering companies, which live or die on the strength of their innovation: granting the status of "Fellow" to innovators who continually make important contributions to the business. Motorola, for instance, annually announces new recipients of its Dan Noble Fellow Award and also recognizes a broader group, consisting of about 1% of its technologists, called its Science Advisory Board. Gene Meieran, the idea practitioner we mentioned earlier, is an Intel Fellow—that company's most senior technical role. All Intel Fellows—49 of them thus far—have been technical visionaries, but Meieran is also a managerial innovator. Together with CEO Craig Barrett, he introduced a quality and reliability initiative to the manufacturing organization. Meieran has championed the modeling of manufacturing processes and supply networks, remote data sensing, supplier maintenance, process control methodology, the role of the Internet in manufacturing, and knowledge management. Meieran admits that his designation as a Fellow has helped him start "brushfires" around a new idea. "Whether I'm right or wrong," he says, "my stuff at a minimum will get a fair hearing."

Get into the ideas. Again and again in our interviews, we heard that the single greatest factor determining whether an idea catches on in a company is the perception of CEO-level backing. A leader can signal support for an idea in any number of ways: by sending out an organizationwide memo; by calling a meeting of the management team at which each member discusses how his or her unit is addressing the idea; by introducing a guru associated with the idea at a management meeting;

An idea-friendly company encourages tolerance for the failures that come with experimentation.

even by keeping a copy of a thoughtful book about the idea on his or her credenza.

We've seen many other types of signals—some subtle, some not so subtle. If you're looking for real change, not-so-subtle is better. For example, when Jack Welch was championing e-business and digitization at GE, he declared that the opportunities and threats created by the Internet were "the biggest change I have seen at GE," and "number one, two, three, and four on my agenda." That advocacy, of course, sends a very powerful message. If any e-business leaders missed it, Welch left nothing to chance. Steve Kerr, formerly of GE and now chief learning officer at Goldman Sachs, told us: "In typical fashion, Jack began calling personally on the newly appointed e-business leaders to ensure there was sufficient urgency and boldness in their actions. At every encounter, he would ask them how much they were selling over the Internet, and what more they could be doing. 'It's a great job because Jack is into it,' said one. 'And it's a terrible job because Jack is into it.'"

Run occasional interference. An idea practitioner without the protection of an idea-oriented leader is unlikely to get very far. One practitioner described how important such support was in clearing obstacles: "We didn't have much of an organizational hierarchy. But I was given a mandate from the CEO—a very rare thing at the company—to pull off this particular idea. If anybody questioned it, I could say, 'Bob wants this to happen.' And that made all the difference."

That's not to say that a manager should be able to railroad an unpopular idea through the organization by liberally dropping your name. But that person should be able to come to you occasionally for help in overcoming unhealthy resistance. Another of our study participants put it this way: "Leaders need to provide high-level cover—like a Strategic Air Command. They have to clear a path for you to keep the idea protected, so that it can continue to spread. When you have high-level cover at the executive level, you can make sure that it works and it's going to last." Without protection from top managers, an idea can fall quickly by the wayside, with all the appearances of having been a fad. Even one experience like that, he explained, "can ruin an organization's capacity for ideas for a long time."

Create an idea-friendly culture. Finally, more than anything, it is the leader's responsibility to create an organizational culture that lets good ideas flourish. In many cases, CEOs are willing to embrace new ideas, but they are surrounded by what one of our interviewees called "centurion guards"—middle managers bent on resisting change at every turn. For idea practitioners, this state of affairs is tolerable, perhaps even expected. But idea practitioners are apt to divest themselves emotionally and intellectually—then inevitably move on—when a CEO or senior executive communicates an aversion for risk greater than that of the rank and file. Noting the paralyzing rhetoric of a former boss, one idea practitioner recalled, "He always said, 'Don't make us better; make us money!'"

Cultivating an idea-friendly organization is also about encouraging tolerance for the failures that come with experimentation. It's often been said that innovation requires the ability to fail, and innovation driven by business and management ideas is no exception. Some ideas will not work out, despite the best intentions and efforts. One might argue that the experiments undertaken with business and management ideas are, in some ways, more difficult and complex than those in any laboratory, yet no one expects that all laboratory experiments will succeed.

Your Real Movers and Shakers

Everyone knows the expression "movers and shakers," but few people realize it was coined by a poet, Arthur O'Shaughnessy, talking about the role poets play in the world. "We are the music-makers," he wrote, "And we are the dreamers of dreams…Yet we are the movers and shakers/ Of the world forever, it seems." Like O'Shaughnessy's poets, idea practitioners are the people who envision a new reality. Without them, new ideas would remain on the periphery of organizations and would never get embedded into practice.

Idea practitioners are a valuable resource for organizations that shouldn't be taken for granted—or they're likely to leave. In conducting this study, we found it was common for idea practitioners to have worked for several different organizations. Dave Clarke, for example, recently joined the not-for-profit world after working in the chemical and automotive industries, moving from WL Gore to General Motors to the American Red Cross. Maybe this is part of their value—like business honeybees, they pollinate new ideas across industries and companies.

But we suspect that their ability to add value grows with their tenure in a particular company, making it all the more important for senior executives to identify and champion them. The more seasoned practitioners have seen a lot of ideas in their time, and they have a good feeling for which ones will fit into the context of their own companies. "Since I know the kinds of ideas this company is receptive to and what it actually needs," says one practitioner, "I can strike the match that lights the fire of innovation."

Reprint R0302D
To order, see the next page
or call 800-988-0886 or 617-783-7500
or go to www.hbrreprints.org

Who's Bringing You Hot Ideas (and How Are You Responding)?

Further Reading

ARTICLES

Deep Smarts
by Dorothy Leonard and Walter Swap
Harvard Business Review
September 2004
Product no. 7731

Idea practitioners possess "deep smarts"—making intuitive decisions and spotting possibilities others miss. They see the big picture, rather than getting bogged down in details. To maximize their value, help them transfer their expertise to others throughout your organization—using these techniques: 1) **Guided practice:** Learners practice skills under the watchful eyes of idea practitioners, who provide feedback enabling them to refine their new capabilities. 2) **Guided observation:** Through job shadowing and field trips with idea practitioners, learners expand their experience by gaining exposure to novel ways of thinking and behaving. 3) **Guided problem solving:** Learners and idea practitioners work on problems jointly, enabling learners to master new approaches to problems. 4) **Guided experimentation:** Idea practitioners help learners establish modest experiments that speed learning—such as pilot studies testing a new technology with selected customer bases.

Deep Change: How Operational Innovation Can Transform Your Company
by Michael Hammer
Harvard Business Review
April 2004
Product no. 6573

Hammer affirms that business practice innovation has become critical to companies' ability to sustain a competitive edge. He provides guidelines for finding and implementing "inside innovations": 1) **Defy constraining assumptions about how work should be done.** A hospital, for instance, began responding to physician referrals more speedily when it challenged the assumption that beds had to be assigned *before* patients could be accepted. 2) **Make the special case the norm.** One packaged-goods maker, facing an unexpected spike in demand, created an ad hoc process to give real-time demand information to manufacturing. It then standardized this approach—delighting customers and shrinking costs. 3) **Rethink critical dimensions of work**—such as who does what. Shell Lubricants replaced a group of seven people who each handled different parts of fulfilling orders with one person who did it all—cutting cycle time by 75% and reducing operating expenses by 45%.