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FEATURE

## Managing for Creativity

**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.**

**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 salaries. 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 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

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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.

**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.**

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 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.

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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 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.

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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.

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