
THE NEXT SPACE ERA

How Health Care Can Heal Itself...page 78 When Executives Feel Phony...page 108

Harvard Business Review

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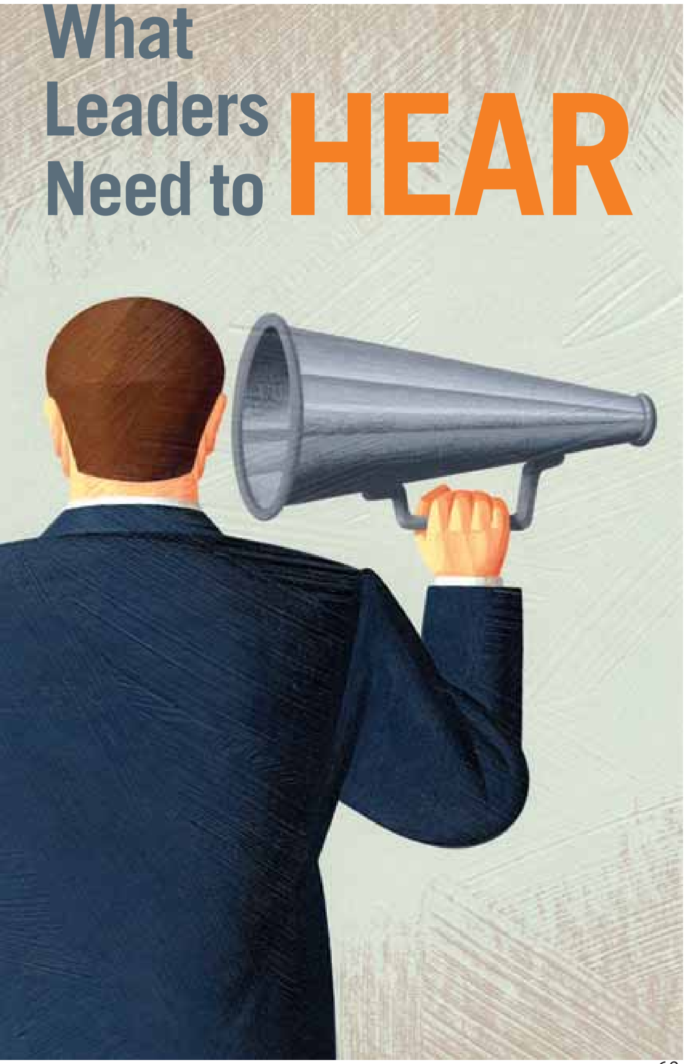
September 2005



...page 68

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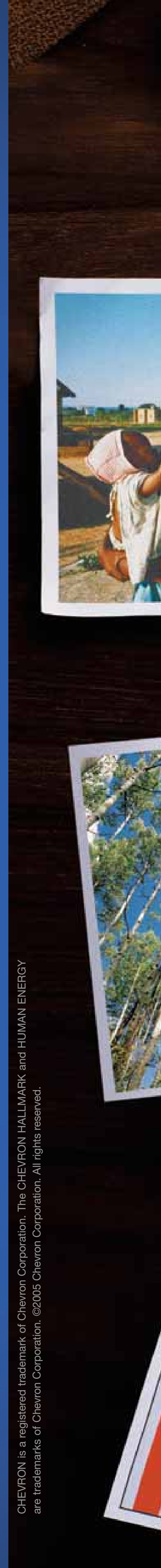

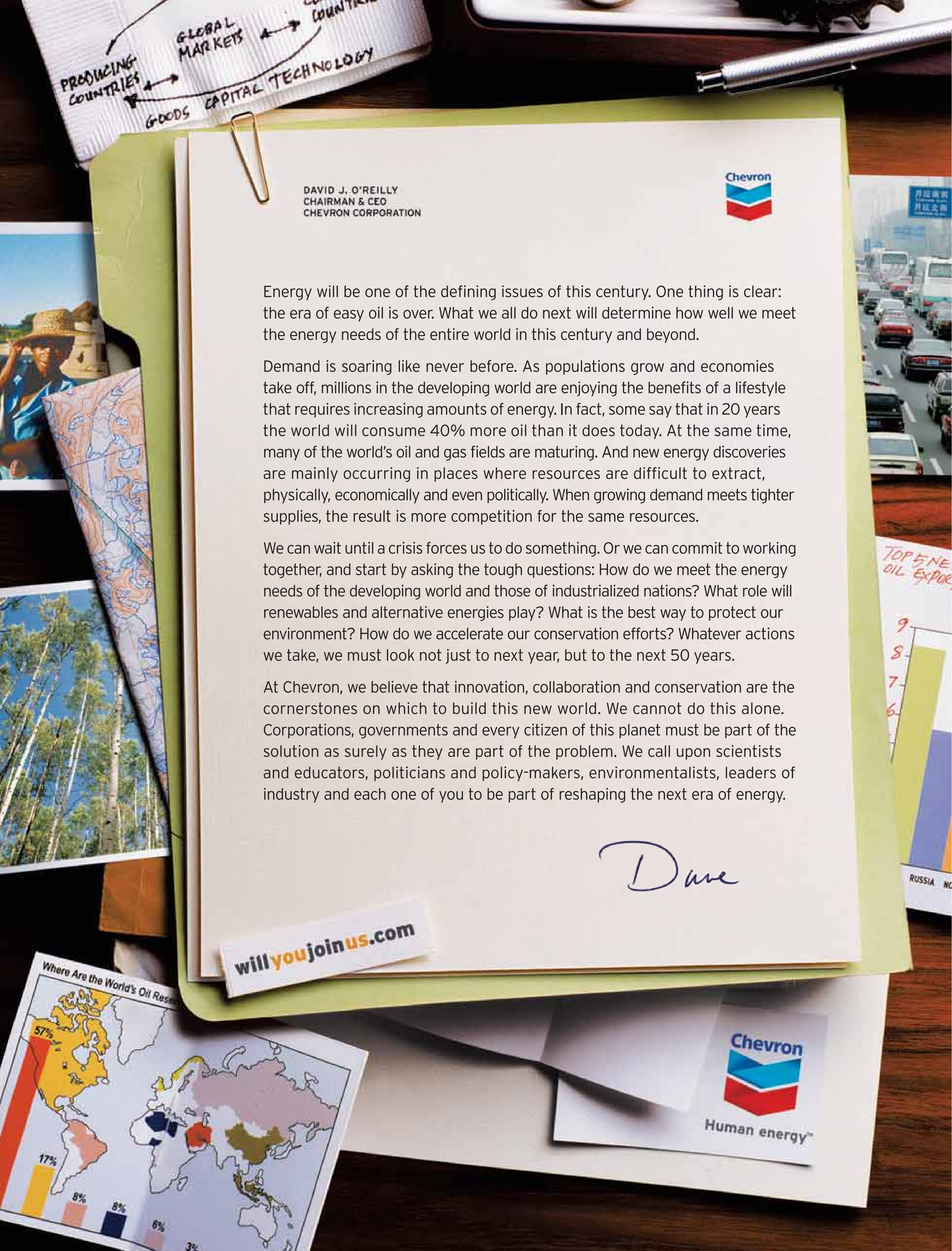

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Energy will be one of the defining issues of this century. One thing is clear: the era of easy oil is over. What we all do next will determine how well we meet the energy needs of the entire world in this century and beyond.
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We can wait until a crisis forces us to do something. Or we can commit to working together, and start by asking the tough questions: How do we meet the energy needs of the developing world and those of industrialized nations? What role will renewables and alternative energies play? What is the best way to protect our environment? How do we accelerate our conservation efforts? Whatever actions we take, we must look not just to next year, but to the next 50 years.
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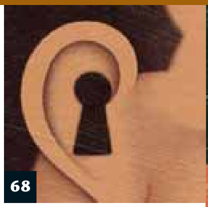

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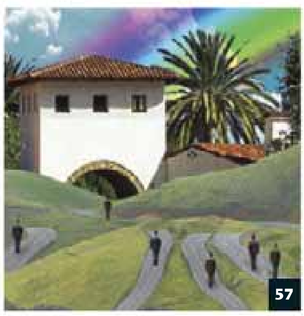

Facing Facts

David Nadler's "Confessions of a Trusted Counselor" is among the most knowing, revealing articles about leadership that we have published. The chief executive of Mercer Delta Consulting and the author of "Building Better Boards" (HBR May 2004), Nadler works directly with CEOs as their adviser. It is a role he has played for Jamie Houghton of Corning, David Kearns of Xerox, Stan O'Neal of Merrill Lynch, and Russ Lewis of the New York Times Company, among others.

It is no surprise that leaders need confidants. But to sit at the right hand of the chief executive of a large corporation is a job like no other, and not just because of its intimacy with power. Good advisers make leaders better. Bad ones can be catastrophic. (Harry Bennett's malignant relationship with Henry Ford nearly destroyed Ford Motor Company.)

Advisers' roles map to leaders' needs – and therefore are as revealing about leadership as a plaster cast or a mold is about an object. Leaders need sounding boards with whom they can discuss ideas freely. They need mirrors to tell them when they are not the fairest of them all. They need taskmasters to remind them what their priorities should be, despite the many competing claims on their attention. And they need consciences to help them separate their personal ambitions from the goals of the organizations they lead. Flipped on their ends, each of these requirements describes something a good leader needs to do: to explore, to be a role model, to choose, to remain balanced. Nadler's article is worth reading carefully (or rereading) on two levels – for its stories about how CEOs and their advisers work and for its insights into the nature of leadership itself.

Please do not miss another article in this issue, "Fixing Health Care from the Inside, Today" by Steven Spear. I am not exaggerating when I say that the ideas there can save tens of thousands of lives and billions upon billions of dollars. Spear takes us inside one U.S. hospital where, for example, deaths from certain kinds of infections have fallen 87%. Another hospital made comparable improvements in dispensary operations. Another reduced the incidence of patient falls in its facility from once every 12 hours nearly to zero, preventing numerous painful and costly injuries. These hospitals have applied the "secrets" of continuous improvement and experimentation developed by Toyota and laid bare in "Decoding the DNA of the Toyota Production System," which Spear and Kent Bowen published in the September–October 1999 issue of HBR. While Washington debates federal health care policy, and constructive discussion has begun about how to create positive-sum competition in health care, here comes riveting evidence that the dedicated people who work in hospitals can make huge improvements in their industry, right now. If you serve on a hospital board, if your company is struggling under its health care burden, read this article. Make every board member read it. Put it before the providers from which you buy health benefits. At HBR, we like to talk about publishing ideas with impact. This is one where the impact can be measured in lives.

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Harvard Business School's academic year begins without Dean Kim B. Clark, who resigned to become the president of Brigham Young University–Idaho. When Harvard Business School Publishing was spun out of the business school into a 501(c)(3) corporation in 1994, the dean of the school became, ex officio, the company's shareholder – a role Kim Clark held for nearly ten years. For us at HBR, Kim has been more than a shareholder: The distinguished author of nine articles, one a winner of the McKinsey Award, he has embodied not just the standards we strive to uphold as a company but the deep research, clear thinking, and real-world applicability we seek in our authors' work.

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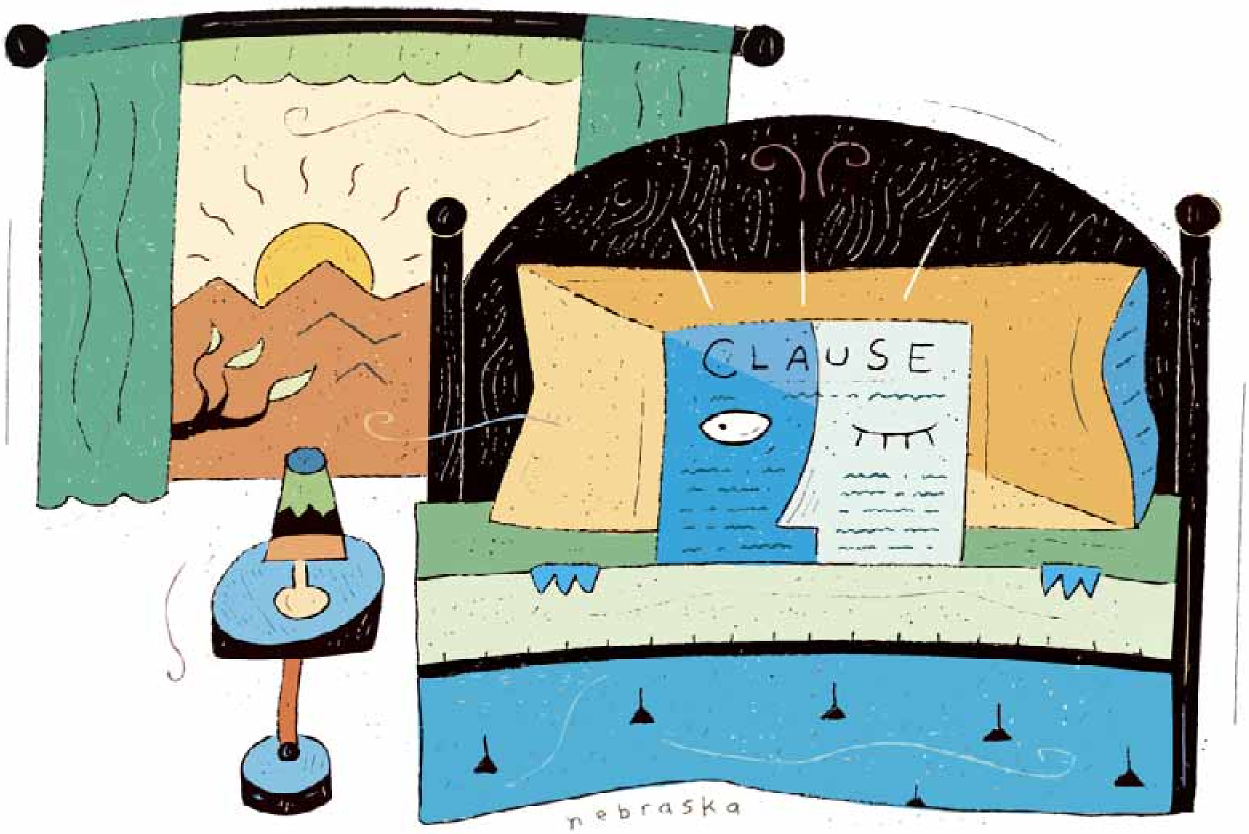

GRIST

The Commerce Clause Wakes Up

by LARRY DOWNES

In U.S. Constitutional law, the "dormant commerce clause" is so called because it forbids individual states from tinkering with even those parts of the national economy that Congress has not regulated – where federal power remains dormant. The name is especially apt because Congress's commerce power has spent much of the past two centuries snoozing. But the Supreme Court has often stepped in to preserve federal options by striking state efforts to regulate where Congress has yet to act. So even when dormant, the commerce clause has proved formidable.

In May 2005, the clause made a dramatic reappearance. In *Granholm v. Heald,* the Supreme Court struck down laws in Michigan and New York that allowed local wineries to sell directly to customers – including over the Internet – while forcing out-of-state producers to go through local wholesalers. That Michigan and New York would even attempt such discrimination reflects the unique status of alcohol, one of the only goods explicitly under state control by virtue of the Twenty-first Amendment. But holding that the commerce clause trumped the Twenty-first Amendment, wrote Justice Anthony Kennedy, was the only way to end an "ongoing, low-level trade war" among the states, which have raised increasingly convoluted barriers to one another's products.

The decision in *Granholm v. Heald* suggests a Supreme Court that is prepared to use the dormant commerce clause to protect electronic commerce, a growing sector of the economy threatened by a patchwork of state regulations and the failure of the federal government to take sufficient action on the global front. To

JOHN NEBRASKA

understand the potential significance of that decision, it helps to know a little history.

The dormant commerce clause originated in the early nineteenth century, in a challenge to inventor Robert Fulton's monopoly license on steamboat travel throughout New York. Chief Justice John Marshall, writing for a unanimous court, ruled that New York lacked the authority to issue such a license, interpreting Congress's power to regulate interstate commerce as an implicit ban on most kinds of state regulation.

Yet for decades afterward, Congress was content to let those powers lie. Why? Not because the United States didn't need regulation. Interstate commerce was already robust, and it exploded with the Industrial Revolution. No, the problem lay with one particularly popular component of interstate trade: slaves. The Constitution rested on a series of fragile compromises between slave and nonslave states; the commerce power threatened that balance. Even small stirrings raised the specter of restrictions on the slave trade and the probable collapse of the Union – what Thomas Jefferson called a "fire bell in the night." There was an acute need for a national economic policy, and that was precisely why Congress refused to create one.

So the commerce clause was drugged into a coma, where it remained even after the Civil War. Then came Franklin Roosevelt's New Deal, an acknowledgment that the federal government's failure to play an active role in regulating the national economy had led to the Great Depression. The New Deal jolted the commerce clause into high gear, creating the regulatory agencies, commissions, and boards that continue to oversee the United States' commercial life.

Things got quiet again until the 1960s, when Congress finally faced the original source of its lethargy. Though slavery was abolished in 1865, it took lawmakers

SUPPLY CHAIN

When Good Customers Are Bad

by REMKO VAN HOEK AND DAVID EVANS

Companies don't just sell product; they sell "delivered product." In virtually every industry, they coddle customers with supply chain services such as next-day delivery, customized handling, and specialized labeling. But few companies track the real costs of the myriad services they offer – and most have no idea how much they're losing.

Because conventional accounting methods and average-cost assumptions obscure the true effect of these services on the bottom line, sales executives often view them as minor concessions needed to close the deal. As a result, the high-volume customers who receive the lion's share of these services may be far less profitable than companies think. Even worse, in their zeal to push sales volume, firms may be implicitly driving their sales forces to extend unprofitable services to the entire customer base.

A Supply Chain Executive Board analysis of 750,000 order records from three companies in the consumer products, process, and electronics industries found that firms providing uncontrolled supply chain services sacrifice substantial profits – up to 20% – for just a 3% to 4% improvement in revenue growth. What's more, our separate analyses of customer and product profitability revealed that 40% of unprofitable orders are placed by the "best" customers, or those who are ranked among the top 20% most profitable. And 55% of the unprofitable orders placed by large customers are for products that are, on average, considered profitable.

A few companies are now using cost-to-serve analytics to address the problem, among them Dow Chemical, Eastman Chemical, and Georgia-Pacific (GP). In mid-2004, for example, GP used total-delivered-cost analysis to improve the performance of a major customer account. By incorporating cost-to-serve data into the calculation of gross margin, GP's supply chain team determined that the costs to provide this customer with expedited transportation and distribution services were significantly reducing the profitability of the account. In a top-to-top meeting with the customer, GP used the data to expose the root causes of the high costs and poor service, which included last-minute, uncoordinated promotional planning and purchasing across the customer's major business units and the customer's unwillingness to share inventory levels and positioning.

According to Marlene Clifton, the senior director of GP's supply chain, the customer, once confronted with the data, was remarkably willing to collaborate on ways to improve service. The customer agreed to appoint a single contact within its own company to liaise with a dedicated supply chain manager in GP and to improve terms for managing last-minute promotions.

In the firms we've worked with, the CEO has been directly involved in applying cost-to-serve analysis to strategy. Delivered-cost analytics can not only reduce costs but also drive revenue, set a company apart from its competitors, and allow a firm to direct the unprofitable behaviors of profitable customers to less agile competitors.

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another hundred years to dismantle the structural vestiges of the system. In the end, the slave states' worst nightmare came true: The civil rights laws used the commerce clause not only to remove race-based economic obstacles but also to rewrite political, social, and even cultural rules.

Which brings us neatly back to *Granholm v. Heald,* in which the plaintiffs – small out-of-state vineyards and in-state residents who want to buy from them – claimed that state manipulation of the local wine market violated their civil rights. In fact, *Granholm* is in some sense a throwback to the kind of commercial interference first rejected by Marshall nearly 200 years ago. Just as the early Supreme Court blocked the states from erecting barriers to physical commerce, the *Granholm* court has shown it is prepared to do the same for the electronic superhighway.

As improvements in technology make possible more intricate webs of national and global commerce, local efforts to protect native industries look more and more like what they really are – ham-fisted attempts to legislate a competitive advantage. That was the goal of the true powers behind Michigan's and New York's wine laws: local wholesalers who saw the nascent threat of electronic commerce and preferred to face it down in court rather than in the open market. But the dormant commerce clause defeated them. For electronic commerce, that decision could mean a new world of opportunity.

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EMPLOYEE BEHAVIOR

Motivating Through Metrics

by FREDERICK F. REICHHELD AND PAUL ROGERS

Getting the right people on board – and then all enthusiastically pulling in the right direction – has bedeviled organizations since the time of wooden ships, when the most popular form of motivation left lash marks. Today's corporate helmsmen may be more enlightened, but they still face the same challenge. How can a company transform its frontline crew into a meritocracy that pulls together?

Recently, a handful of firms have addressed this problem by tying rewards to team performance and putting customers and employees, rather than bosses, in charge of performance rankings. Some of these trendsetters are well-known global players, such as Enterprise Rent-A-Car; others are less well-known, such as Applebee's restaurants, located largely in the United States, and Ireland's Superquinn grocery stores. But all link frontline performance rankings to customer and peer feedback, not just to productivity. And they use simple metrics that can be applied to compensation, promotions, and career transitions.

Reward exceptional hiring. Enterprise, one of the world's largest car-rental concerns, rewards managers for how well their reports serve customers. For managers to get promoted, their branches must deliver customer service at or above the average for all comparable branches. Success is judged by a metric called the Enterprise Service Quality index (ESQi), which shows the percentage of customers who rate a branch five out of five when asked if they were completely satisfied. If a branch doesn't achieve or exceed the company's average feedback score, the entire team is ineligible for promotion. In many branches, teams have also introduced a voluntary weekly metric called The Vote, in which team members hold an open discussion and rank one another on how well each has helped to create outstanding customer service. This personal accountability for team success has led to higher ESQi scores.

Tap that extra 10%. Inspiring even the best employees to give their all requires setting clear goals that are more personal and immediate than a mandate to maximize overall profit. At Superquinn supermarkets, perks are determined by employees' influence on customers' spending. Recently the staff (called "colleagues" at Superquinn) in the bakery at one store was given a challenge: Increase the number of "households" (based on

continued on page 24

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Opinion

by JACK TROUT

Schizophrenia at GM

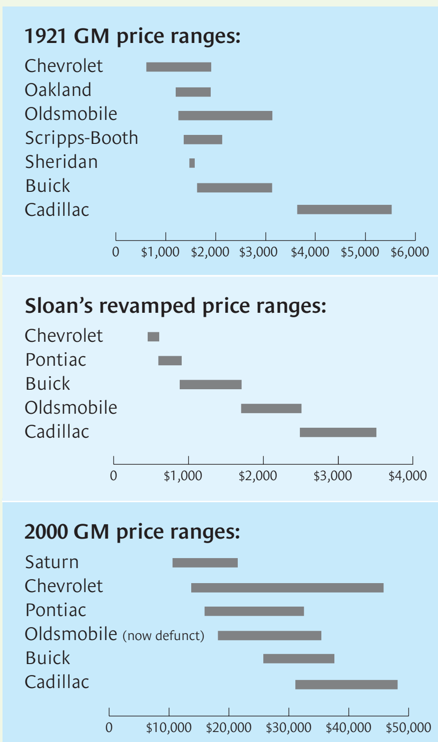
Powerful brands have distinct personalities: Duracell's batteries last a long time. Volvos are safe in a crash. But even dominant brands can fade if they fall prey to multiple personality disorder. Consider General Motors. What's the difference between a Chevrolet, a Pontiac, and a Buick? The company has recently woken up to the problem; last spring GM announced it would narrow its selection of cars. But this belated effort to bring the automaker's brand schizophrenia under control is too little too late.

To understand GM's dilemma, you have to retrace its steps over the decades as the company has played out its schizophrenic marketing strategy. In the beginning, GM was a mess. Founded by William Durant in 1908, at a time when the emerging industry was overrun with manufacturers, GM grew through voracious acquisition. By 1910, Durant had acquired 17 car companies including Oldsmobile, Buick, and Cadillac. In 1911, he invested in Louis Chevrolet's new company, and by 1918 he owned it.

When Alfred Sloan joined GM as operating vice president, he inherited what he called an "irrational product line," one that had no guiding policy for the marketing of its many brands. The company's only objective was to sell the cars, as is apparent from its 1921 list of overlapping prices. (See the exhibit.) The brands stole volume from one another and, with the exception of Buick and Cadillac, all lost money.

Sloan immediately realized that GM had too many models and too much duplication and lacked a product policy. In one of the earliest examples of market segmentation, he reduced GM's offerings to five models, separated them by price grades, and emphasized individual brand image to entice customers into the GM family and move them up.

These distinct and strong brands allowed GM to capture more than 57% of the U.S. market by 1955. Aware that pursuing more market share could lead to antitrust actions and the threat of a breakup, GM fatefully shifted its strategy from making more and better cars to making more and more money from a relatively stable number of sales.



Nothing dramatized this new direction more than the concept of "badge engineering," or selling identical vehicles under different model names. This invention of GM's finance staff was a way to increase profits through uniformity, by, among other things, making parts interchangeable. Slowly but surely, the different brands lost the individual personalities that the company had so painstakingly established. At the same time, to improve their numbers (and bonuses), the GM divisions began to push the boundaries of the product policies that defined their brands: Chevrolet went up in price with fancier models, as did Pontiac. Buick and Oldsmobile offered cheaper versions. In time, GM was once again producing multiple cars of different brands that both looked and were priced alike. For GM, it was 1921 all over again.

The GM story is not unique. Once a company abandons its brands' distinctive personalities, it's just a matter of time before confused customers start to drift away. In 1985, Coca-Cola infamously introduced an identity-blurring new brand, New Coke. A massive consumer backlash ensued, and the company quickly reinstated its familiar Classic Coke. You'd think Coca-Cola would have learned from that experience the importance of having a unique product personality, but today the company sells some 16 versions of Coke.

There are ways to execute line extensions without confusing, and losing, your customers. What these strategies have in common is rigorous attention to the brand's *position* – consumers' sense of the brand's distinct, overarching identity. BMW, for example, has been "the ultimate driving machine," for decades, an identity that transcends the company's multiple product lines. Managed carefully, a good position is timeless. The "ultimate driving machine" is now 33 years old, and "A diamond is forever" is 57. Alfred Sloan understood the power of positioning. Unfortunately for GM, his successors just didn't get it.

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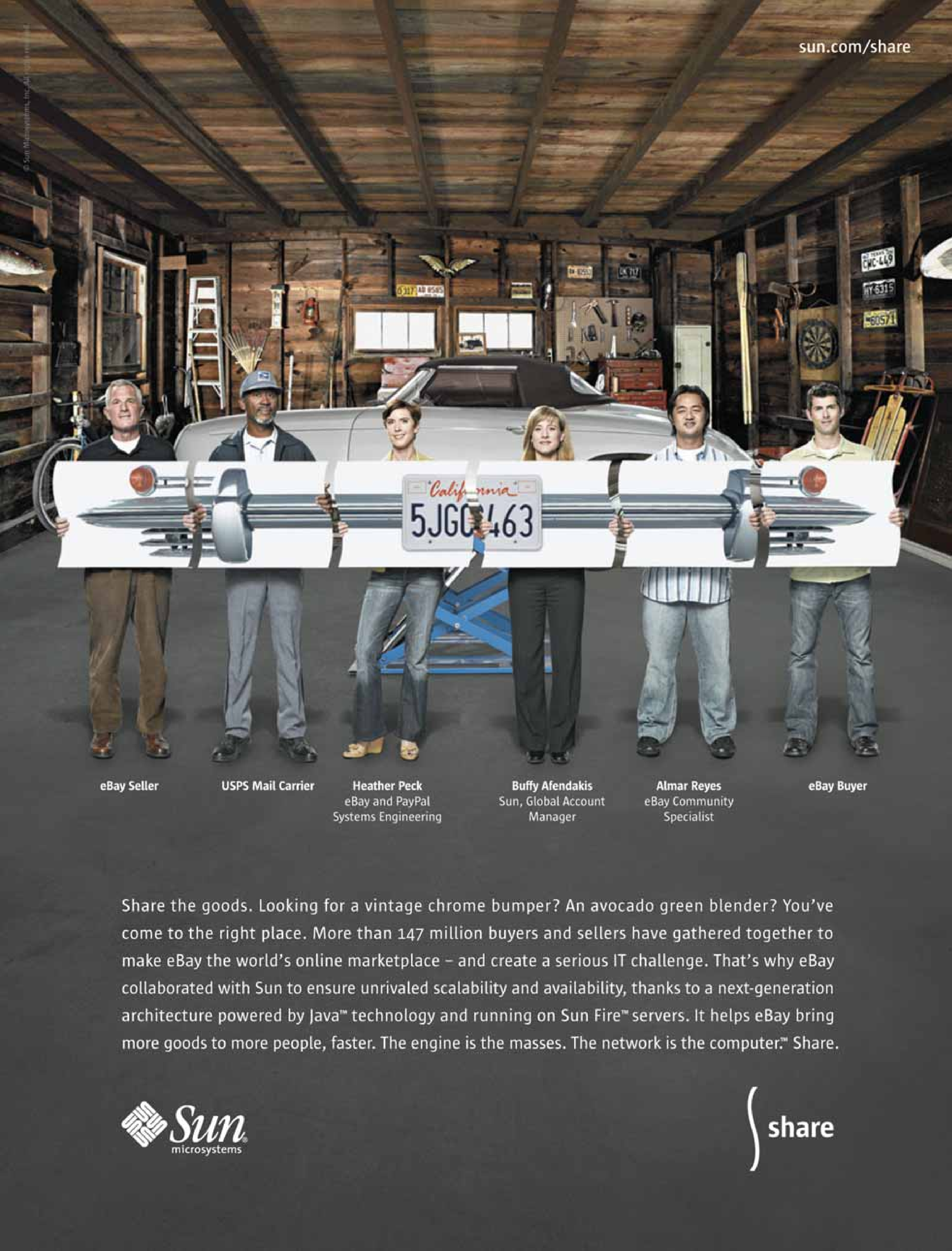

the Superquinn loyalty card) that purchase from the bakery. The reward was a helicopter trip around a local bay. The team set up a doughnut cooker inside the main entrance, offered every shopper a taste, and guaranteed the doughnuts' freshness. As a result, the number of households that purchased from the bakery increased from 75% to 90% – and all 20 bakery colleagues won helicopter rides.

Keep the best. Metrics can help companies identify who isn't rowing with the team. The trick is to objectively identify and transfer cultural misfits without demotivating other employees.

At Applebee's, general managers' bonuses are based on metrics that combine measurements of financial results, "guest results" (how well patrons rate their overall dining experience), and "people results" (turnover rates on the manager's team). In the casual dining segment of the restaurant business, where Applebee's competes, an entire staff can turn over twice in one year. But Applebee's looks beyond total turnover; recently it began measuring turnover of the top 20% of performers, the middle 60%, and the bottom 20%. Managers are rewarded for their success in retaining the top 80% and not penalized when a bottom-20 performer leaves the company. In fact, managers are encouraged to help poor performers either improve or seek other opportunities. As a result, since 2000, turnover among hourly associates has decreased from 146% to an industry-leading 84%, evidence not only that managers are more motivated to hold onto their teams but also that the teams themselves, minus poor performers, are more stable. Last year, Applebee's same-store sales growth rose 4.8 percentage points.

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KNOWLEDGE SHARING

Create Colleagues, Not Competitors

by MARSHALL W. VAN ALSTYNE

If managers want their employees to share information, why do they encourage them to hoard it by rewarding competition among them? My colleagues Erik Brynjolfsson at MIT and Nat Bulkley at the University of Michigan and I have been studying knowledge sharing and productivity in the executive recruiting industry. We asked 71 employees, from partners to IT staff, at three recruiting firms about their compensation structures and their attitudes toward sharing information with colleagues, and we tracked their individual contract revenues and the e-mail activity among them.

We found, as predicted by economic theory, that the people rewarded for individual performance shared information least; the people rewarded for team performance shared more; and the people rewarded for company performance shared most. In each case, the degree of sharing reflected the sharer's self-interest. If compensation is linked to one's performance relative to others, then employees are likely to hoard information to both maximize their own performance and undermine (or, at least, not benefit) others. But if rewards are tied to firm performance, then individuals stand to gain most from activities – like free knowledge sharing – that benefit the company.

This effect is demonstrated in the exhibit at right, which shows the network of e-mail traffic in a recruiting firm composed of two offices. Though this firm, overall, shared information to a moderate degree (as measured by the volume of e-mail among employees), the employees in office 1, on the left side of the network, were rewarded principally for organizational performance. The employees in office 2, on the right, were rewarded principally for individual performance. It's clear which office shared more.

Though most executives intuitively grasp the relationship between incentives and knowledge sharing, it's surprising how many companies – even those where knowledge sharing is critical – still emphasize rewards for individual performance rather than encourage team or firm performance. They turn colleagues into competitors. Most white-collar, up-or-out incentive schemes in law, accounting, management-consulting, and other fields rank employees on a few indicators such as sales volume or hours billed, and then reward those at the top.

Consider IBM's experience over the past 15 years. Before Lou Gerstner arrived, more than three-quarters of IBM's bonuses were based on individual performance – and the company was almost paralyzed by fiefdoms. But Gerstner

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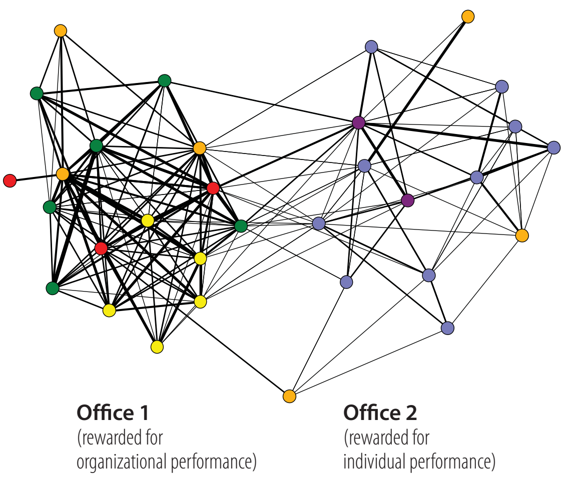
Lines of Communication

Each connecting line below indicates e-mail traffic between two individuals. The left side details the e-mail communications of employees in office 1; the right side details e-mail communications of employees in office 2. The thicker the line, the greater the volume of e-mail. For each employee, every additional connection reflects an average of $6,000 in revenues generated.



Conversation

MARC ABRAHAMS ON INNOVATION

Save That Thought

Marc Abrahams is a connoisseur of ideas: the good, the bad, and especially the ugly. As a cofounder and editor of the magazine *Annals of Improbable Research*, Abrahams – together with a merry band of scientists that includes eight Nobel laureates – rescues from obscurity such academic toast crumbs as a study of peanut butter's effect on the earth's rotation. He also presides over the Ig Nobel Prizes, an annual celebration of quixotic achievement in the sciences. His latest book, *The Ig Nobel Prizes 2: An All-New Collection of the World's Unlikeliest Research,* is being published this month by Dutton Adult.

Is there such a thing as a bad idea?

Of course. But often there are ideas that people react to badly because the ideas aren't explained clearly or because that particular group on that particular day isn't receptive. So be tenacious. Keep lists of rejected ideas that you find intriguing, and then bring them up again. Often, in our meetings to assess Ig Nobel candidates, some nominee gets a tepid response; then two or three years later someone suggests that candidate again, and everybody decides this is the best thing they've ever seen.

Are there reserves of rejected ideas waiting to be tapped?

Yes. Most companies could ban all new ideas and still have enough good – but abandoned – ones lying around to keep thriving for years. The mathematician Benoit Mandelbrot has made a career out of looking at ideas that others abandoned. He resurrected whole branches of mathematics from things nobody cared about 80 years ago. And look at pharmaceuticals and chemicals. Many professors will tell you about good, working products or processes that could have become gigantic industries by now. But in the early stages, some company decided the new project wouldn't be quite as profitable quite as soon as something unrelated they had. Now those things are just sitting there, waiting for someone to turn them into an industry.

How do companies miss those things if they are actively looking for innovation?

We say we want innovation, but when something actually is innovative, it's also odd. And for most people, odd isn't good. For the Ig Nobel Prizes, we look for things that are a special kind of odd – things that first make people laugh, and then make them think. Looking at ideas that way – seeing if they stick in your head, no matter how they affected you in that first moment – is a useful habit.

Here's a gaudy parable. Last year we gave an Ig Nobel to Daisuke Inoue, who invented karaoke. In 1971, he was a not terribly good drummer in a mediocre rock band. He managed to sell a few of his machines. But most people just chuckled. Inoue faded out of the picture. Then a few people in a few companies started to take out patents related to karaoke. Now there are more than 1,500 karaoke patents in Japan, and more than 1,000 in the U.S. And companies have made billions on Inoue's idea, because a few people laughed, and then thought – and then didn't let their amusement deter them from making money.

So familiar ideas trump innovative ones?

That's the usual order of business. Years ago, when Lotus had just made a huge splash, I was starting a software company doing something very different. I got introduced to some VCs. And eight out of nine of them said to me almost the identical thing. "We are looking for the next Lotus." And I said, "Right – you are looking for the next small company, doing something unique that's going to become gigantic." And they said, "No, we are looking for the next Lotus." And I said, "So, you are looking for the next company that has a niche all to itself and might be able to crowd out all potential competitors?" And they said, "No, we are looking for the next Lotus. We want a new company that will make spreadsheets." They wanted to invest in the same product and the same market Lotus already had. That was their notion of innovation.

The thing to remember is that almost every breakthrough discovery or invention – the lightbulb, antibiotics from bread mold (of all things!), the PC – once seemed foolish. Those who suggest innovative ideas sometimes get laughed at, lose their jobs, or worse. And later somebody focuses on one of those ideas, puts some resources into it, puts some little twist on it – and maybe ends up with a funny and richly satisfying tale to tell.

– LEIGH BUCHANAN

Reprint F0509F

made it clear he would reprimand or fire anyone who refused to share valuable information. Executive compensation became more team based, and management invoked Gerstner's name and fearsome reputation to win compliance among recalcitrant employees. The result was improved information flow, which contributed significantly to IBM's enormous growth during the 1990s.

Our research confirms that aligning incentives with team or firm performance effectively enhances information flow. But as IBM's experience shows, if you want to maximize sharing, sometimes inducements to share are best coupled with deterrents to hoarding.

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SECURITY

A United Defense

by LAURA KOETZLE

Your head of physical security is probably a former law enforcement officer: a fit, taciturn man in a gray blazer with a Secret Service–style earpiece. By contrast, your IT security chief is an ex-network engineer who prefers black jeans, Diet Coke and poring over techno-hieroglyphics. To all appearances, these two people share nothing except the word "security" in their titles.

But in fact, they have much in common. Integrating certain physical and IT security functions – such as access control – has always made sense. Let's say that Kenji swipes his pass at the door to the R&D lab in Tokyo on a Sunday afternoon. That's perfectly normal; he's worked every second Sunday for 12 years. But what if someone also claiming to be Kenji accesses the corporate network from a site in San Francisco during the same period? If your two security chiefs could put those pieces of information together quickly, they could prevent the theft of precious intellectual property.

Until recently, however, converged physical and IT security systems have proved too costly to engineer. Designers of older physical security applications created stand-alone systems that made integration difficult. Today's physical security systems offer multifunction smart cards for building access and come with integration tool kits. As your company moves to new facilities or upgrades its existing physical plant, you'll find that your new building security system runs on a standard server that plugs into your regular data network.

But just because the new physical security systems resemble standard IT applications doesn't mean the work's all done. Like their bosses, your physical and IT security staffers have very different skill sets and will require cross training to work together. Some skills will probably be transferable. For example, both physical security experts who manage video surveillance and IT security experts accustomed to spying on clever hackers can easily learn to monitor consoles for significant events that span the physical and digital worlds.

Physical and IT security staffs aren't exactly hand in glove yet, according to a recent survey from Forrester Research. Just 5% of North American firms have a single organization that handles guards and cameras as well as firewalls and antivirus programs; and only 7% said they were moderately likely to integrate those functions this year. But nearly half of respondents think they can achieve better overall security by funding joint projects between physical and IT security departments.

Government agencies in North America are continuing to expand their existing initiatives in security convergence, such as the U.S. Department of Defense's Common Access Card. Companies in Europe, meanwhile, are showing a strong interest. A Switzerland-based international financial institution, for example, has assigned to each employee a combined access token that lets the employee both open doors and access the bank's computer network.

Most experts agree that a nation's ability to prevent attacks requires the seamless sharing of information. As they confront threats from disgruntled employees, industrial spies, thrill-seeking hackers, and the like, companies are discovering the same thing.

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Reprint F0509G

HEADQUARTERS

Benchmarking Your Staff

by MICHAEL GOOLD AND DAVID COLLIS

Corporate centers vary radically in size and activity. Companies with 10,000 employees, for example, may have as few as 20 people in their headquarters or as many as 4,000. (See "When Lean Isn't Mean," HBR Forethought, April 2005.) Given this diversity, how can companies decide what size and composition of corporate staff is right for them? And what role, if any, should benchmarking play in these decisions?

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Corporate staffs play three fundamentally different roles: added-value parenting (improving the performance of the company's businesses); shared services (providing services that create economies of scale, scope, or specialization); and governance and compliance (discharging legal, regulatory, and fiduciary responsibilities). Because corporate staffs from various companies differ so much in their added-value initiatives and the services they provide, benchmarking for these two roles isn't very useful in determining ideal HQ head counts. For these roles, it is more important to design fit-for-purpose staffs according to the company's strategy.

Sizing It Up

Our benchmarking tool for corporate governance and compliance staffs considers the number of employees at a company, the average sales per employee, and the level of influence corporate staffs have over functional decisions. The tool is standardized against a European company with 10,000 employees, sales per employee of $150,000, and a headquarters with a medium level of influence over functional decisions. The median size of the governance and compliance staff for such a company is 29. This figure serves as the starting point for the benchmarking calculation.

	Base median for governance and compliance staff	29	
	Country factor		
	Europe	1.00	
The size of a corporate governance and compliance staff at a U.S. company…	U.S.	1.27	29 × 1.27 = 36.8
	Employees		
	2,000	0.34	
	5,000	0.63	
	10,000	1.00	
with 20,000 employees…	20,000	1.59	36.8 × 1.59 = 58.5
	50,000	2.94	
	100,000	4.68	
	Sales per employee		
	$75,000	0.77	
	$150,000	1.00	
and $300,000 in sales per employee…	$300,000	1.30	58.5 × 1.30 = 76.05
	Functional influence		
	low	0.71	
	medium	1.00	
and a high level of corporate influence…	high	1.05	76.05 × 1.05 = **80** people
	Quartiles Europe		
	lower quartile	0.71	
	upper quartile	1.42	
	Quartiles U.S.		
could be from 54 to 120 people, with 80 as the median.	lower quartile	0.67	0.67 × 80 = **54** people
	upper quartile	1.50	1.50 × 80 = **120** people

But the governance and compliance role is quite similar across companies and so is more amenable to benchmarking. Based on a survey of 600 corporate headquarters in the United States, Europe, and Japan, we have developed a benchmarking tool for estimating the typical median governance and compliance staff size for different types of companies. (See the exhibit "Sizing It Up.")

Though governance and compliance activities must be thorough, having too many people involved can lead to excessive checking and second-guessing, which can drive up costs and do little to improve the quality of the process. New government requirements may be pushing the numbers upward at companies, but our tool shows that it is possible to manage governance and compliance with strikingly few headquarters staffers. Do the calculation for your own company. If your governance and compliance staff size comes in significantly above the median, you may want to find out how similar companies are doing the same job with fewer people and consider reducing your staff.

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Reprint F0509H

OUTSOURCING

Give a Little, Get a Little

by ERIC WALDEN AND JAMES WETHERBE

Most companies view handing intellectual property to an outsourcer as delivering the castle keys to marauders. Outsourcers need access to customer names, automated business processes, and their clients' homegrown software to do their jobs. But unscrupulous contractors can also do a job on clients. Businesses such as Apple Computer and Pearl Investments, a Portland, Maine–based hedge fund, have sued their service providers for revealing company

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secrets or for using client systems for their own gain.

Fortunately, sharing IP doesn't have to be all risk, no reward. Consider this: In 1983 (the primordial mists of information technology outsourcing), then-fledgling systems developer Bloomberg approached Merrill Lynch with a proposal to build a program that delivered up-to-the-minute financial data to the brokerage's employees. But instead of paying Bloomberg $30 million to develop proprietary software, Merrill Lynch paid $30 million for a 30% stake in Bloomberg and temporary exclusive rights to the system it produced. The software was so successful that after a while Merrill Lynch waived exclusivity, letting Bloomberg sell it to other brokerages. Still, Merrill Lynch retained first-mover advantage (established during the exclusivity period) and continued to derive value from the system. Eventually, it sold one-third of its stake in Bloomberg (or 10% of the total ownership of Bloomberg) – which had flourished – for $155 million in 1996.

Companies hoping to strike similarly advantageous deals must recognize that information assets (intellectual property) differ from physical assets in that they can be at once given away and retained. Requiring exclusive ownership of everything developed in the outsourcing relationship makes sense for physical assets but can be shortsighted when it comes to information assets. Allowing outsourcers to resell the information assets they create for clients gives those vendors incentive to make sure their products are exceptional. It also lets outsourcers amortize development costs across multiple clients, which can mean lower fees for everyone. So companies sacrifice some of the competitive advantage of owning a unique technology in return for getting that technology at a lower price.

Sharing the rights makes even more sense in offshoring arrangements. A contract is only as good as the legal system that backs it up, and some countries' intellectual property laws are ambiguous or downright lax. If the outsourcer's country will not enforce a solid intellectual property contract, assume some of your IP is going to slip outside the gate, and take comfort in the lower fees you're paying and the higher quality of service you're receiving.

"At the length truth will out," Shakespeare tells us, and the same goes for intellectual property. Companies that outsource would do well to focus less on what they give up and more on what they get in return.

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CONSUMER BEHAVIOR

Denying the Urge to Splurge

by ERICA MINA OKADA

You can't always get what you want. But even when you can, you're more likely to get what you *need* instead, if the two choices are presented simultaneously.

Consumers naturally prefer goods that bring them pleasure to those that satisfy basic needs. (In these flush times, "basic" is a relative term. A cell phone counts as basic in many quarters. A PSP video game system does not.) Research shows that consumers try to justify their fun purchases by – among other things – focusing on those items' utilitarian value. If I buy the 60-inch high-definition television, I won't have to pay outrageous ticket prices at the box office. Carrot cake is good for my vision.

But shoppers are less likely to choose goods that are just plain fun if a more practical alternative is staring them in the face, according to my new study of consumer choices in a variety of situations. A shopper sees a DVD player with a built-in MP3 feature at the mall and succumbs to temptation, even though she knows what she really needs is a new food processor. If, on the other hand, she sees both the DVD player and a comparably priced food processor in the same store, she will probably buy the required utensil, assuming she cannot afford both. It is simply too difficult to justify buying what she wants when that choice results in rejecting what she needs.

Suppose the shopper isn't struggling with the choice between the fun and the useful but instead simply deciding whether or not to spring for the fun. In that case, how (as opposed to how much) she has to pay is a major influencer. Here, too, she needs wiggle room to justify her purchase, and paying money (a set price) doesn't give her that flexibility. But if she has the opportunity to spend time instead of money – by, for example, waiting an hour in line to be among the first 100 customers at a new store and receive 50% off the DVD player – well, she probably would have wasted that hour watching television anyway, and she can always make it up by skipping lunch on Tuesday. For the food processor, by contrast, she's comfortable paying full price. If she really, really needs it, she may even be willing to bid up that price on eBay.

The message for merchandisers: If you're selling the stuff of dreams, try to position it away from the stuff of day-to-day reality. And when possible give people the chance to work a little more and pay a little less.

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DECISION MAKING

How Markets Help Marketers

by ANITA ELBERSE

Stock market simulations – mechanisms that tap into consumers' collective wisdom by letting them bet on the success of products – are potent predictive tools, proven to generate reliable sales forecasts. Now these information markets promise to do something even more exciting: help companies determine the optimal marketing strategy for products prior to launch.

Consider the Hollywood Stock Exchange (HSX), a popular online simulation

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The best service anticipates your needs. To help you arrive feeling ready for business, our Arrivals Lounge at Heathrow has the services of a spa. You can step off the plane and straight into a shower, a robe, even a Molton Brown facial - all while your suit is being pressed. Our goal is simple: to deliver the best service you could ask for, without you having to ask. So whether you're enjoying a gourmet meal, or our infinitely more comfortable flat bed, we think you'll find our business class like no other.

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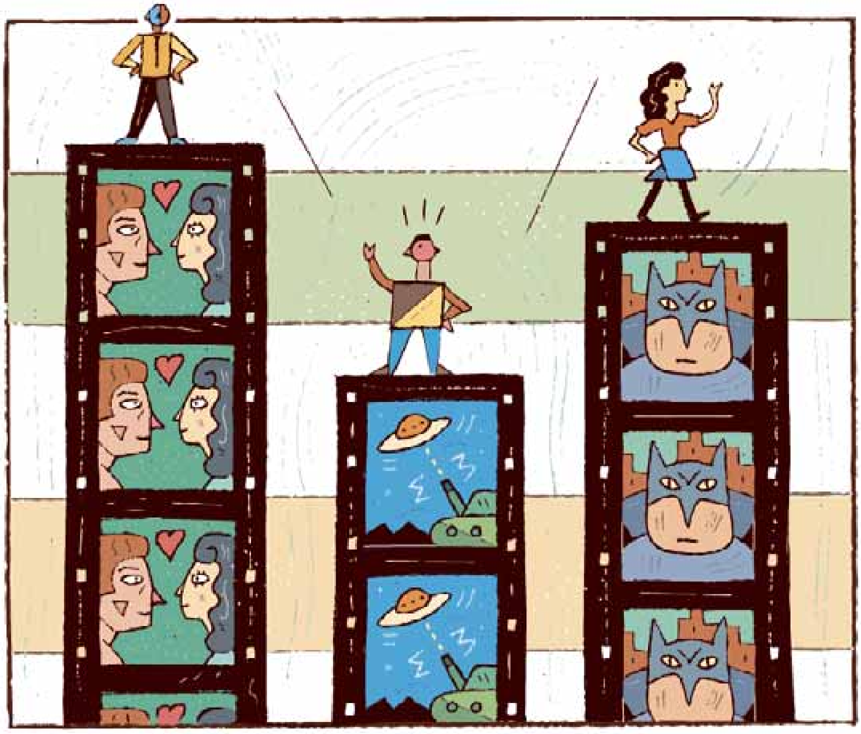
Business class is different on BRITISH AIRWAYS where cinephiles trade movie stocks to predict the box office performance of upcoming releases. The value of HSX stocks corresponds to the movies' performance; the higher the grosses, the more Hollywood dollars stock owners reap. Although the market consists of hundreds of thousands of amateur traders who play for fun, HSX predictions are reasonably accurate – quite an achievement given the uncertain demand for movies.

A better understanding of what information HSX players use to guess performance should therefore produce a better grasp of what makes movies successful and thus what constitutes good movie marketing. For example, after analyzing the performance of hundreds of movie stocks, my Harvard University colleague Bharat Anand and I found that their prices respond to TV advertising expenditures. Advertising, it seems, is one piece of information that HSX traders use to anticipate a film's performance. By looking at the market reception of early advertising, and armed with historical data on how markets respond to advertising and how that relates to films' actual performance, marketers can gauge the effectiveness of their campaigns.

From the moment players hear about an upcoming movie (even if it is still in the concept stage) and form initial expectations about its probable box office performance, studios can use HSX as a test platform. By closely monitoring stock movements after, say, the release of a trailer, the start of a guerrilla marketing effort, or the airing of a television commercial, executives can assess that marketing action's effectiveness. If their ad campaigns fail to bump up the stock prices, the studios can further tweak the existing plan, switch their efforts to a new format – a buzz-generating Web campaign, for example – or reduce their spending to try to minimize losses. Those companies wishing to elicit specific information or wield greater control can design and run their own markets using traders they recruit; that would allow them to perform such experiments as showing an ad to one group of traders and not another.



Market simulations are efficient, collecting in one fell swoop several variables normally measured by surveys and other research tools. For example, these simulations capture people's awareness of a product's existence (since only those familiar with the product are likely to bet on it); their beliefs about how the market as a whole will respond to the new offering; and their confidence in those beliefs, which is indicated by the size of the bets placed. Simulations also consider the dynamic competitive environment, because players choose to bet on one film or one product over another. And as most people currently play these games without monetary incentives (although marketers may have to recompense recruited players in a customized market), companies can significantly increase sample sizes without busting their research budgets.

Simulated markets are particularly useful in creative industries where product life cycles are short and marketing largely takes place before launch. Most industries don't yet have a version of HSX, and traditional research agencies shy away from the technology. But a few service providers operate in this space, and companies can develop the ability to run their own electronic markets.

A greater challenge may be changing the way marketers think. Companies must be willing to adjust their advertising campaigns – or their product pricing or distribution strategies – based on the data that players produce. That means getting comfortable with a methodology that flies in the face of conventional beliefs about random or representative sampling. (In public markets such as HSX, self-selection occurs, and participants often remain anonymous). It also means accepting that a campaign is or is not successful without being able to pinpoint the reasons why.

The power of market simulations lies in the premise that, collectively, consumers will recognize the difference between an effective and an ineffective campaign. "Under the right circumstances, groups are remarkably intelligent and are often smarter than the smartest people in them," writes James Surowiecki in his book, *The Wisdom of Crowds.* Smart marketers will trust the collective smarts of the markets they seek to serve.

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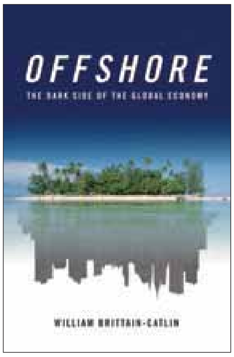
Reprint F0509L

Reviews

Offshore
The Dark Side of the Global Economy
William Brittain-Catlin
(Farrar, Straus and Giroux, 2005)

It seems doubtful that William Brittain-Catlin set out to undermine his argument about the evils of offshore finance by annoying the reader. But he does.

Offshore is an exposé of those sunny shadow lands where money goes to hide – the geographic equivalent of the unfathomable accounting gimmicks that abet corporate bad behavior. Given the author's background (journalism and corporate investigations), the reader anticipates a colorful, straightforward analysis of this subject.



Although the book does offer a lively history of the Cayman Islands as a "sweetshop for capitalism," most of Brittain-Catlin's tale is obscured by hackneyed antiglobalization rhetoric and prose that is simultaneously overwrought and opaque. ("We can begin, if we want to look hard enough, to glimpse the strange, hidden space between capital and the state, the secret realm at the ambiguous heart of Western modernity.") Especially irritating is the tedious philosophical framing, including an odd "interlude" chapter that takes us from the myth of Proteus and the "philosophical prehistory of the secret realm" to Immanuel Kant.

But readers who stick with *Offshore* will see the phenomenon of the tax haven in a new light. The book does a decent job of explaining how companies use these financial centers to reduce or eliminate taxes (although it often blurs the distinction between offshore tax havens and onshore financial centers – there is, for example, the strained characterization of Delaware as a Cayman Islands–like isle of iniquity). What will really widen eyes, though, is the magnitude of the practice. The author says one-third of the world's wealth is held in offshore tax havens, 80% of international banking transactions occur there, and half the capital in the world's stock exchanges is parked offshore at some point.

Offshore financial centers also have played a significant, if underappreciated, role in recent corporate scandals, helping companies like Enron and Parmalat hide losses that ultimately contributed to their downfalls. And these havens have contributed to the collapse of national economies: Countries including Venezuela, Argentina, Korea, Thailand, and Malaysia have tried to disguise their faltering finances by moving risk-laden liabilities offshore.

By the book's end, the author has sketched the outlines of a huge and dark alternative financial universe, one that makes the breezy business coverage by mainstream publications seem superficial or even naive. And he isn't optimistic that much will change. Sure, there is an occasional brouhaha: When toolmaker Stanley Works proposed moving its headquarters from Connecticut to Bermuda several years ago, the company "quickly became the scapegoat for all that was wrong and immoral about U.S. capitalism in the immediate post-Enron era." But there is little outcry that Tyco International, whose abuses should have been a catalyst for reform, is still based, even after its much-publicized corporate housecleaning, in Bermuda.

– PAUL HEMP

Thinking for a Living: How to Get Better Performance and Results from Knowledge Workers
Thomas H. Davenport
(Harvard Business School Press, 2005)

Managers eager to improve the productivity of their knowledge workers can draw on an expanding array of technology tools. But Davenport, a prominent scholar, cautions that these tools should facilitate rather than direct knowledge work. Mentoring and networking, he says, are likely to help employees far more, while also boosting their enthusiasm for their jobs. Aside from a missed opportunity to distinguish managers' work from employees', this is a comprehensive and thoughtful examination of an important business challenge.

It's All Politics: Winning in a World Where Hard Work and Talent Aren't Enough
Kathleen Kelley Reardon
(Currency, 2005)

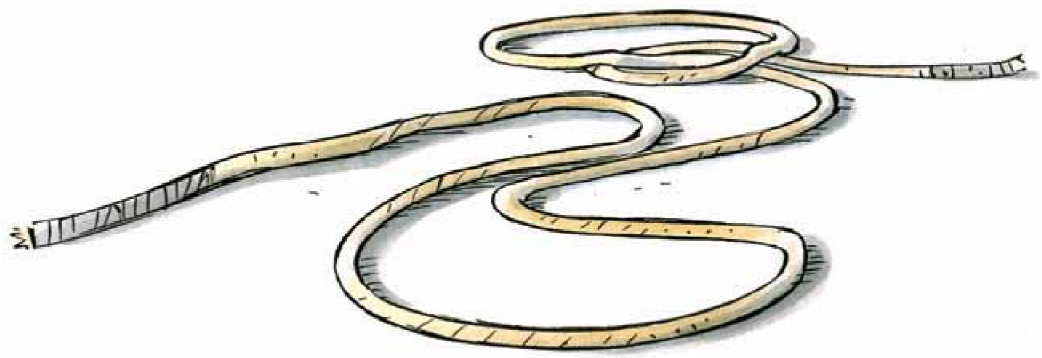
Politics is as pervasive in offices as fluorescent lighting, and this uneven book tries to cover the whole byzantine subject. Much of the advice is familiar: Look for hidden agendas; understand how your boss thinks. More intriguing, Professor Reardon explains how people subtly undermine their positions. For example, many employees try so hard to be polite and cooperative that they let aggressive colleagues frame situations in self-serving ways. Even in a world that overvalues charm, nice guys finish last.

All Marketers Are Liars: The Power of Telling Authentic Stories in a Low-Trust World
Seth Godin
(Portfolio, 2005)

Sipping chardonnay from a Georg Riedel wineglass does nothing to improve the flavor, blind taste tests show. Yet wine connoisseurs effervesce about the brand because artisan Riedel tells a great story that flatters their prejudices and aspirations. Godin, whose specialty is adapting marketing principles to the TiVo-ized world of fragmented media, urges companies to sell the fantasy. The catch is that marketers must believe their own stories. Consumers may not recognize a lie, but they can spot insincerity a mile off.

– JOHN T. LANDRY

The executives who lead Voici Brands' various businesses own their bottom lines. Now the CEO wants to centralize supply chain operations. The businesses may save money – but the executives will lose control. How should this battle be fought?



The Tug-of-War

by Yossi Sheffi

When Jack Emmons, CEO of Voici Brands, stepped into the vast, brightly lit production area of the "supply chain city" in Shanghai, his jaw dropped. An ocean of uniformly kerchiefed and aproned Chinese women bowed over their sewing. There must have been a thousand of them.

"Each workstation is limited to a six-inch stack of material," Xao Li, the sales representative, pointed out in skillful English. "This floor is divided into three sections, one for each client. As you can see, our employees work under the best conditions. NGOs have nothing to complain about."

Li led Jack and Robert Dodds, Voici's CFO and Jack's sidekick on this trip, along a glistening green aisle, past row upon row of busy workers. Jack watched, fascinated, as the workers deftly pulled thread and material through the machines. In the distance, Robert caught sight of a Caucasian woman wandering the aisles in one section of the production floor.

"Who is that over there?" Robert asked.

"Ah," said Li, peering knowingly over his designer glasses at Robert, then at Jack. "I believe she is an inspector for Marquise. Her presence here ensures the high and consistent quality that Marquise expects."

The reference to Voici Brands' major competitor was hardly lost on Jack. Two years earlier, Marquise had consolidated its supply chain operations by outsourcing all its product lines to the supply chain city. In doing so, Marquise

HBR's cases, which are fictional, present common managerial dilemmas and offer concrete solutions from experts.

DANIEL VASCONCELLOS

had shrunk the time from fashion design to products' arrival in its retail stores from 50 weeks to 60 days, boosting its bottom line by 20%. Only a small part of the increase in profits was due to lower Chinese labor costs. Most of it was due to the faster time to market, which allowed Marquise to respond more quickly to the whims of its fashion-conscious customers.

As Jack and Robert followed their host out of the cavernous facility, Jack realized that the sewing operation was only the tip of the iceberg. Adjacent buildings housed every other stage of apparel production, such as weaving and fabric dyeing. In one dazzling, Silicon Valley–style office building, Chinese and Western engineers and designers worked side by side at large LCD screens.

"Our professionals can help you with every stage of production, in all your lines," said Li. "We take care of everything right here, from design through delivery. This way, you gain significant economies of scale. We can move from concept to production and distribution faster than anybody, so you speed your time to market and increase the level of service across all your brands. And as a large customer, you can be assured of dedicated attention. All you need to worry about is just selling clothes."

Jack laughed. "You make it sound so simple."

In fact, he had been increasingly worried about "just selling clothes." Over the past five years, Los Angeles–based Voici Brands had widened distribution from department stores in the United States to locations in Canada, Mexico, and Great Britain, as well as through catalogs and the Internet. But in the past two years, the company had started losing money. Competitors were outselling Voici because supply problems had affected sales.

On the drive back to the hotel, Jack frowned, recalling what had happened the previous holiday season with the Jacquie line of teen clothing. A particularly "hot" leather-trimmed miniskirt, modeled by pop star Jeni James in a Jacquie TV commercial, sold out almost immediately, but resupplies didn't make it to stores in time for Christmas. A local television station even aired a segment showing teens fighting over the skirts. Margie Rosen, the senior vice president in charge of Jacquie, took immediate steps to secure backup suppliers. She hired additional personnel to monitor these suppliers; even so, some batches had to be reworked. After the holidays, teens lost interest in the skirts. Inventory levels climbed. The remaining skirts were sold at a heavy discount. Meanwhile, a well-known industry analyst pointedly criticized the company for failing to shore up its operations, and Voici's stock took a hit. Being the professional she was, Margie assumed full responsibility, but Jack realized that it was not really a problem unique to her operation. The long time from design to market made accurate forecasting impossible. When supplier troubles resulted in stock-outs with Harry and Sally, Voici's line of children's clothing, Jack knew he had to take a good, hard look at the company's operations across the board.

As the car pulled into the long driveway of the hotel, Jack yawned. "Oh, my,"

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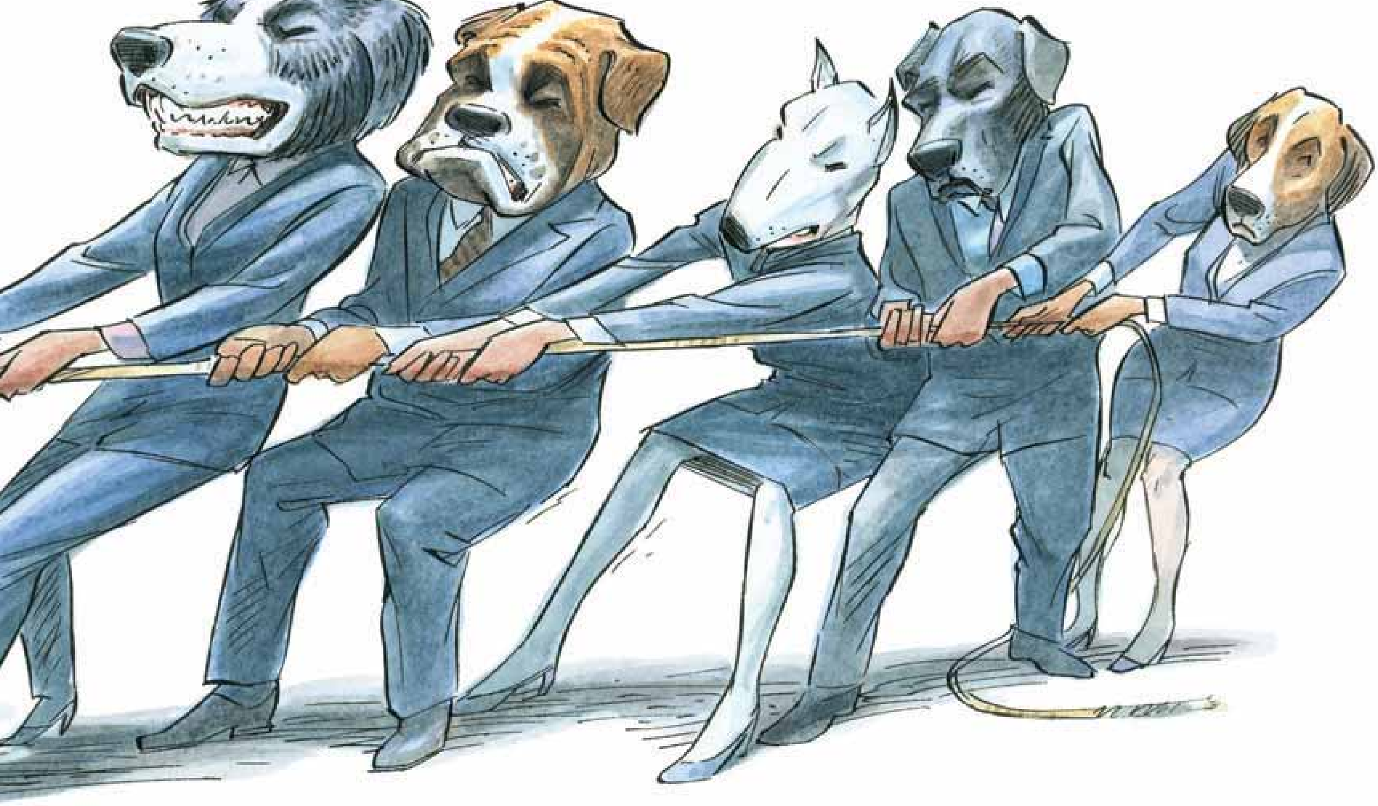


he said. "I'm absolutely beat." He shut his eyes and rested his head against the buttery leather upholstery of the Mercedes C320. "I wonder what time it is in Los Angeles."

Li, who was riding beside the chauffeur, checked his watch. "It's 3:02 PM, yesterday," he said. The car pulled up to the curb, and a valet opened the door. Jack, Robert, and their host climbed out. "It was a pleasure to have you with us," said Li, bowing deeply. "I wish you a very smooth journey home."

A Cozy Relationship

"Damn," Jack muttered as he nicked his neck with his razor. The white shaving cream bloomed red. He rinsed his face with water from the tiny spigot on the Air China Boeing 777 and dabbed at the wound with some tissue paper.

Since he'd boarded the plane, Jack had been struggling with the realization that negotiating with the Chinese supply chain city was not even an option for him. Voici was just too decentralized.

Founded in 1970, Voici Brands had begun with one line of clothing, acquiring four more brands over the next 35 years. Each business was like a subsidiary – complete with its own legacy, its own management, its own set of suppliers. Margie was typical of the lines' managers. Her knowledge of the fashion world, retailing, and the fine details of procurement commanded universal respect in the company. Truth be told, Jack even felt a little intimidated by her.

Like all the other lines' business heads, Margie had, over the years, forged stable and reliable contracts with suppliers – from textile mills to production houses, from customs brokers to warehouses, from technology consultants to transportation firms. Her employees worked with these suppliers, followed the unit's unique procedures, and trained on its systems.

Jack remembered how uncomfortable he was when he'd had to ask Margie about the leather shortage. It turned out that her main supplier, a firm in Australia, had been hit with a labor strike.

"Isn't that the same company that had management trouble a few years back?" Jack asked.

"Yes, it is," said Margie. "They were having some problems. They changed management, and everything has been fine until now."

"Well, what's the problem now?" asked Jack tersely. "And why are we still using these guys?"

"They use a specialized process that produces the very soft leather we like," Margie replied. "Our relationship with them goes back decades. Until the strike, they had always been reliable in terms of delivery."

Having been a unit manager himself, Jack understood the close relationships Margie and the other vice presidents had developed over the years with their suppliers. If anyone had tried to pull one of his critical suppliers – and still hold him responsible for bottom-line performance – he would have said, "Over my dead body."

Jack pulled the plug in the plane's miniscule sink and watched the shaving water spiral downward. "I can't shove consolidation down their throats," he thought. "Margie might get fed up and leave." Some of the other unit heads would feel resentful, too. They might act out and do some serious behind-the-scenes politicking. The consolidation initiative would be a big failure, and in three years' time, they'd be dancing on its grave. (And maybe *his*.)

He toweled his face, opened the folding door, and walked back to his seat, thinking again of the shiny production floor at the supply chain city, the hundreds of sewing machines, the intensely focused women in their kerchiefs – and Marquise, which was beginning to put the squeeze on Voici's market. "Change or die," he thought. "Change it is. But how?"

He resumed his seat and opened his magazine to a long article on supply chain management. The article described the success that a giant telecommunications company was enjoying, thanks in large part to the supply chain czar it had appointed to oversee logistics and procurement operations. This executive was depicted as a tough-minded leader who had created an organization responsible for all supply chain operations. By keeping only a select few vendors, he also became one of their biggest customers, so they had to pay attention to his needs. In the end, he saved the company millions through operational efficiencies.

"That's the kind of guy I need," Jack thought. "Someone to take the bull by the horns." Margie would certainly react negatively if she had to deal with such a person. To convince her and the other unit heads that this was a good idea would take some finesse. It would be better to start small.

"I'll ask the SVPs to volunteer parts of their supply chain for review," Jack thought. "If one unit finds that there's an area where it can save costs, the others might join in." With that, he smiled and put on his headphones.

Jack couldn't shove consolidation down their throats. Some of the unit heads might act out and do some serious behind-the-scenes politicking.

The Rottweiler

Grigio, Jack's favorite site for a long business lunch, was bathed in bright noontime sun that poured in through huge skylights, winking off the wine glasses and the copper-colored tile floor. Jack chose the special of the day, wild salmon. His guest, Ravi Chandry, opted for the scampi. The waiter thanked them for their orders and disappeared.

Ravi had been recommended by Mike Coverdale, Jack's mentor on the board, as someone who had effectively centralized all supply chain operations for T.M. Solden, the second-largest snack food and beverage company in the world. Mike had mentioned that Ravi, who looked to be only in his fifties, had recently "retired" and was spending his time playing golf and doing some consulting. "I don't expect he'll stay retired very long," Mike had told Jack. "He's well off financially, but he's too good at what he does. He'll get restless. Now might be a wonderful time to tempt him with a challenge."

Jack began by describing his trip to China and touching on some of the problems with Voici's supply chain. Ravi listened carefully, then launched into question mode. He first asked about Marquise and Voici's other competitors, grilling Jack about how their P/E ratios, times to market, and customer satisfaction compared with Voici's. Jack ran through the numbers as best he could. He was impressed with Ravi's professionalism and toughness.

Satisfied that he'd collected enough information to form an opinion, Ravi leaned back in his chair and wiped his mouth with his napkin.

"There is absolutely no question that you have to improve your supply chain speed and efficiency," he began. "First of all, your costs are buried all over the place. You have to start by measuring everything – and I mean everything. Once you do that, you can figure out what to do about streamlining your operations. It sounds as if Marquise has pulled far ahead of you in this regard." He looked deadly serious, staring across the table at Jack. "Given your competitive situation, you need to begin now."

When Jack described his concern about Margie and the other unit managers, Ravi smiled, displaying his overlarge teeth.

"I understand," he said. "It's a huge threat to these people for you to take their power away. But look at it this way: Your competitors are moving ahead fast. Your recent losses sounded alarm bells. If you don't act immediately, the losses will spread. When that happens, you might not be able to get a good deal even from the Chinese, who will sense desperation." He paused. "Frankly, your whole company will be in danger."

Jack knew it was time to put his cards on the table. "I've spoken to the board and the CFO," he said, "and I'm certain

we can put together an offer that would please you."

Ravi looked impassive. "Jack, you need a Rottweiler for this job, and I would only consider doing this if the unit heads got an unequivocal message from you that they must comply. You haven't got time to build consensus. The job will get done a lot faster and yield benefits much sooner if you don't waste a year selling this internally. It's that simple."

A More Cautious Breed

Back in the office, Jack took a stab at sketching out an organizational chart. He wrote in Ravi Chandry's name for the new position of vice president of global procurement, manufacturing, and logistics. Alongside Ravi's box, Jack drew five more, filling them in with the names of Voici's unit heads. He began writing in the name "Tony Rini" and stopped.

Tony headed up Harry and Sally, the children's wear division. Children's wear was a steady line of business, but it was not the biggest or fastest growing. Tony was a highly capable ten-year veteran of the company; he'd worked in all its divisions. He didn't play politics, at least as far as Jack could tell. Of all the business unit managers, Tony had always seemed the most straight-up and trustworthy. He could win hearts and minds.

Jack erased Ravi's name and put Tony's in the box. The idea was interesting. Tony certainly had credibility with the other business heads. He knew not only how to get along with them but also how to get things done in the company. But Tony had never consolidated his own supply operations. Would he be able to pull it off? Would he want to? Jack asked his assistant to set up a meeting with Tony.

The following afternoon, Jack motioned Tony to a chair in his office and shut the door. "Tony, I want to bounce an idea off you – in confidence," he said.

Tony seemed pleased. "Go ahead, Jack."

One by one, Jack showed Tony the PowerPoint graphs that he had shared with the board. He ran through the numbers – first in general and then for Tony's unit. The analysis showed that by reducing the number of suppliers, each business unit would save 20% in the first year and at least 4% to 6% more the following years. Half the savings would be poured back into the individual units' marketing and sales efforts as well as bonuses for the top managers. "And overall, it looks as though your unit would stand to gain the most," Jack concluded. "So – what do you think?"

Tony paused, pressing his lips together, and then stood up and approached the whiteboard. He listed all the parts of his division's supply chain and matched them up with their respective contractors. "Just look at the transportation suppliers," he said. "We have product coming in from these ten companies, each with their own logistics operations." Some companies, he explained, provided their own transportation to Voici's warehouses in New York and Los Angeles. Others used contractors to get the product to the warehouses. Still others moved clothing directly to the stores. "My unit will have to change the terms of sale with our contractors." Tony continued to list subcontractors and sub-subcontractors on the far sides of the board, drawing circles around various groups and connecting lines. The board was beginning to look very messy; Tony's handwriting grew more crabbed. "You get the picture. This is really complex stuff. There are a million details to consider. Even narrowing down suppliers in a single unit can't be done overnight."

Jack stared at the board.

"My suggestion, if you really want to do something like this," Tony said, "is to go slow. Start with some low-hanging fruit that won't have a huge impact on existing operations. We could begin with low-level IT functions, for example. Get a few quick wins. Then we can move up because we will have shown that the concept works."

Tony really does know what he's talking about, Jack thought. "Tell you what, Tony," he said. "I'd like you, Margie, and the other unit heads to meet individually with me and Robert Dodds for an operations review. I think we need our CFO to help us sort through all this fine detail."

Butting Heads

At her review, Margie explained to Jack and Robert how her unit's fabric supplier network functioned. As she began to walk through the costs, Robert interrupted her.

"Why on earth does it still take almost a year to get something from design to market, even with all the investments we've made in IT?" he asked.

"We use the best-of-breed suppliers for everything," Margie replied sharply, "and each supplier uses its own best-of-breed suppliers. This means we have a deep supply chain. So the designs are great, and the manufacturing quality is there. But these guys all have many other companies competing for their time, and the handoff can be slow."

When Robert pressed her on the high cost of airfreight for her unit, she lost her temper.

"Excuse me, Robert, but I find it a bit odd to be quizzed by you on the costs of airfreight. I have 20 years of experience with this stuff. It's my area of expertise. Our forecasts may be a little off, but they are the best that can be done with a 50-week lead time – which is inevitable if you want to keep our quality as high as it is. Honestly, I wouldn't think of asking you how to put together an annual report. Why are we wasting time on this?"

"Sorry, Margie. I'm just doing my job."

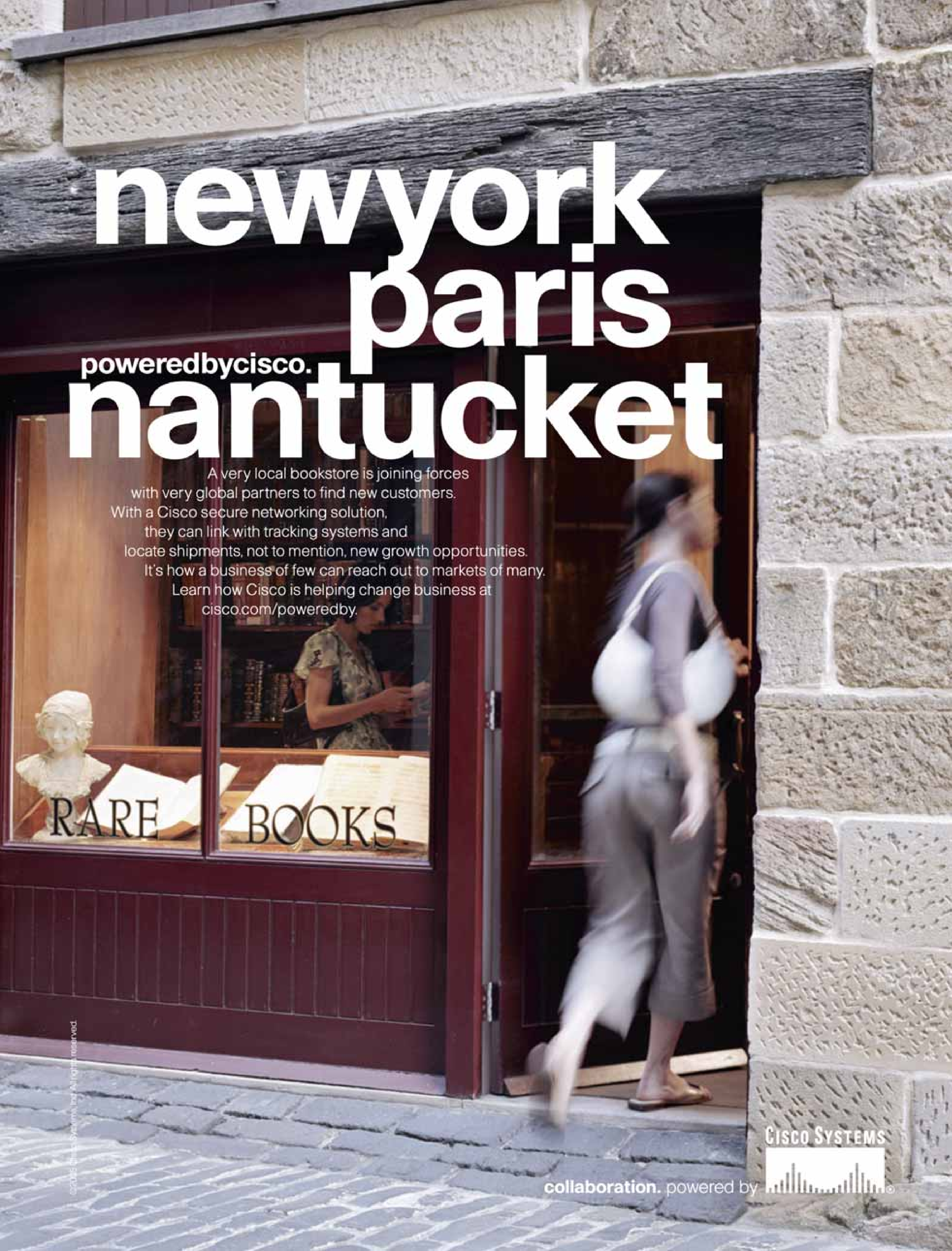
"No, you're not. You're doing mine."

"OK," Jack said soothingly. "I think we've spent enough time on this for today. Margie's made her point, Robert. Let's continue this some other time."

As Margie marched out, Robert said to Jack, "They all have their pathologies. When you add them all up, they're not only costing us a lot of money – they may be putting the future of this company at risk."

What kind of leadership will get Voici's units to pull together?

• Four commentators offer expert advice beginning on page 46.



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Shakeel Mozaffar (shakeel_mozaffar@ici.com) is the group vice president of Global Supply Chain at ICI in London.

Jack Emmons is wise to ask for the assistance of a supply chain czar, and Ravi Chandry could definitely help move Voici Brands into the future. But to succeed, Ravi will need to align the "three p's" – the people, the processes, and the programs.

Let me start with the people. The label I would use for the unit heads' mind-set, which is very common in large, decentralized organizations, is another set of p's – the passionate pursuit of parochial protectionism. Ravi is correct in saying that he would need unequivocal support from the top to give the units' supply chains an overhaul, and Jack has to help him navigate the organizational obstacles. But Ravi needs more than the support of the CEO; he must also have the full endorsement of the board. Without visible board support, the Rottweiler will be toothless.

The board must review, debate, and sanction the supply chain strategy in order to legitimize Ravi's authority in the eyes of all stakeholders. The blessing of the board ensures lockstep alignment between the supply chain strategy and the overall business direction of the company. Additionally, the board's input and guidance will help Ravi reach key milestones on time and on budget. (Once the board buys in, the company should consider instituting a formal communications program to promote the initiative internally so that it gains traction on all levels.)

If the board endorses his appointment, Ravi must clearly understand the supply chain processes in place before he tries to fix them. As he points out, the prerequisite for improvement is measurement. In companies that have highly effective supply chain management, there is no such thing as overmeasuring. Ravi and the other top managers must make reliable data gathering and measurement of the company's current performance a priority. It sounds as if Voici has made a big investment in IT, but it likely needs to invest even more. For example, the company may want its salespeople in the retail stores to use handheld computers to send sales data in real time to the inventory and production systems. That way, the right information gets to the right people at the right time, and it becomes both measurable and transparent. In addition, Voici should conduct a strict and comprehensive IT review and work hard to integrate its systems. Inventory management needs to coordinate with the people in manufacturing, logistics, planning, and financial reporting, for instance.

Once management understands precisely what it costs to put a skirt on a store rack, the company can begin trimming the excess from its supply chain. This is the program implementation phase, the goal of which is to narrow down the supplier base to a handful of strategically chosen, highly reliable vendors. Voici will have to cut out the smaller shops and move to larger service and materials providers like the supply chain city in Shanghai. Instead of working with a local trucking firm, for example, the company should choose a global logistics supplier like UPS. Jack, Ravi, and the business unit heads need to sit down and decide which contracts to renegotiate and which ones to get out of altogether. Tony Rini is correct in saying that it's best to start with the low-hanging fruit; weeding out the smaller suppliers first is the way to go.

How long will all this take? If Jack is successful in convincing not only the unit heads but all Voici employees that there is no other choice, the company may be able to realize significant cost savings in three to five years. I would venture to guess that it might take the company that long to meet its goals and catch up to Marquise. That may sound like a long time to endure the painful process of reengineering the company, but the pain will be worth it.

Ravi needs more than the support of the CEO; he must also have the full endorsement of the board. Without that, the Rottweiler will be toothless.

WENDY WRAY

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***Robert W. Moffat, Jr.,** (moffat@us.ibm.com) is the senior vice president of Integrated Supply Chain at IBM in Armonk, New York.*

My advice to Jack is to ask Tony to run the integrated supply chain operation while running Harry and Sally at the same time. Tony is already trusted by his peers; he understands their pain points. By putting a unit head like Tony in charge of supply chain operations, Jack also ensures that the focus remains solidly on the people who buy Voici Brands' products, not just on reducing cycle times and so on.

To illustrate, allow me to describe how we integrated the supply chain in IBM. Prior to 2002, each line of business had its own supply chain. I was running three of IBM's businesses: personal computers, printing systems, and retail store solutions. In 2001, Sam Palmisano, then our COO, began talking with the unit heads about the need to integrate the supply chain. When he first approached us with the idea at a meeting, I thought, to use Jack's words, "Over my dead body." I knew how to run my businesses' supply chains. I was convinced that if some staff functionary at headquarters tried to take them away from me, my businesses would fall apart. I didn't want to have to answer to someone who was all about shortening cycle times; I was concerned about responding to my customers. I made my concerns known to the group.

A few days later, Sam told me not only that he had decided to consolidate our supply chains but also that he was putting me in charge–without relieving me of running the three lines of business. I was very skeptical, but I took on the new role, making sure I put extremely capable executives in place to help run the businesses as well as the different functions of the supply chain.

I knew that the heads of IBM's other units had many of the concerns I did about integrating the supply chain. Fortunately, because I was also a business line manager, they didn't see me as the supply chain guy; they knew I had to deal with the same day-to-day challenges they did. So they were willing to give me the benefit of the doubt.

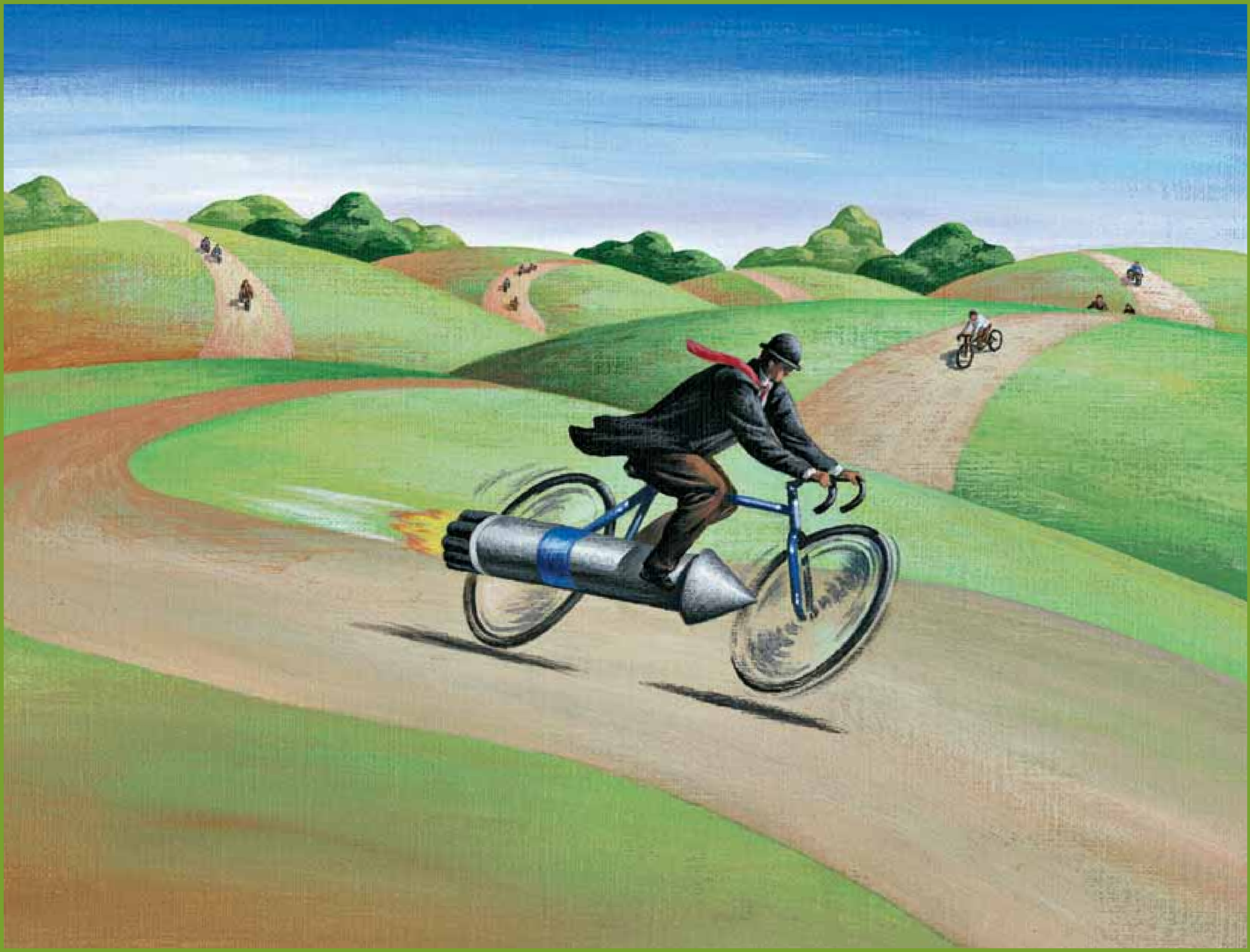
The tough part was getting people from different areas of the supply chain to come together. I remember one big meeting (shortly after the integrated supply chain organization was formed) where birds of a feather really flocked together. Procurement people from one site had their own table; procurement people from another site had theirs. The same was true for every function in the supply chain. We were integrated on paper only.

So I presented a challenge: Let's find a way to save a billion dollars by cutting redundancies. One suggestion was to look at our contracts with suppliers. For example, we had dozens of individual contracts with one supplier in Korea – and none of them were coordinated. In the end, we formed a number of enterprise service–level agreements for better cross-IBM pricing and reduced the number of suppliers by more than half.

By putting a unit head like Tony in charge of supply chain operations, Jack would keep the focus on the people who buy Voici's products.

Eventually, eliminating such redundancies helped us smooth out operations. The first year, the integrated supply chain reduced overall costs by $5.6 billion. By the end of the second year, IBM's inventory was the lowest it had been in 20 years. Over the past three years, we have saved the corporation roughly $20 billion. Now that IBM is a service company, we're applying a lot of the principles we've honed in our hardware supply chain to improve our service supply chain.

Tony will quickly understand the much bigger picture of Voici's businesses and thus make decisions that benefit the company in the long run. It won't be long before the unit managers notice big improvements.



Jack can't afford to take a slow, incremental approach to change. There is a burning platform – he has to realize he's standing on it and quickly extinguish the fire.

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I agree with Ravi. Voici Brands is in trouble, and Jack can't afford to take a slow, incremental approach to change. There is a burning platform – Jack has to realize he's standing on it and quickly extinguish the fire. Otherwise, Voici could go out of business.

Jack must make everyone aware that this is a top priority and that business as usual is no longer acceptable. As a first step, he should establish a high bar and clear targets for performance. Reducing the company's supply chain costs by 20% to 25% over the next 18 to 24 months would be a good start. But Voici's problems are not just about cost. Marquise's time to market is six times shorter than Voici's. And last year, late delivery in the Jacquie line meant lost sales and deep markdowns. So improving responsiveness may be just as important as cutting expenses. No matter how the priorities are set, the goals need to match the strategies for each of the company's businesses.

Second, Jack needs to select a leader to drive the changes. I would not ask Tony to take on this role: That would be like putting your best cost accountant in charge of innovation. Bringing in a complete outsider like Ravi to fill a new organizational role would be risky, too. He might take too long to get up to speed or else jump in, make mistakes, and get booted before he has a chance to succeed. In my experience with similar change initiatives in short time frames at other companies, results drive the organization, not the other way around. In other words, Jack's time would be better spent driving for results that excite the organization to accept a new model rather than designing an acceptable model and convincing the organization it will produce results in the future.

Jack should think about how to use Margie Rosen. She seems to command the most respect (or fear) throughout the organization, and she is the one who is most unhappy. Jack can put her in charge of a steering committee that drives the initiative. That way, she has a stake in helping the mother ship make the necessary changes, and she can make sure the needs of her unit are fairly considered. Jack can also offer her the support of an expert such as Ravi, who might be hired as a consultant, at least in the beginning. Once the initiative starts generating successes and the unit heads offer ideas on how to succeed over the long term, Jack can install Ravi as the supply chain head. Essentially, it's a try-before-you-buy approach.

Throughout, Jack will have to clear other roadblocks that are bound to be placed in his way. The resistance will range from explicit refusal to participate to more passive-aggressive behavior – for instance, people saying they are on board and even reluctantly allocating resources to the project but, in the end, trying to torpedo any proposed changes. A common excuse for inaction is "We tried that already." Often, this dismisses suppliers or approaches that failed in the distant past but that may work in current circumstances.

One way to approach possible blockers is to enlist them as sponsors or "champions" of parts of the program. It's also a good idea to seed Margie's committee with at least a couple of the other business unit heads. And Jack should give the units motivation to succeed. For example, I agree that he could let each one reinvest half of its cost savings into growing its own business, as its unit head sees fit, and deliver the rest to corporate to improve profits. This would lessen resistance in the beginning and build momentum as results came in, creating an environment more open to change.

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***Nick LaHowchic** (nlahowchic @limitedbrands.com) is the executive vice president of Limited Brands in Columbus, Ohio, and the president and CEO of Limited Logistics Services, an internal service subsidiary.*

Jack is right to want to cut the fat from Voici's supply chains, but intimidating the unit heads with a Rottweiler is not the way to do it. As far as I can tell, Voici Brands is still a healthy company, although it may have clouds on the horizon. Jack needs to think beyond raw economics and saving costs. He should consider how world-class supply chain services (SCS) could be used to accelerate profitable growth. The best way to begin is to make the business heads active and enthusiastic partners in Voici Brands' overall vision of success. The person in charge of the SCS organization will not only need to be a persuasive salesperson but will also have to deliver quickly on promises made.

I know this because my own company, Limited Brands, has undergone the kind of transition Jack is thinking about. A number of years ago, Limited Brands comprised 13 different lines of business. Each unit had its own people, processes, and technologies for logistics, compliance, procurement, and so on. My division, Limited Logistics Services, was designed to bring Limited Brands' entire SCS together.

Like any internal service organization, we had to sell our value-added services to the unit heads. We met with each of them to help augment their profit-growth plans with supply chain improvements. Our goal was to demonstrate that an enterprise service organization would be more competitive than individual support organizations with separate external suppliers. As part of our relationship-building effort, we developed a detailed customer service agreement for each unit. The agreements described the type and level of service we would provide in every area – transportation, supply chain engineering, regulatory and quality compliance, strategic procurement, and so on – as well as the roles that we and the units themselves would play in achieving performance targets. These agreements demonstrated our commitment to align our objectives with those of the units and to set and strive for, with the customers' partnership, stretch targets that directly supported each unit's objectives.

Jack should consider how world-class supply chain services could be used to accelerate profitable growth.

The unit heads could not live on promises alone, so we had to produce some early wins. We undertook several initiatives that could be launched relatively quickly and that would garner measurable results. For example, we redesigned and installed an enterprise warehouse management system that improved productivity by 20% to 30%. We also reengineered the delivery process so that our 4,000 store locations received products within predefined two-hour windows with 97% reliability – an improvement that got products on the floor faster and reduced selling costs. In the area of strategic procurement, we used best-in-class processes and technology to produce savings in the tens of millions of dollars while achieving better quality. Because we were able to deliver value quickly, business unit leaders became willing partners in consolidating supply chain services.

Where should Jack start? I would advise him to link accelerated profitable growth with changes needed in his SCS. I would also suggest that he ask whomever he puts in charge of the SCS division to become a valued partner to the business units and to do some high-level benchmarking internally and externally. Getting a rough assessment should take no more than four months.

Next, the SCS executive will need to take pains to show that the newly formed supply chain services division is fully supportive of, and aligns itself closely with, business unit objectives. By making information as transparent as possible, holding regular progress meetings, and giving all the credit for success back to the individual units, the supply chain head will build close, good relations across the units. Soon, Voici Brands will become every bit as competitive as it wants to be.

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To order, see page 161.

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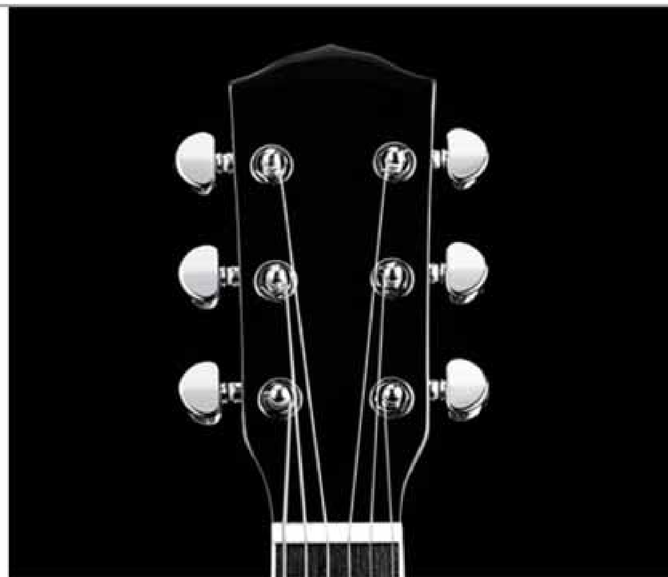

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You distribute it.
You sell it.
And in between, you strive to do the whole process more efficiently and profitably than your competitors.
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The fast-growing Outback restaurant chain has defied industry norms by creating long-term career paths for employees – with sizzling results.

A Stake in the Business

by Chris T. Sullivan

When I and three friends opened the first Outback Steakhouse in March 1988, in Tampa, Florida, we hoped it would be successful enough to spawn a few more nearby, and perhaps some other kinds of restaurants as well. Since then, our chain of Australia-themed restaurants has grown – to some 900 locations and counting – and we've invested in another 300 or so concept restaurants that operate from under our corporate umbrella. Growth like that doesn't happen accidentally, but it certainly wasn't part of the original plan. We'd all started at the bottom of various restaurant chains, so we knew how grueling the business could be. We thought that if we had a little equity, unlike most chain-restaurant operators, we'd be able to run a profitable business and still have time to play golf and generally enjoy life on the shores of Tampa Bay. Besides, we didn't see how we could ensure that things would be done the way we wanted if Outback grew very large. But before long, colleagues from other chains where we'd worked were bidding to open Outbacks of their own.

Today, Outback Steakhouse Incorporated (OSI) is fiercely growth oriented. In 2004 alone, we added about 120 restaurants. For most chains, growth like that can be a mortal threat to cohesiveness. For our company, it's the opposite: OSI grows at the pace it does because if it didn't it would become unglued – but not because Wall Street would punish the company or because customers wouldn't be able to get through the doors of our restaurants. Our growth allows us to keep the promises we've made to our employees, who count on being given the same opportunities the founders themselves have had. We tell

LOU BEACH

them they can make a career within Outback and its family of brands – Bonefish Grill, Carrabba's Italian Grill, Cheeseburger in Paradise, Fleming's Prime Steakhouse & Wine Bar, Lee Roy Selmon's, Paul Lee's Chinese Kitchen, and Roy's. Giving them good working conditions, so they'll want to stay, and opportunities to become owners themselves, if they so desire, has proved to be good business. If the burnout rate is low, we figure, the burn rate (whether of customers or steaks) will be low as well. The resulting longevity of Outbackers enables the company's growth; and the company's growth in turn allows us to reward employees' loyalty and creates room for the advancement we've promised.

How did a 17-year-old company produce 20.1% sales growth last year while increasing its workforce by 15.9% without losing focus and control? By creating an organizational model in which managers in the field make most of the decisions, garner the rewards, and live with the consequences. Almost all of these managers have come up through Outback's ranks; they've done every front-of-the-house and back-of-the-house job there is. They've taught those jobs to others, and they've had instilled in them our "principles and beliefs" (P&Bs). As these managers move on to a Carrabba's or a Roy's or another restaurant in the OSI portfolio of brands, they bring their understanding of Outback's core values and practices with them. (Paul Avery, who started at Outback in 1989 as a store manager, has carried the P&Bs all the way into the COO position.)

So long as OSI continues to identify, develop, and promote the right talent, it's unlikely that even the furthest reaches of the company will drift away from the standards established by the founders; all four of us are still actively involved in the company. And so long as OSI keeps moving into new regions and concepts, it should have no trouble attracting and retaining a sufficient number of dedicated and ambitious homegrown managers.

***Chris T. Sullivan** (chrissullivan@outback.com) is a founder, the former CEO, and the chairman of Tampa, Florida–based Outback Steakhouse Incorporated.*

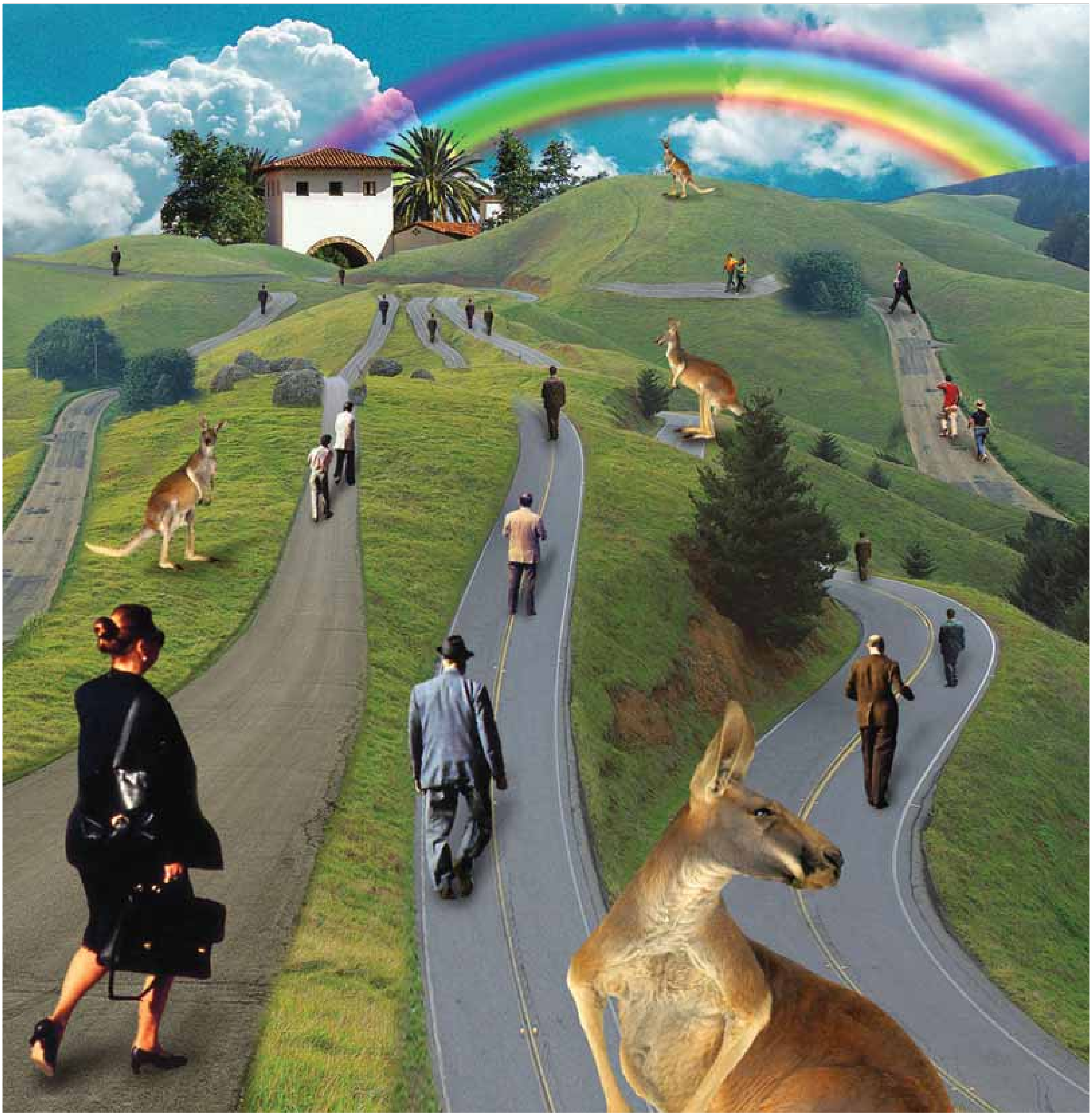
Preventing Wobble

"Wobble" is the term we use to describe what began to happen in the 1990s, when we reached 20 stores. The original foursome, Americans all – Bob Basham, our former longtime chief operating officer and now vice chairman; Tim Gannon, our resident chef and senior vice president; Trudy Cooper, our decor guru and vice president of training; and I – felt the business getting away from us. New hires were arriving in droves, bringing with them lots of experience but also many bad habits they'd learned at other chains. I asked a friend of mine, Tom DeCotiis, a management consultant based in Colorado Springs at the time, to develop some employee testing and training materials for us. He did that but also launched us on a nine-month inquiry into our core beliefs. We knew we believed in putting people first. But we had to acknowledge there were several categories of them – suppliers, partners (the men and women who ran the restaurants and the regional operations), customers, employees, and the community. We decided that none of these constituencies would take precedence over the others, not even customers. We figured that if all the other groups were served to their satisfaction, inevitably the customers would be, too.

We now had a company constitution, which we began imparting to our restaurant managers, but it wasn't fully ratified. We left it up to the managers to decide at what level to adopt our principles and beliefs, such as being "tough on results but kind with people" and "putting quality ahead of cost." We didn't want to necessarily impose these tenets on the managers; we had confidence in them and believed they knew better than the handful of us at headquarters how to run their businesses.

What resulted was an inadvertent but controlled experiment. In 1993, we conducted a poll; we asked our employees to identify on a six-point scale how strongly they agreed or disagreed that Outback's principles and beliefs were practiced in their particular restaurants. Interestingly, the turnover rate of the hourly employees in the group most strongly agreeing that the P&Bs were their stores' guiding ethos was half what it was in the group most strongly disagreeing. Five times as many customers of the strongly agreeing group said they were likely to return. And at the strongly agreeing group's restaurants, revenues were 8.9% higher, cash flow was 26% higher, and pretax profit was 48% higher. The experiment had proved what had been until then only a matter of our personal convictions. Needless to say, it is now mandatory for Outback managers to follow our principles and beliefs.

Although the P&Bs themselves are mandatory, one of the most important of them is "No rules, just right." Though it's meant as a promise to our customers – if they want their steaks cut into 30 pieces, we'll do it for them – it's also an attitude that pervades the organization. Almost all of our innovations bubble up from the individual restaurants, often originating with our servers or kitchen staffers. They'll suggest an idea to the restaurant manager, who may adopt it on an experimental basis. If the recommended menu or process change clicks, the lead manager – whom we call the "managing partner" – communicates the idea to his or her regional manager, who is known as the "joint venture partner" (JVP). The JVP oversees the restaurants in an area or region – usually ten to 20 sites – and will ask them to try out the idea. If it involves food, for example, it might be referred to our corporate food technology department for perfecting. If the suggested change meets company standards, videos and other materials showing how to implement it are distributed to the other JVPs. Each is free to take it up or not. In most cases, buy in from the managing partners has to be close to universal before an innovation becomes a policy. Our "curbside takeaway" service, which I'll describe later, emerged in just this way.



Early in our history, we instituted a custom we call "the walkabout," which takes place ten times a year. Sometime during every manager's tenure, he or she is invited to Tampa to tour the offices and meet with the four founders.

The terms "managing partner" and "joint venture partner" aren't symptoms of title inflation. They straightforwardly describe people's roles and relationships to the organization. All managing partners, most of whom start as hourly employees, must invest $25,000 of their own money–not because Outback needs the capital but because their financial contributions make them committed investors in the businesses they'll be running. They must also sign a five-year contract, and they are granted roughly 1,000 shares of restricted stock, which vest only at the end of their contracts. In return, managing partners can keep 10% of the cash flow their restaurants generate each year. The idea is to ensure that at the end of five years each of them will have stock worth around $100,000. With annual sales at most sites exceeding $3 million, managing partners typically earn more than $120,000 a year in total compensation. At the end of the five years, successful managers – about 95% of them succeed – are invited to re-up with the same restaurant or to manage a different one, either an Outback or one of our other restaurant concepts.

Outback's JVPs, who number around 60, must invest $50,000, which entitles them to 10% of the cash flow of all the restaurants they oversee after the partners have received their 10%. Whereas the managing partners focus on operations and community relations, the JVPs focus on monitoring performance, finding and developing new locations, controlling quality, and identifying and developing new managers, managing partners, and JVPs like themselves. No matter how strong their financial results, neither managing partners nor JVPs get to move or expand unless they have identified and developed lower-level managers deserving promotion. Although we're a company with more than 80,000 employees, the JVPs are the only management layer between the six operations executives at headquarters and the managing partners at the individual restaurants.

The JVPs and the managing partners are, in effect, our HR department; except for a few administrative people at headquarters who interact with third-party payroll and insurance providers, we have no other. That's because we want our managers to live daily with the consequences of their hiring decisions – and to keep those consequences in mind when they're evaluating candidates. After all, a bad dishwasher can make everyone else's life pretty miserable. Living with the people they've hired also lets our partners become familiar with the employees' problems as well as their aspirations. They're not going to ask someone who is working her way through college to cover four or more shifts in a week. And if a manager's business is suffering, we expect his JVP to know whether problems in his personal life are the reason. Sometimes we'll bring in a comanaging partner until the problems straighten themselves out. Mostly they do. Though, from time to time, probation is imposed on underperforming managing partners by JVPs and the operations executives, there's no trial period for new employees; we want them to think of themselves as Outbackers from their first day on the job.

Managing Turnover

There are three kinds of turnover in the restaurant business – customer, employee, and table. Most restaurant chains worry about the first, resign themselves to the second, and encourage the third. At Outback, it's not as straightforward as that; we believe the rates of all three are integrally related. Specifically, our management model and approach reflect the importance we place on fighting employee turnover. One of our catchphrases is "fully staffed, fully trained." You can't be either of those things if every restaurant is a revolving door. Besides, customers like to see a familiar face.

One of our catchphrases is "fully staffed, fully trained." You can't be either of those things if every restaurant is a revolving door.

Restaurant work can be stressful. The better the staffers, the more intent they will be on doing things right – and the more frustrated they will become when the facilities and tools they've been given get in the way, whether the problem is dull knives or not enough burners. Having seen firsthand at the Steak and Ale chain how demanding it was for small kitchens to handle expanded menus, Bob Basham insisted on making all of our kitchens at least 2,500 square feet and keeping lots of cool air flowing through them, despite the cost. (Bob, Tim, and I are all S&A alumni.) The kitchens occupy half of the typical Outback restaurant's floor plan – space that other chains allocate to revenue-producing tables. But we wanted to offer a bigger menu than the typical casual restaurant did in the 1980s, so we knew we would have to give the cooks and prep people the space to pull it off.

Likewise, we never assign our servers to cover more than three tables; the industry standard is five or six. Because Outback is a casual steakhouse, falling somewhere between Morton's and Ponderosa, a wide range of customers choose to dine with us on a variety of occasions. Are the guests racing to make it to a game on time? Or are they celebrating a promotion? It has to be the customer who sets the pace for the meal, not the server or the kitchen staff. But for that to happen, our servers need time to figure out the mood and expectations of a given table on a given evening, the kitchen has to be well-enough staffed and equipped to turn around orders without delay, and the recipes the kitchen is given to execute can't be too complicated. We test for judgment at the point of hiring, but servers can lose it pretty quickly if they are given too many tables to attend to.

We think that employees who are not overstressed stay in their jobs longer than those who are; that employees who stay have time to master their jobs, become familiar with their regular customers' preferences, and learn to operate as teams; that the combination of mastery, memory, and calm is more likely to afford customers themselves a relaxing, enjoyable experience; and that diners who are not hustled through their meals are more likely to come back. In short, low employee turnover leads to well-paced table turnover, which ultimately leads to low customer turnover.

No Lunch?

Another good illustration of the mutually reinforcing nature of Outback's policies is our position on lunch. Almost without exception, we don't serve it. Most chains do, on the theory that idle facilities are a waste of capital. But that theory ignores many of the hidden costs of serving both lunch and dinner. To begin with, a restaurant manager who has to oversee two shifts can't avoid working an 80-hour week, making it impossible for him or her to maintain any semblance of family life or any other kind of life outside of work. People who work those hours eventually quit and become frazzled and less productive before they do. To solve that problem, we could hire comanagers for each store, but then we'd have twice as many to replace when they left. Of course, most would stay, creating a new set of problems. A doubling of managers would not produce a doubling of opportunities within the organization, and so the managers would find that the career tracks they'd been promised had become dead ends.

By the same token, servers who work two meals in one day will arrive at the later, more important one already tired. Dinner is the restaurant industry's equivalent of showtime, and it's when our performers need to be at their freshest. Hiring the extra 30 people per restaurant necessary to serve both lunches and dinners would be far more trouble than it's worth, given the hourly employees' rate of turnover and the inevitably chaotic changeovers from one shift to the next. It makes no sense for the server to be relaxed when the customer is in a hurry and for the server to be frazzled just when the customer wants to relax.

The value of quality doesn't apply only to our people. Food that has been prepared early in the day will no longer be at its peak by the time dinner comes around. We make just about everything at Outback from scratch, including the croutons, and we insist on authentic ingredients – parmesan cheese from Parma, Italy, and olive oil from Tuscany. We conduct eight food meetings per year, led by Tim Gannon and his team of food techs, and 100% of our restaurants participate. It would be self-defeating for us to go to those lengths and then serve wilted lettuce or congealed soup.

Most Outback restaurants are located in suburbia, next to essentially residential neighborhoods. It's businesspeople, however, who take their lunch in restaurants. In order to do a good lunch business, we'd have to situate our stores in areas where rents are much higher, which would offset the incremental revenues we'd gain by adding lunch service. Also, lunchtime tabs are usually lower than dinner tabs, partly because people don't eat as much steak in the middle of the workday as they do in the evening; nor do they consume as many adult beverages, restaurants' major source of profit. Due to the emphasis we place on our food, we make only 13% of our revenues from alcohol, a low number for the industry but still significant.

(Our preference for residential locations also helps explain why there are relatively few Outbacks in places like New York and Los Angeles and, ironically, only two in Australia, where most of the population is concentrated in the big cities. In reality, the suburbs are our outback.)

Fostering Connections

Besides "no rules," another important principle for us is to make connections – internally, with our colleagues, and externally, with our customers. For instance, Trudy Cooper was once a schoolteacher, and so she's thought a lot about how to relate to people who aren't at eye level, whether they're sitting at a classroom desk or a restaurant table. The solution for our servers has been to lean over. Some actually sit down in the booths next to customers when taking their orders. Sometimes the practice generates complaints from customers who would prefer that the servers keep their distance. We could easily forbid the practice, but we trust our servers and encourage them to be themselves.

Not every situation calls for face-to-face communication. Take our reservations policy – as a casual dining chain, we don't want to adopt one. We want people to come by on an impulse; what's more, the typical bill, about $20 per person, is not large enough to absorb the expense of tables standing empty while parties straggle in. So it's not unusual for people to have to wait an hour or more to be seated at an Outback. We try to make the waits in the bar area fun, often giving away food for the duration. Still, some fraction of our customers stopped coming as often as they would have otherwise. So we adopted a system under which customers calling from home are told roughly how long a wait to expect and given a place in line. By the time they arrive, they should be facing a wait of only a few minutes. We give them pagers that vibrate or emit light when a table opens up. The pagers definitely beat those grating announcements over a PA system. Some people might say that by shortening the wait time we forfeit food and drink sales. If we looked at wait times that way, our customers would sense it and be turned off.

Connections don't occur only between people. Just as meaningful are people's feelings of connection to our food. "People" includes the kitchen staff. Many of them grew up eating in chain restaurants or in homes where Mom resorted to the microwave, not the stove. Handling fresh ingredients gives them a newfound respect for food and an awareness of where it comes from. Giving them responsibility for preparing it allows them to take pride in their work. Our recipes use 17 spices and herbs. They carry a strong Creole

Low employee turnover leads to well-paced table turnover, which ultimately leads to low customer turnover.

flavor, a hybrid of French, Spanish, Caribbean, Indian, African, and Southern influences. Maybe that's why our dishes connect with so many different kinds of customers. Keeping familiar items on the menu, instead of overwhelming customers with specials, also helps. In 17 years, we've added only three appetizers.

We also want to foster connections between our managing partners and Outback's heritage. Early in our history, we instituted a custom we call "the walkabout," which takes place ten times a year. Sometime during every manager's tenure, he or she is invited to Tampa to tour the offices and meet with the four founders, with a president of one of the other branded chains, and with Tom DeCotiis, the custodian of our culture, who conducts a P&B session. Sometimes veteran partners are brought back, either to receive a refresher or to be held up as role models. The day ends with dinner at the home of one of the founders. In the past 15 years, only one founder, just once, has missed a walkabout.

Growth, Piecemeal and Global

Growth has two dimensions: revenues per restaurant and number of restaurants. Each managing partner keeps track of capacity and demand in his or her restaurant, just as each JVP stays alert to expansion possibilities in his or her region. In that sense, restaurant growth is a microcosm of chain growth. Take the matter of those long waits – annoying to some customers, to be sure, but an unmistakable sign to Outbackers of unmet demand.

Managing partners tried to cope with it by adding chairs to tables and tables to patios. A particularly entrepreneurial manager in Orlando realized that the physical limit on the number of seats we could fit in one restaurant was artificially stunting our growth. Though the founders assumed food prepared "just right" was our chief selling point, our curbside takeaway business, which began in that Orlando restaurant, now represents more than 10% of Outback's total sales – a bigger figure than it seems, considering takeout sales never include alcohol. Takeaway and other measures have allowed restaurants that were designed to do $3 million in business to collect $5 million.

When a takeaway customer places an order over the phone, we ask him to describe the car he'll be driving so that, as soon as it comes into view, one of our staffers is on his way out the door with the order. We've created small areas in the restaurants to handle the processing of orders. But the effective expansion beyond the dining area that takeout represents would never have been possible if we didn't have those big kitchens. When we expanded into Japan, someone tried to persuade us to shrink them, since space there was at such a premium; ultimately, we didn't. The fact is that in smaller markets you do most of your business for the week on Friday and Saturday nights. The big kitchens are needed to handle periods of peak demand. You don't make money in this business by tightening up; you make money by finding ways to expand.

Do unto others – in particular, your employees – as you would have them do unto others – namely, your customers and suppliers.

As the Outback restaurants started to reach the saturation point in some markets, we began to see the wisdom of investing in newer restaurant themes that will take longer to plateau. The first thing we look for in an existing business, of course, is lines out the door. But we don't take an equity position or a share of the profits unless we are convinced that the restaurants are fully staffed, that the people are fully trained, and that the company puts people first. We'll look for economies of scale in purchasing and so forth, provide the concept with the capital to expand, and recommend executive talent in some cases. Beyond that we don't necessarily go. Why would we refrain from imposing on our newer concepts all the things that have worked so well at Outback? Probably because their strength lies in their faithfulness to their founders' initial vision, and it would be a mistake to tamper with that. With the exception of Jimmy Buffett's Cheeseburger in Paradise and the Selmon family's Lee Roy Selmon's, which were developed collaboratively, the founders stay put to run things and maintain the consistency of the concepts they originated. After all, that's what Bob, Tim, Trudy, and I did. (One of those founders, Fleming's Bill Allen, is OSI's CEO.)

Outback Steakhouses themselves aren't standing still. They're in all 50 of the United States and in 21 foreign countries. If Bonefish Grill and Paul Lee's, which charge roughly the same as Outback does for a meal, take some of Outback's business, that's all right – better for them to get it than an unaffiliated competitor. This year we'll be adding 16 to 19 restaurants overseas, predominantly in Korea and Brazil, which, like the United States, have growing middle classes with reasonable disposable incomes.

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OSI puts great store in the perks it gives its employees: profit sharing for hourly employees; health care premiums adjusted to wage levels; good working conditions; and a future. We do it because we subscribe to our special variant on the golden rule: Do unto others – in particular, your employees – as you would have them do unto others – namely, your customers and suppliers. In the restaurant industry, concepts are easily copied but values only with difficulty because they have to be lived. How did we know these things when we started Outback? It definitely helped that we'd all been waiters, cooks, dishwashers, and managers ourselves.

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To order, see page 161.

MARK ANDERSON

"What's that boy?! A paradigm shift?!"


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Red-breasted Snipe

LESSUS

Few jobs in business are as exciting as that of adviser to the CEO. But those who sit at the right hand of power learn that the influence game has to be played by the rules. **CONFESSIONS OF A TRUSTED COUNSELOR** by David A. Nadler

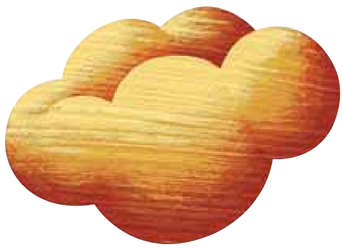
ADVISING CEOS SOUNDS LIKE a dream job. The corner office is the seat of power and the center of action, home to some of the smartest, most charismatic men and women in business. Working side by side with the highest-caliber leaders on issues affecting tens of thousands of people, you have an unparalleled opportunity to make a real and lasting difference.

But if counseling CEOs is a heady experience, it can also be perplexing and perilous. At times, the questions you must ask yourself–about your own motivations, loyalty, and behavior–are thornier than the organizational problems you tackle with clients. I know, because I have been asking myself such questions for a quarter century while advising the chiefs of more than two dozen corporations. In that time, I have experienced or observed hazards ranging from political banana peels to strategic Burmese tiger traps.

The role of CEO adviser is unique because the role of the CEO is unique. All advisers have symbiotic relationships with their clients, breathing the same air, grappling with the same challenges. And in business, no air is as rarefied, and no challenges are as complex, as at the top. In the past five years, corporate chiefs have grown increasingly beleaguered under pressure from boards, investors,

ADAM NIKLEWICZ

> You may know your stuff, but that won't do you any good if you ignore the basic rule of consulting to CEOs: Adviser, know thyself.



special interest groups, the press, politicians, and regulators. But even in the relative calm before this perfect storm, the CEO's job was like no other. Consider these distinctions:

• No one else in the organization is so starved for unbiased information. While CEOs understand in principle that everyone who seeks their attention has an agenda, they don't always know a bias when they see one. In fact, their inside advisers may not recognize their own biases. Those insiders simply describe the view from where they sit without considering the distortions implicit in that perspective.

• No one else so needs to hear hard truths. Yet in the CEO's presence, people are guarded, unwilling to raise difficult topics. Richard Parsons, the CEO of Time Warner, has been on both sides of that dynamic. "For years, Gerry Levin was one of the guys here I was closest to, but there were just certain issues I was reluctant to bring up to him because he was the CEO," Parsons told me. "So I have to assume the same thing is happening with the people who work for me."

• No one else is such a lightning rod for criticism of the business, with all the anger, frustration, and occasionally outright humiliation that such a role entails. The CEO of one embattled health care company said he looked forward to weekends "because I knew I could open the front door in the morning without seeing the *Wall Street Journal* lying there and wouldn't have to explain to my wife and kids why the newspaper was saying all those terrible things about me."

• No one else is the final arbiter in so many vital business decisions and, consequently, so vulnerable to self-doubt. "CEOs are the most insecure people in the world, and anyone who says we aren't is lying," confided one corporate chief – a regular on lists of the nation's top performing CEOs, no less. "Every night, I go to bed asking myself, 'Why do people think I have all the answers?' And every morning I wake up thinking, 'Is today the day they figure out that I don't?'"

• No one else is the subject of so many statements beginning "No one else." Within the company, the CEO has no true peers, no colleagues in whom he can unreservedly confide. "The thing that was the greatest surprise to me in this job," a new CEO once told me, "was the intense and profound loneliness."

For those reasons and others, CEOs sorely need close, long-term relationships with trusted professional advisers. And if you are one of those advisers by profession – a group that includes lawyers, investment bankers, public relations professionals, governance experts, business strategists, and specialty consultants – it's likely that you're eager to fill that role. Operating so close to power can be intoxicating. But you will also face dilemmas that could derail you, your client, or, in extreme circumstances, your client's company.

There are no easy answers; in some cases, there aren't even *good* answers. However, recognizing the pitfalls of consulting to CEOs may help you sidestep them. And understanding a problem's nuances and implications may help you find a solution – if not the perfect fix, at least the best one under the circumstances.

What follow, then, are the six most common dilemmas facing CEO advisers and suggestions for resolving them.

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The perils in the first set are organizational and political. Overcoming them requires a sophisticated understanding of reporting relationships, management processes, and the CEO's role. Missteps in this area can weaken – even irreparably damage – the institution.

The Loyalty Dilemma

Is my ultimate responsibility to the CEO who pays for my services or to the institution that pays for his? When these interests collide, what is my professional obligation?

For CEO advisers, the growing ambiguity around loyalty marks a dramatic change from the past. During the 1980s and early 1990s, my obligations were clear. Those were the days of the imperial CEO: a power unto himself, accountable to no one (except under extreme circumstances). What's more, the CEO and the corporation were

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perceived as being practically synonymous. By helping the CEO who retained my services, I was by extension helping the organization. And if at some point I concluded that the CEO could not or would not take measures I deemed critical to his and the company's success, then the two of us would discuss the problem in private. My job – my only job – was to help him succeed.

Today, shorter CEO tenures, greater board oversight, and more-vocal shareholders have diminished the top leader's power and autonomy. As CEO and company interests diverge, things get complicated, particularly if the CEO consistently chooses to ignore my advice. Then I have to ask myself: If I am getting nowhere with this person, should I persevere in the possibly deluded hope that I can still do some good for the institution? Or am I actually hurting the institution by colluding in the myth that this CEO can somehow succeed?

I faced that situation in the late 1990s while consulting to the CEO of a major technology firm. In a frank conversation with my client, I explained my concern that the company's flashy results masked pervasive, potentially disastrous organizational rot. I cited unsound business strategies, questionable methods for booking sales, and deteriorating morale among the firm's key people. At my persistent urging, the CEO reluctantly appointed a top-level committee of very bright people to investigate my complaints. Several months later, they came back with findings even worse than I had expected.

As the committee presented its report, I saw the CEO's eyes glaze over. He didn't buy it, or he didn't want to buy it. Weeks passed, and he did nothing. Eventually, I had to accept that he would never act. This CEO was steering his company toward a crisis, and I was powerless to stop it. So I told him how I felt: that I was no longer having any impact and it was time to end our relationship. He readily agreed. All the problems uncovered by his task force persisted. Within a year, the company's results cratered, and the CEO was fired.

More vigilant board oversight – while generally desirable – further clouds the adviser's role. I cannot recall having a single substantive conversation with directors about the top leader's performance during my first 20 years consulting to CEOs. Today, such conversations are routine, and I regularly share in-depth feedback about my client with the board, frequently as part of the CEO's regular 360-degree evaluation. To do so, I gather volumes of feedback on his performance from many sources, and in some cases that feedback is highly critical. Then the questions arise: What information am I obligated to share and with whom? Should I err on the side of disclosure or discretion? Should my audience be the entire board or just the lead director and the nominating and governance or compensation committees?

Complicating matters further, it is generally deemed inappropriate – if not downright unprofessional – to go over the head of the person who retained your services. But in the course of my discussions with executives and directors, I may unearth doubts about the CEO's competence or character. In that case, do I have a responsibility to share the information with the board, even if the directors haven't asked about it? Twenty years ago, the answer might well have been no. Today, it is probably yes. Still, it's a question that is much easier to answer in the abstract than in the face of a specific set of extenuating circumstances.

To defuse loyalty issues, I raise them with the CEO at the outset of the relationship rather than wait until I am

sitting across from him with a folder full of potentially explosive information. Enlightened CEOs generally welcome a frank discussion of conflicting interests, taking it as evidence that I understand the new rules of corporate governance.

The Communication Dilemma

How much and what kind of information should I convey between employees and the CEO?

It is one of the great ironies of the adviser role: CEOs listen to you because you are independent, but once employees see that you have the leader's ear, they try to exploit you, compromising the very quality that makes you valuable. Does becoming a backstairs channel for communication do more harm than good?

First, the good. CEOs need to hear the scuttlebutt, but their access to it decreases over time. People talk to them differently. "A CEO loses the ability to be informal," Stan O'Neal, the chairman and CEO of Merrill Lynch, told me. "If you pick up the phone to just gossip, this becomes an event. Any time you ask for information, people start to wonder why you're asking for it, and they anticipate you. Just by asking, you influence the situation. The longer you're in this role, the more isolated you can become. Therefore, it's important to try to find mechanisms to combat the natural course of isolation."

The adviser can be one of those mechanisms. It thus seems logical that the more you know what is on the minds of people in the organization, the more use you are to your client. But here's the harm: Often, what advisers hear is propaganda rather than intelligence. People try to use you to lobby the CEO, particularly when she is mulling promotions or a significant strategic move or a major restructuring that will shift assignments. Falling for such stratagems is a risk every consultant faces. I've learned, over the years, to resist overtures from people who hope to exploit my relationship with the CEO for their own advantage.

More than once, for example, someone two or three levels below the top slot has urged me to recommend that the CEO fire the person's boss. Such arguments often raise my suspicions – less about the executive being criticized than about the motivation and character of the critic. At other times, managers have lobbied me on behalf of their bosses. That happened in the 1980s, when I was consulting to David Kearns, then the CEO at Xerox. One day I received a call from the human resource director for a division run by one of three executives widely viewed as a potential CEO successor. She asked if we could meet for dinner to discuss an important matter. As the meal was served, she launched into an impassioned argument about why Xerox's future rested on her boss's promotion to CEO. It was awkward and inappropriate, and I had to abruptly end the conversation.

Others have found more creative ways to game me. Several years ago, when I was consulting to Roger Ackerman, then the CEO of Corning, an ambitious executive contracted with my company for some work. The project never got off the ground, but this executive kept sending us a check every month while continually postponing the meetings necessary to get started. I finally realized it was a sham; the executive hoped that Roger and I would view him as CEO material if he demonstrated his wisdom by using the same consultants as Roger.

Some managers try to fish for confidential insights. During one assignment, a top executive repeatedly asked me what the CEO had thought of a major presentation he'd made to the board. After refusing (as politely as possible) to answer, I finally said, "Why don't you just ask him yourself?" He, like many senior executives, was evidently worried that the CEO might perceive such a question as a sign of insecurity. I understood but insisted that the CEO's feedback come directly from the CEO, not through me.

Another risk – more of a temptation, really – the consultant faces is becoming a conduit for potentially inaccurate or misleading information he picks up on his own. As I circulate in organizations, I occasionally hear something about a product that's running behind schedule, say, or a leader who's out of touch with her people, and my first instinct is to swing by the CEO's office and pass along the tidbit. But if I did, I'd risk making a mistake I warn clients about: overreacting to isolated facts or events. And if I were to overreact, the CEO would be likely to overreact too. So when I hear something, I do nothing with it for 24 hours. And about 90% of the time, I end up keeping it to myself. At some later date, that bit of information may become part of a larger trend that will merit the CEO's attention. My job is helping my client see the entire puzzle, not rushing upstairs every time I discover a stray piece.

Becoming a prized source of information is an attractive way to demonstrate my worth. But I can never become a tool for weakening or circumventing a company's management processes or reporting relationships. So I refuse to act as a messenger, even if that means I hear fewer messages.

The Assessment Dilemma

Can I share my opinions about individual employees without inappropriately inserting myself into the assessment process and internal politics?

If the CEO values your judgment, sooner or later he will ask for your views on specific people. That is no trivial request. A CEO's most important decisions fall into two categories: big bets on people and big bets on strategy. The people decisions are arguably more important because they heavily influence the strategy decisions. They also

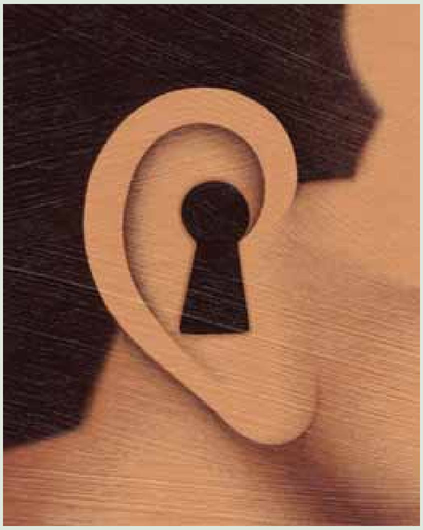
TALK SO THEY'LL LISTEN

Communication is at the heart of all counseling relationships. CEO advisers know that, yet many repeatedly fail to make their points. They ignore the requirements of individual clients and contexts. They talk but don't illuminate.

The following rules for effective communication target CEO counselors, but most apply to anyone trying to build a close advisory relationship.

Use discussions, not decks. I'll often see a consultant marching into the CEO's office with an 86-slide PowerPoint deck, expecting the executive to sit spellbound through a two-hour presentation of how smart the adviser is. But CEOs don't have the time or the disposition to be lectured to. They prefer lively exchanges about big ideas, and they want insights that don't condense neatly into bullet points.

Synthesize, don't dump. CEOs deal in forests that consultants create from many individual trees. You must be ready if your client asks about a particular detail, but, in general, your job is to present a whole that is the coherent sum of many, many parts. For example, a colleague and I recently gave Stan O'Neal at Merrill Lynch the detailed results of a complex organizational assessment we had conducted at his request. After staying up much of the night reading it, he confessed to experiencing some "vertigo." The real value we provided was helping him work through the data to understand the implications and real-world applications to the business.



Understand how the CEO processes information. Whenever I take on a new CEO client, I study his cognitive processes and then tailor my communications to suit them. For example, I learned never to send documents to Xerox's David Kearns before a meeting, because he liked to talk through everything as he absorbed it. By contrast, his successor, Paul Allaire, much preferred to discuss an issue after he'd had a chance to read and thoroughly digest the materials. Different CEOs will also prefer different presentation formats. Ted Brophy, former CEO of GTE, disliked visual depictions and graphical models. A lawyer by training, he wanted to see everything outlined. Russ Lewis, former CEO of the New York Times Company, also started out as a lawyer and was an avid reader. Russ, however, liked ideas presented in graphical formats.

Use the CEO's vocabulary. Just as CEOs have preferred methods for processing information, they also have their own speaking styles. Some are formal – almost courtly – even in private meetings; others sound like longshoremen. Many use language that reflects their industries or professional backgrounds – in engineering, for example, or finance. Although you never want to mimic the CEO's speech patterns, it's a good idea to match your tone to his and to be familiar enough with his areas of expertise that you can understand his references. And at all costs, avoid consultantspeak. "People hate jargon," Henry Schacht, the former CEO of Lucent, told our consultants. "They think you use it to mystify what you do, to make it sound more important and technical than it really is. Just be clear and direct with us."

Talk to the CEO as you would to a colleague, not to your boss. CEO advisers are outside the normal hierarchical chain of command. You are not the CEO's peer, but neither are you an underling. So be direct, relaxed, and respectful, but not deferential. If you talk and act like a subordinate, you'll be treated that way. Always.

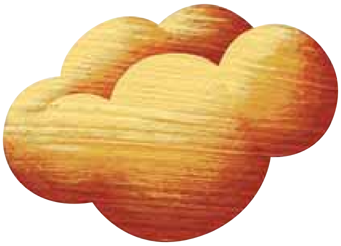
Fit communications to the CEO's calendar. I'm always stunned when I see a consultant send a CEO background material for a meeting to be held the next day. That demonstrates a fundamental ignorance of just how busy the CEO's life is. If I need a client to look at something before we meet, I start working with her assistant more than a week in advance to find a time when she'll actually be able to read it – usually on an airplane. I will then make sure she has the material in good time. The term "last minute" should not exist in your vocabulary.

Just listen. Everyone needs a confidant – particularly CEOs. Every word they say in public and private is parsed for meaning; every expression of doubt, frustration, or depression is construed as a sign of weakness. And while friends and family may offer sympathetic ears, sometimes these leaders need to unload on someone who also understands the business. Be that person. Be the audience with whom they can safely be themselves.

have an enormous impact on individual careers. Once someone has been written off by the top leader, it's time for that person to update the résumé.

CEOs understand the gravity of people issues, which are scrutinized by both insiders and outsiders. They also recognize how hard it is to get the full story, particularly about their top reports. After one CEO removed a very visible top executive, he was "overwhelmed by all the [negative] stuff that came out" about the individual who had left. "I realized that people were much more reticent to share information with me than they had been before I was CEO, particularly information about other people," the client said.

A CEO said: "Do not fall in love with us. The minute you fall in love with us, you lose your value."



Often, a CEO will say something like this to me: "You've been working with us for a while, and you've seen my people in action. Tell me what you think of Doug." Even if I have an opinion, my knowledge of Doug's performance will necessarily be fragmentary (a fact I am obligated to remind the CEO of). So my first response is to turn the question around and ask, "What do *you* think of Doug, and why are you asking me about his performance when you have a lot of data about him from other sources?"

It usually turns out that the CEO isn't fully confident in his own evaluation of Doug. So I help him determine what additional information would make him confident – and how to get it. But sooner or later, the CEO will circle back to the original question. "All that's fine," he will say. "But tell me what *you* think of Doug." At that moment, I have to strap on my skates and head for thin ice.

The situation is riskiest when I believe an executive is so incompetent or disruptive that he ought to be removed from his job. That's what happened at AT&T, where I was helping CEO Bob Allen instill a new set of corporate values. As our work proceeded, I pointed out to Bob that one particular executive, through both his words and actions, was subverting the effort by thumbing his nose at the new values. Yet this man kept getting promoted. If it were my call, I said, I'd fire the guy. But it wasn't my call; and for a variety of legitimate reasons, Bob decided that keeping the executive in place was important to the business. While that wasn't the outcome I'd hoped for, I felt I had fulfilled my responsibility by raising the issue.

In that case, I personally lost nothing. But in another, my advice backfired loudly. Several years ago, a CEO confided to me his concerns about a top executive who was widely viewed as his heir apparent. The client asked me to put my analysis and recommendations regarding this person into a report that he could share with the board. I gave the board a highly critical document, and one director instantly leaked it to the executive in question. What followed was a bloodbath. First, I was fired, along with all of the other consultants from my firm who were working with the company. Then the CEO was pushed out in a palace coup orchestrated by the maligned executive, who assumed the top spot himself. It was among the most frustrating experiences of my career.

Despite that debacle, I believe my evaluation of the executive's performance was accurate. In fact, I have no regrets about any of the recommendations I've made over the years. That is because, on people issues, I always follow three rules: Never rush to judgment. Do not take decisions lightly. And always remember that the consultant's job is to help the client make the right decision, not to make a decision for him.

• • •

The second set of dilemmas concerns the adviser's personal relationships and emotional maturity. Because your ego is at stake, these can be more painful than political problems. Persistent introspection is critical. You may know your stuff, but that won't do you any good if you ignore the basic rule of consulting to CEOs: Adviser, know thyself.

The Overidentification Dilemma

How do I immerse myself in the CEO's view of the world without making it my own?

To help us stay focused on the CEO's perspective, my company routinely invites clients to our annual off-sites. A few years ago, our guest speaker was Russ Lewis, then the CEO of the New York Times Company. When we asked what advice he had for us, Russ didn't hesitate. "Do not fall in love with us," he said. "Our people are smart, they're funny, they're interesting to be around. But the minute you fall in love with us and start thinking we have all the answers, you lose your value. You're not there to be one of us."

That advice is especially pertinent for CEO advisers. To work effectively with a chief executive, you must empathize with her. You must understand her business, speak her language, and see the world through her eyes. Yet you must also provide her with disinterested advice and an independent perspective. How do you balance empathy and objectivity?

Most CEOs believe that either empathy or objectivity will lead to the same conclusion, because, after all, *they are right.* And they believe you will come to understand this once you know what they know. Considering the chief executive's privileged grasp of the big picture, that's a tough argument to counter. Years ago, when I was consulting to Rich McGinn, CEO of Lucent Technologies, he would deflect my criticisms this way: "Yeah, I see what you're saying. But you don't understand what's going on. Let me explain why I did this." Rich could be enormously persuasive.

If you don't push back, however, you're not doing your job. Blunt disagreement rarely works; tactful but probing questions are a better approach. Having followed the CEO's thought process and studied her argument, you are in an excellent position to spot lurking vulnerabilities and avoid asking questions you know she can parry. What information has she not considered? Are there alternate interpretations of the set of circumstances in question? If other people could see the particular problem through her eyes, what issues might still raise concerns? The trick, of course, is to ask these questions without shaking the CEO's confidence that you fully comprehend the complexity of the situation she faces and the nuances that shape her views.

Unfortunately, the adviser's situation, over time, nibbles away at independence and objectivity. The closer you get to the CEO, the more likely you are to share her isolation and, consequently, her views. Making matters more difficult, many CEOs are narcissists who live to be loved. Working a crowd, the CEO won't rest until everyone has fallen under her spell. Closeted with you, her adviser, she focuses her considerable powers of persuasion on *you.* And she won't just want you to agree with her; she will want you to believe in her. It's your job to withstand that extraordinary force, to maintain the necessary balance of engagement and detachment.

If you are part of a team working in the company, your colleagues can provide reality checks. But if you're flying solo, you must stay connected to the outside world and maintain your own independent sources of information. Don't restrict yourself to meeting with the CEO and her closest internal advisers. Instead, speak regularly with people of different minds, ranging from mild doubters to outright dissidents. And when you feel yourself succumbing too easily to an argument, ask yourself this: Are you reacting to what the CEO says or to how eloquently she says it?

A VALUABLE ALLY: THE CONSUMMATE INSIDER

My consulting work often benefits from collaboration with a trusted internal adviser, someone who has known the CEO for a long time and is intimately familiar with the company, its people, and the industry. Insiders grapple with many of the same dilemmas described in this article, but for them the job is harder. How do you speak truth to power when that power signs your one and only paycheck? How do you urge the CEO to make tough decisions that could hurt your friends and colleagues?

The best inside advisers manage to navigate those murky waters while delivering extraordinary value to the CEO. Having observed many of these people in action, I have identified some qualities that the best ones share:

Limited Career Expectations. The most effective internal advisers have already reached the capstones of their careers. Consequently, their advice is untainted by ambition.

Professional Excellence. Whatever the adviser's position – CFO, human resource director, general counsel – she has proved she can do her own job exceptionally well before advising the CEO on how to do his.

Personal Connection. Internal advisers must be very sensitive about when and how to offer advice. They know their CEOs as people, not just as leaders, and can operate in sync with them.

Courage and Candor. Effective inside advisers are not afraid to deliver bad news or unwelcome advice. Their unquestioned integrity and embodiment of company values make the CEO more receptive to their messages.

Good Judgment and Common Sense. Even when internal advisers lack deep knowledge of an issue, their instincts are usually sound. And influential people in the company know that.

Involvement in the Business. Valuable inside advisers do more than just advise. They stay engaged in the business and maintain connections with a variety of people throughout the company.

Appropriate Distance. Like outside advisers, good internal advisers don't become too close to the CEO, even though they may work beside him every day and travel in the same social circles.

Limited Tenure. CEO-adviser relationships require time to develop, and they need personal chemistry. It is exceptionally rare, though not unheard-of, for an internal adviser to sustain that role from one CEO to the next.

The Ego Dilemma

How do I prevent my privileged position from going to my head?

The fact that you are advising chief executives implies substantial professional success. Rookies don't get to play at this level. So your ambition and ego larders are probably well stocked. But as a trusted CEO adviser, you must make sure that nearly all of your work remains invisible. You actually destroy value if you are perceived as the man behind the curtain giving voice to Oz, the Great and Powerful.

Eschewing recognition of your status and credit for your contributions requires considerable restraint. On occasion, while a CEO delivered a speech to thunderous applause, I have sat in the back of the room, remembering how bad the original version was and thinking, "Those are my words. Those are my ideas." But if others in the company suspect your influence, you could lose everything. At best, people will regard you as part of the power structure, someone to be resented or feared. At worst, they'll paint a target on your back.

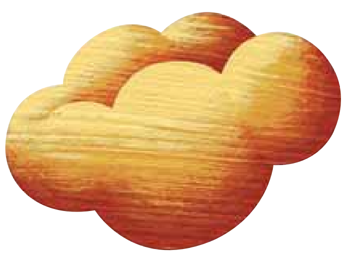
That happened years ago at AT&T, where a consultant (not me this time) was working closely with then-CEO Jim Olson. The consultant flaunted his clout, implying that he personally was responsible for some of the CEO's important decisions. Randy Tobias, who was then vice chairman of AT&T (and afterward CEO of Eli Lilly), later told me he decided it was dangerous for an outsider to wield so much power. He had the consultant removed.

I've observed the ego trap from the other side of the desk, as well. As an executive of the large company that owns our firm, I have had to endure the self-important puffery of consultants working with the CEO on various projects. The worst of them invoke his name repeatedly and always make it sound as though they've just come from a meeting in his office. I itch to shoot back, "I know my own CEO. I don't need you to tell me what he thinks." Their behavior is a constant reminder of what not to do when I'm the consultant.

The simplest treatment for an inflated ego is to self-administer regular doses of humility. Remember that your access to the CEO is a function of your job. It is not a sign of power.

If you're still longing for recognition, find it in another context. Talk about your successes with members of your family (assuming they'll listen). Share your experiences with colleagues – but in moderation, or they won't like you any better than your clients' employees do. Perhaps the best idea is to pursue other activities, such as writing or public speaking, that earn you wider recognition. My solution was to run my own company. I find it easier to advise from the back when I also get a chance to lead from the front.

You destroy value if you are perceived as the man behind the curtain.



The Friendship Dilemma

If the CEO and I like each other personally, can we – should we – become friends?

The final dilemma is the most difficult, because it is the most deeply felt. A successful, long-term advisory relationship with a CEO requires a strong personal connection based on reciprocal trust and respect. In some cases, that connection becomes a friendship.

Of course, it is easier to work with a friend than with someone you actively dislike. On occasions when I felt antipathy toward clients, the work quickly turned to drudgery, and I had trouble summoning the energy to sustain me through meetings. But that has happened rarely. Most of the CEOs I work with are smart, interesting, engaging people whom I like, trust, and respect. I enjoy being around them. And I want them to feel the same way about me.

But wanting it too much can hurt you. I recall one former colleague who, while consulting to a celebrity CEO, misconstrued offhand comments and insignificant incidents to mean that he and his client were becoming best friends. He boasted about their relationship, to the point where he sounded positively delusional. He lost his objectivity, his judgment, and, ultimately, his value to the CEO, who wanted a counselor, not a buddy.

Still, the best long-term partnerships transcend the purely professional. Over time, you and the CEO must map out what I call a "zone of connection" that balances strong personal bonds with strong personal boundaries. I shared such a nuanced relationship with Jamie Houghton, the former CEO of Corning. Jamie and I discovered a mutual interest in sailing when, at one of our early meetings, he showed me pictures of a sailboat he had just purchased. After that, we started every meeting by trading a few pleasantries about our boats or recent sailing trips. We also talked about someday going sailing together. But Jamie and I never went sailing together, and I think both of us knew we never would. Nonetheless, the boat chat allowed us to be people together, without necessarily being close friends.

On another occasion, however, I allowed my zone of connection with a client to expand inappropriately. While working with the CEO of a major company, I began consulting to his president and heir apparent, who was approximately my age and with whom I shared several interests. We became close, socializing and sailing together. But our friendship blinded me to huge holes in his CEO qualifications. So disarmed was I that I foolishly discounted the concerns of people I normally trusted – concerns that were borne out by his brief and disastrous tenure as CEO.

The best consultant-CEO relationships are characterized by candor and the participants' clear-eyed recognition of each other's frailties, tempered by genuine affection and easy rapport. I achieved that perfect balance with Xerox's David Kearns. Over the years, we became quite close but never lost sight of what brought us together. I could always be honest with him – sometimes painfully so. In December 1984, for example, I helped David prepare for his annual self-assessment session with the board. Running down a list of accomplishments, David awarded himself an A for a major restructuring. I pointed out that the restructuring had been on his to-do list for three years, and I gave him a D. The grade irked him, but he accepted it. Twenty years later, he still refers fondly to that incident as the first time someone made him face up to his shortcomings as a CEO.

There's another exchange with David I will always remember. I had started one of our meetings with a polite "It's good to see you." "It's good to see you, too," he responded, "and that's not just a pleasantry. When I look at my calendar and see I've got a meeting with you, I look forward to it. I also find it useful – but that isn't enough. If I didn't enjoy it, I wouldn't keep doing it."

CEO advisers must enjoy these relationships as well, because in the end, the relationship is the job. For those who manage to avoid the traps, it is a job that offers an incomparable perch from which to watch the grand battle and a chance to teach and learn from some truly inspiring leaders.

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To order, see page 161.

LEO CULLUM

"If I wear shorts, the mosquitoes eat me alive."

How can health care professionals ensure that the quality of their service matches their knowledge and aspirations? As a number of hospitals and clinics have discovered, learning how to improve the work you do while you actually do it can deliver extraordinary savings in lives and dollars.

Fixing Health Care from the Inside, Today

by Steven J. Spear

Last year on Christmas day, a 32-year-old Belgian woman celebrated the birth of a healthy daughter. Nothing remarkable about that, you might say, except that seven years prior, this same woman had been diagnosed with Hodgkin's lymphoma. Because doctors feared that chemotherapy would leave her infertile, they surgically removed, froze, and stored her ovaries. Once her treatment was concluded, with her cancer sufficiently in remission, they thawed the tissue and returned it to her abdomen, after which she was able to conceive and deliver.

Such medical miracles – improvements in fertility treatment, cancer cures, cardiac care, and AIDS management among them – are becoming so commonplace that we take them for granted. Yet, in the United States,

JAMES STEINBERG

the health care system often fails to deliver on the promise of the science it employs. Care is denied to many people, and what's provided can be worse than the disease. As many as 98,000 people die each year in U.S. hospitals from medical error, according to studies reviewed by the Institute of Medicine. Other studies indicate that nearly as many succumb to hospital-acquired infections.[1] The Centers for Disease Control and Prevention (CDC) estimates that for each person who dies from an error or infection, five to ten others suffer a nonfatal infection. With approximately 33.6 million hospitalizations in the United States each year, that means as many as 88 people out of every 1,000 will suffer injury or illness as a consequence of treatment, and perhaps six of them will die as a result. In other words, in the 15 to 20 minutes it might take you to read this article, five to seven patients will die owing to medical errors and infections acquired in U.S. hospitals and 85 to 113 will be hurt. Health care safety expert Lucian Leape compares the risk of entering an American hospital to that of parachuting off a building or a bridge.

How can this be in the country that leads the world in medical science? It's not that caregivers don't care. Quite the contrary: Health care professionals are typically intelligent, well-trained people who have chosen careers expressly to cure and comfort. For that reason, perhaps, many policy makers and management scholars believe that the problems with American health care are rooted in regulatory and market failures. They argue that institutions and processes mandated by law and custom are preventing demand for health care from matching efficiently to those most capable of providing it. In this view, the best treatment for what ails the U.S. health care system is strengthening market mechanisms – rewarding doctors according to patient outcomes rather than the number of patients they treat, for instance; increasing access to information about health care providers' effectiveness to employers, individuals, and insurers; expanding consumer choice.

I won't dispute the benefits of these reforms. The efficiency of health care markets may indeed be gravely compromised by poor regulation, and economic incentives should reinforce health care providers' commitment to their patients. But I fear that the exclusive pursuit of market-based solutions will cause professionals and policy makers to ignore huge opportunities for improving health care's quality, increasing its availability, and reducing its cost. What I'm talking about here are opportunities that will not require any legislation or market reconfiguration, that will need little or no capital investment in most cases, and – perhaps most important – that can be started today and realized in the near term by the nurses, doctors, administrators, and technicians who are already at work.

The scale of the potential opportunities can be seen in the results of a number of projects I've been following over the past five years at various hospitals and clinics in Boston; Pittsburgh; Appleton, Wisconsin; Salt Lake City; Seattle; and elsewhere. Consider just one example. The CDC cites estimates indicating that bloodstream infections arising from the insertion of a central line (an intravenous catheter) affect up to 250,000 patients a year in the United States, killing some 15% or more. The CDC puts the cost of additional care per infection in the tens of thousands of dollars. Yet, two dozen Pittsburgh hospitals have succeeded in cutting the incidence of central-line infections by more than 50%; some, in fact, have reduced them by more than 90%. Rolled out throughout the U.S., these improvements alone would save thousands of lives and billions of dollars.

Other hospitals have dramatically lowered the incidence of infections arising from surgery and of pneumonia associated with ventilators. Still others have improved primary care, nursing care, medication administration, and a host of other clinical and nonclinical processes. All of these improvements have a direct impact on the safety, quality, efficiency, reliability, and timeliness of health care. Were the methods these organizations employ used more

> UNLESS everyone is completely clear about the tasks that must be done, exactly who should be doing them, and just how they should be performed, the potential for error will always be high.

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The Health Care Opportunity

What if the improvements to medical care described in this article were adopted by every hospital in the United States? The following calculations estimate how many lives and how much money could be saved if actual rates (drawn from a number of conservative empirical studies) were cut in half – and if they were slashed by 90%.

Medical Errors in U.S. Hospitals

Estimate of current annual level, nationwide	Benefit if rate were cut 50%	Benefit if rate were cut 90%
974,000 patients injured	487,000 patients avoiding injury	877,000 patients avoiding injury
44,000 to 98,000 deaths	22,000 to 49,000 lives saved	39,600 to 88,200 lives saved
$17 billion to $29 billion in costs	$8.5 billion to $14.5 billion saved	$15.3 billion to $26.1 billion saved

Preventable Medication Errors

Estimate of current annual level, nationwide	Benefit if mistakes were reduced by 50%	Benefit if mistakes were reduced by 90%
185,000 patients injured	92,500 patients avoiding injury	166,500 patients avoiding injury
7,000 deaths	3,500 lives saved	6,300 lives saved
$2 billion in costs	$1 billion saved	$1.8 billion saved

Central-Line Infections

Estimate of current annual level, nationwide	Benefit if infections were reduced by 50%	Benefit if infections were reduced 90%
250,000 patients affected	125,000 patients avoiding infection	225,000 patients avoiding infection
30,000 to 62,500 deaths	15,000 to 31,250 lives saved	27,000 to 56,250 lives saved
$6.25 billion in costs	$3.13 billion saved	$5.63 billion saved

Sources: Unless otherwise noted, current figures are estimated from studies published in *To Err Is Human: Building a Safer Health System,* eds. Linda T. Kohn, Janet M. Corrigan, and Molla S. Donaldson (Institute of Medicine, 2000). Injuries from medical and medication errors are estimated from figures in Eric J. Thomas et al., "Incidence and Types of Adverse Events and Negligent Care in Utah and Colorado," *Medical Care* (Spring 2000). Central-line figures estimated from D.M. Kluger and D.G. Maki, "The Relative Risk of Intravascular Device–Related Bloodstream Infections in Adults," *Abstracts of the 39th Interscience Conference on Antimicrobial Agents and Chemotherapy* (American Society for Microbiology, 1999) cited in the CDC's August 9, 2002 weekly report of guidelines for prevention of central-line morbidity and mortality.

broadly, the results would be extraordinary. In fact, you could read an entire issue of HBR, even several, and during that time the number of fatalities would be close to zero. (See the exhibit "The Health Care Opportunity.")

To understand how the improvements were achieved, it is necessary to appreciate why such a gap exists between the U.S. health care system's performance and the skills and intentions of the people who work in it. The problem stems partly from the system's complexity, which creates many opportunities for ambiguity in terms of how an individual's work should be performed and how the work of many individuals should be successfully coordinated into an integrated whole. The Belgian woman's treatment, for instance, required a large number of oncologists, surgeons, obstetricians, pharmacists, and nurses both to perform well in their individual roles and to coordinate successfully with one another. Unless everyone is completely clear about the tasks that must be done, exactly who should be doing them, and just how they should be performed, the potential for error will always be high.

The problem also stems from the way health care workers react to ambiguities when they encounter them. Like people in many other industries, they tend to work around problems, meeting patients' immediate needs but not resolving the ambiguities themselves. As a result, people confront "the same problem, every day, for years" (as one nurse framed it for me) regularly manifested as inefficiencies and irritations – and, occasionally, as catastrophes.

But as industry leaders such as Toyota, Alcoa, Southwest Airlines, and Vanguard have demonstrated, it is possible to manage the contributions of dozens, hundreds, and even thousands of specialists in such a way that their collective effort not only is capable and reliable in the short term but also improves steadily in the longer term. These companies create and deliver far more value than their competitors, even though they serve the same customers, employ similar technologies, and use the same suppliers. Operating in vastly different industries, they have all achieved their superior positions by applying, consciously or not, a common approach to operations design and management.

As I have argued in previous articles in *Harvard Business Review,* what sets the operations of such companies apart is the way they tightly couple the process of doing work with the process of learning to do it better as it's being done. Operations are expressly designed to reveal problems as they occur. When they arise, no matter how trivial they are, they are addressed quickly. If the solution to a particular problem generates new insights, these are deployed systemically. And managers constantly develop and encourage their subordinates' ability to design, improve, and deploy such improvements. (See the sidebar "Delivering Operational Excellence.")

Delivering Operational Excellence

Four basic organizational capabilities, if properly developed and nurtured, deliver the kind of operational excellence exhibited at Toyota and companies like it:

1 **Work is designed as a series of ongoing experiments that immediately reveal problems.** In order to drive out any ambiguity, employees in industry-leading companies spell out how work is expected to proceed in extraordinary detail, especially for highly complex and idiosyncratic processes. This increases the chance that the employees will succeed because it forces them to make their best understanding of a process explicit. If they don't succeed, spelling out what is expected increases the chance that problems will be detected earlier rather than later, since people will be surprised by the unexpected outcome. Such companies go even further by embedding tests into the work that show when what is actually happening is contrary to what was expected.

2 **Problems are addressed immediately through rapid experimentation.** When something does not go as expected, the problem is not worked around. Instead, it is addressed by those most affected by it. Its ramifications are contained and prevented from propagating and corrupting someone else's work. Causes are quickly investigated and countermeasures rapidly tested to prevent the problem from recurring. When those who first address a problem are flummoxed, the problem is quickly escalated up the hierarchy so that broader perspectives and additional resources are brought to its resolution.

3 **Solutions are disseminated adaptively through collaborative experimentation.** When an effective countermeasure is developed, its use is not limited to where it has been discovered. But that doesn't mean the countermeasure is simply rolled out as a cookie-cutter solution. Rather, people build on local insights into reducing defects, improving safety, enhancing responsiveness, and increasing efficiency by solving problems with colleagues from other disciplines and areas so that the countermeasure, and the process by which it was developed, is made explicit, can be emulated, and can be critiqued.

4 **People at all levels of the organization are taught to become experimentalists.** Finally, managers at companies like Toyota don't pretend that the ability to design work carefully, improve processes, and transfer knowledge about those improvements develops automatically or easily. Coaching, mentoring, training, and assisting activities constantly cascade down to ever more junior workers, thereby building exceptionally adaptive and self-renewing organizations.

This approach to operations can work wonders in health care, as the case studies in this article will show. We will see examples of how health care managers and professionals have designed their operations to reveal ambiguities and to couple the execution of their work with its improvement, thus breaking free of the work-around culture. We will also see how health care managers have transformed themselves from rescuers arriving with ready-made solutions into problem solvers helping colleagues learn the experimental method. I won't claim that moving to the new environment will be easy, given the complexities of the health care workplace. It will probably take some time, as well, because changes will have to be introduced gradually through pilot projects so as not to disrupt patient care. These changes will require serious commitment from health care managers and professionals at the highest levels. But the potential savings in lives alone – never mind the improved quality and increased access to health care that the dollar savings will make possible – are surely ample justification for attempting the voyage.

Let's begin by taking a closer look at what lies behind the health care tragedies we so often hear about.

Ambiguity and the Work-Around Culture

Typically, care in a hospital is organized around functions. Issuing medication is the responsibility of a pharmacist, administering anesthesia of an anesthetist, and so on. The trouble is, that system often lacks reliable mechanisms for integrating the individual elements into the coherent whole required for safe, effective care. The result is ambiguity over exactly who is responsible for exactly what, when, and how. Eventually a breakdown occurs – the wrong drug is delivered or a patient is left unattended. Then, doctors and nurses improvise. They rush orders through for the right drugs, urge colleagues to find available room for patients, or hunt down critical test results. Unfortunately, once the immediate symptom is addressed, everyone moves on without analyzing and fixing what went wrong in the first place. Inevitably, the problem recurs, too often with fatal consequences.

Consider the story of Mrs. Grant, which comes to us from a 2002 article by David W. Bates in the *Annals of Internal Medicine.* A 68-year-old woman Bates called Mrs. Grant (all individuals' names in this article are likewise pseudonyms) had been recovering well from elective cardiac surgery when, all of a sudden, she began to suffer seizures. Her blood was drawn for testing, and she was rushed for a CT scan, which revealed no hemorrhage, mass, or other obvious cause. When she was returned to her room, caregivers saw from her blood test results that she was suffering from acute hypoglycemia, and they tried unsuccessfully to raise her blood sugar level. She quickly fell into a coma, and after seven weeks her family withdrew life support.

How could that have happened? A subsequent investigation revealed that at 6:45 on the morning of the incident, a nurse had responded to an alarm indicating that an arterial line had been blocked by a blood clot, and he had meant to flush the line with an anticoagulant, heparin. There was, however, no evidence that any heparin had been administered. What investigators did find was a used vial of insulin on the medication cart outside Mrs. Grant's room, even though she had no condition for which insulin would be needed. Investigators concluded that the nurse had administered insulin instead of heparin and that this error had killed the patient. In retrospect, the mistake was understandable. Insulin and heparin (both colorless fluids) were stored in vials of similar size and shape, with labels that were hard to read, and they were located next to each other on the cart.

Mrs. Grant's tragedy illustrates both the ambiguity that typifies many health care environments and the drawbacks of a work-around culture. The drugs were packaged, labeled, and stored the way they were because the people responsible for doing so did not understand how their decisions about such specifics might cause problems for the nurses administering the drugs. As a consequence, safety depended heavily on nursing staff vigilance. Given how fragmented and hurried nursing work is, that was asking a lot at the best of times. In Mrs. Grant's case, the timing of the mistake may have increased its likelihood, as the insulin was administered early in the morning, when the nurse might not have been fully alert, in a room that may have been dimly lit.

Mrs. Grant's nurse was certainly not the first in this hospital to have confused insulin with heparin. In fact, Bates (et al.) in a 1995 study found that for every death due to medication error there were ten injuries that weren't fatal and 100 instances where harm was averted. In other words, most of the time people make a mistake, they prevent it from harming the patient, mainly by catching themselves in time and replacing the wrong drug with the right one. Because they usually correct themselves quickly, almost reflexively, they seldom draw attention to the error. It is only after a patient dies or suffers a serious injury that the type of mistake and the factors contributing to it are subject to serious scrutiny.

Not all medical errors are the result of individuals failing in the face of challenges presented by confusing situations. Take the case, investigated by the Centers for Medicare & Medicaid Services, of a five-year-old boy who had electrical sensors surgically implanted in his brain to treat his epilepsy. Six hours after the operation, seizures began to rack the boy's entire body; anticonvulsant medication needed to be administered immediately. Yet even though several neurosurgeons, neurologists, and staff members from the medical intensive care unit (MICU) were either in the room, on call nearby, or at the end of a telephone, too little medication was administered too late. The boy suffered a heart attack 90 minutes into the seizures and died two days later.

When the investigators asked the doctors and nurses involved how the boy could have died surrounded by so many skilled professionals, they all explained that they had assumed at the time that someone else was responsible for administering the drugs. The MICU staff thought that the neurologists were in charge. The neurosurgery staff thought the MICU and neurologists were responsible. The neurologists thought the other two services had the lead. Those on the phone deferred to those at the patient's bedside.

Each of the professionals had probably been involved in hundreds of similarly ambiguous transfers of care. In those cases, however, either the patient didn't suffer an unexpected crisis or one of the parties involved stepped in and took a decisive lead. Unfortunately, the success of those sometimes heroic work-arounds concealed the ambiguity that made them necessary in the first place.

Nailing the Ambiguities

What can hospitals and clinics do to prevent such tragedies? The experience of the presurgery nursing unit at Western Pennsylvania Hospital ("West Penn") in Pittsburgh shows how organizations can make the transition from an ambiguous environment filled with work-arounds to one in which problems become immediately apparent and are dealt with as they occur.

On a typical day, the hospital's presurgical nursing unit prepared some 42 patients for scheduled surgery. On arrival, a patient registered with a unit secretary, who entered the person into the system. Then a nurse took the patient's medical history and conducted a physical examination. A critical part of this prepping job was drawing blood for testing, which provided essential information for the surgical team. Sometimes, the examining nurse drew the blood; other times, she asked a technician to do it; still other times, if something intruded on the nurse's attention, no one would do it. The result of this catch-as-catch-can procedure was that, on average, the blood work for one in six patients failed to be completed before the patient was ready to go to the operating room. This was costly in a number of ways. A delay in getting a patient to the OR meant idling OR staff, at an estimated cost of $300 per minute. It also meant delaying care – even canceling it, in some instances – for a patient who had been fasting and was anxious about the procedure.

When the unit reviewed the steps used in drawing blood, it uncovered, and then eliminated, a series of ambiguities in the process in a systematic way. First, though it was clear that blood needed to be drawn for every patient, it was often not clear to the nursing staff whether the procedure had already been done. To eliminate this confusion, the unit introduced visual indicators to identify which patients still needed the procedure and which did not. These indicators included stickers on charts and signs on the ends of beds, both of which could be deployed easily during the presurgical preparation.

But even when it was clear which patients needed blood drawn, it was not clear who should do it. The nurse? A technician? To deal with this second ambiguity, the unit designated a particular staff member, whom we'll call Mary, to be the sole person to draw blood from every patient. Mary's appointment had positive results: The number of prepped patients missing blood test results fell sharply. Nonetheless, some patients were still ready for surgery before their tests were complete.

It turned out that even if Mary knew which patients needed their blood drawn, she didn't always know soon enough to get results back in time for their surgery. To give the lab the most time to process the sample, nurses agreed that blood should be drawn as soon as a patient was registered.

This improvement also reduced, but did not eliminate, the problem. In investigating further incidents, the nursing staff found yet another degree of ambiguity. Although Mary now knew she was responsible for drawing blood once the patients were registered, she didn't always know when the registration had been completed. There was no clear signal that Mary should begin her work. To resolve this, Mary and the unit's registration secretary specified a simple, reliable, and unambiguous visual signal – a card would be placed on a rack. If no cards were on the rack, no samples needed to be taken. If one card was on the rack, a patient had been registered and was ready to have a sample taken. Two or more cards beginning to pile up on the rack was a clear sign that Mary was taking samples at a rate slower than patients were arriving.

Despite all these improvements, a few patients were still turning up for the OR without their blood work. Mary and her colleagues took another look at their process. It was clear which patients needed to have blood drawn, who was responsible for drawing the blood, and when Mary needed to draw it. What still wasn't clear was where the procedure should take place. To eliminate this final ambiguity, the unit converted a small closet into a room for drawing blood. Stored items were removed, the walls were painted, lighting was installed, supplies were stocked, and a comfortable chair was provided for patients. With this final change, the number of patients ready for the OR without blood work declined to – and stayed at – zero.

In addition to the blood-drawing initiative, Mary's unit conducted a number of similar projects to improve the reliability of work through high-speed, iterative trials. One such effort was targeted at improving patient comfort and dignity. In the past, the unit had moved patients as far along in presurgical preparation as possible to ensure that surgeons were never kept waiting. This included getting patients to change into those uncomfortable, overly revealing hospital gowns well ahead of time, which meant that they had to wait around in public for an average of 25 minutes before being given a bed.

A team in the unit spent half a day piloting a number of innovations to allow patients to delay changing until a bed was free. Team members tested out and then established signals to indicate which bed was to be available for whom, when. A changing area was created, equipped with various signs and directions designed to ensure that patients wouldn't get lost or misplace their personal effects. Before choosing the area, the team tested different rooms and screen configurations to see how well they provided privacy and made it easy to change clothes. The changes made a considerable difference. The number of patients waiting in public in their gowns at any one time fell from as many as seven to zero. Now they could wait in their street clothes with family members until beds were ready.

> PEOPLE confront the same problem, every day, for years, manifested as inefficiencies and irritations – and, occasionally, as catastrophes.

West Penn's improvements didn't happen because frontline workers all of a sudden started avoiding work-arounds and instead paused to construct reliable countermeasures. Much of the credit for the successes can be attributed to the problem-solving support provided by the unit's clinical coordinator, Karen, whose role was redefined in the course of the projects.

Previously, she had been the person of last resort when unit staffers couldn't construct their own work-arounds. If they couldn't get some needed paperwork, she got it; if lab tests were missing, she chased them down. Karen's new responsibilities were very different. Staffers brought all problems, including those they could work around themselves, to her attention one by one, as they occurred,

Eliminating Ambiguity and Work-Arounds

In the moment, it may seem that when you are faced with a problem, the most effective thing to do is work around it as quickly as possible, particularly when lives are in the balance. But see how much time was saved – and how much patient care improved – when people at Western Pennsylvania Hospital stopped working around problems, and ambiguities in work processes were systematically eliminated through a series of rapid experiments facilitated by a manager.

METRIC	THE AMBIGUOUS, WORK-AROUND SYSTEM	THE RAPID-EXPERIMENT APPROACH
Time between signing in and starting registration:	Up to 2 hours	0
Time spent registering patients:	12 minutes to 1 hour	3 minutes
Time spent assembling patients' charts:	9 hours each day	2 ¼ hours
Number of charts with unstamped pages: Nurses' time wasted as a result, each day:	35 70 minutes	less than 1 negligible
Number of gowned patients waiting on chairs in hallway:	4 to 7 at any given time	0
Time spent waiting in gowns in public:	25 minutes, average	0
Number of patients whose lab results are incomplete:	7 out of 42	0
Availability of supplies:	Some unavailable; others overstocked but past expiration	All available when, where, and in the quantity required
Number of unnecessary blood bank reports issued:	10 to 11 per day	0

rather than after the fact (if at all) in a group. Once alerted to a problem, Karen worked with whoever had raised it to investigate the causes, develop a solution, and test and validate the changes. These were not ad hoc solutions – like putting pressure on the pharmacy to rush a particular order – but rather basic changes in the design of work that were meant to entirely prevent the problem from recurring.

In the highest-performing organizations, all workers – not just those on the front line – need to be coached to learn how to reduce ambiguity systematically and how to continually improve processes through quick, iterative experiments. Thus, to help find her way into the new approach, Karen had a mentor – Alex – who worked with her several days a week. A former hospital administrator, Alex had been trained in the principles of the Toyota Production System. Alex's role was not to teach Karen how to apply to the hospital environment the widely used tools of TPS, such as andon cords or kanban cards, but rather to teach her how to develop analogous problem-solving techniques and tools that took into account the idiosyncrasies of her unit.

In the year after Karen's role was redefined, her unit identified and tackled 54 separate problems – about one a week. These varied in scope, impact, and time involved, but each followed the approach I've just described. As the table "Eliminating Ambiguity and Work-Arounds" shows, a systematic approach to eliminating problems need not take any more time than a temporary work-around.

Big Gains Through Small Changes

The changes I've described at West Penn were individually small, but taken together they led to marked improvement in the presurgical unit's performance. That's also characteristic of change at Toyota: People don't typically go in for big, dramatic cure-alls. Instead, they break big problems into smaller, tractable pieces and generate a steady rush of iterative changes that collectively deliver spectacular results. This determination to sweat the small stuff underlies the remarkable reduction in central line–associated bloodstream (CLAB) infections achieved by the hospitals participating in the Pittsburgh Regional Healthcare Initiative (PRHI).

Used to speed the delivery of medication, central lines are intravenous catheters placed in the blood vessels leading to the heart. Infections arising from this procedure exact a terrible cost. The figures that I cited at the top of this article – 250,000 patients suffering central-line infection in U.S. hospitals, with some 15% or more deaths – are only averages. The mortality rate at just one PRHI member, LifeCare Hospitals of Pittsburgh, was a staggering 40%, and the cost for each case was anywhere between $25,000 and $80,000.

The CDC has developed guidelines for the placement and maintenance of central lines. But as the PRHI professionals realized, the guidelines are generic to all hospi-

Combining Countermeasures Has a Big Effect

In their quest to eliminate central line–associated bloodstream (CLAB) infections, the hospitals in the Pittsburgh Regional Healthcare Initiative instituted a plethora of small process enhancements that together added up to dramatic improvement.

HOSPITAL	COUNTERMEASURE	RESULT
LifeCare Hospitals	• Avoid femoral lines because of increased infection risk. • Change type of disinfectant. • Use transparent dressings to improve visibility of wound to caregivers and reduce the need for physical manipulation as part of inspection. • Call out every hand-washing lapse. • Have nurses ask doctors each day if catheters can be removed or placed in lower-risk sites. • Change lines for all new admissions, since history of current line is not known. • Report every infection to the CEO every day, and investigate each one immediately.	87% reduction in CLAB infections even as the number of lines placed rose by 9.75%.
Monongahela Valley Hospital	• Require that kits always be complete so that practitioners can always don full protective garb. • Require the lab to call the moment a positive culture is identified; initiate a root cause analysis immediately. • Avoid femoral lines.	Since 2002, zero infections in medical intensive care unit (MICU), 1 in cardiac care unit (CCU). (National average is 5 infections per 1,000 line days.) Zero urinary tract infections and zero ventilator-associated pneumonias in MICU and CCU for 6 months.
UPMC Health System	• Ensure hand-washing compliance. • Improve barrier kits and use them in a consistent manner. • Allow medical residents to place lines only with supervision until they all are formally trained.	One MICU went without a CLAB infection for several months. Systemwide rate cut to 1.2 infections per 1,000 line days.
Allegheny General Hospital	• Investigate each infection as it's discovered. • Remove all femoral lines within 24 hours. • Prohibit rewiring of dysfunctional lines. • Remove all catheters for transferred patients. • Use biopatch dressings for lines that are expected to be in place for two weeks or more.	Infections down from 37 in 2003 to 6 in 2004; deaths down from 19 to 1 in the same period. Direct cost reduction of $1.4 million.

tals and do not take into account the idiosyncratic factors of patient, place, and worker that are the root causes of individual infections. To improve their central-line processes, therefore, the PRHI hospitals decided to identify all the potential sources of central-line infection and all the local variations. As a result, the countermeasures these hospitals generated were tailored to the caseload, staffing, and special requirements of individual institutions and units. Nevertheless, the hospitals developed their countermeasures in the same way that Mary, Karen, and their colleagues did at West Penn. They responded swiftly to individual problems, testing a variety of possible solutions quickly, and those more senior took on the responsibility of enabling those more junior to succeed in the design and improvement of the work.

At Monongahela Valley Hospital, for example, a team of infection control experts documented every line placement to identify all variations and their shortcomings. They carefully monitored all line insertions, dressing changes, medication administrations through the line, and blood draws for even the minutest breaks in technique and sterility. Each time the team observed a problem with the process, it would immediately develop and test some kind of countermeasure.

Like the innovations developed at West Penn, the countermeasures these hospitals developed were all aimed at removing ambiguity and increasing specificity in the same way–specifically, at four levels of system design: system output, responsibility, connection, and method. As they did at West Penn, the changes at the PRHI hospitals were designed to make crystal clear

- who was to get what procedure (output),
- who was to do which aspect of placing and maintaining the lines (responsibility),
- exactly what signals would be used to trigger the work (connection), and
- precisely how each step in the process would be carried out (method).

For instance, several hospitals required that the central lines in all new admissions be replaced, since the histories of those lines were not known, thus simplifying output. To ensure that lines were properly placed, some units assigned responsibility only to those who had been specifically trained in each hospital's most up-to-date techniques (while expanding the size of that group through additional training).

In terms of connections, visual signals, such as stickers, were added to patients' charts and beds to trigger the removal of catheters sooner rather than later. Other such signals were used to indicate when a catheter should be moved from a place on the body known to have a high risk of infection to a lower-risk area and to otherwise clarify when lines had to be maintained or replaced. Transparent dressings were used to make it easier to tell whether a wound site was healthy or not.

As for methods, changes were made in disinfectant materials and techniques, and the kits in which line maintenance supplies came were repeatedly modified. (One alteration was to pack gloves on the top of the kit so that people would not contaminate other components in getting at the gloves.) Tests were made of various sized surgical drapes to determine which were not so small as to be ineffective or so big that they were knocked out of place when patients moved.

The results of the initiative were impressive. At Allegheny General Hospital alone, the number of patients suffering from central-line infections declined from 37 in one year to six in the following year, and associated deaths fell from 19 to one. (To see the cumulative effect, see the exhibit "Combining Countermeasures Has a Big Effect.")

Simulation and Experiment

On any given day, Toyota employees engaged in design and production will be conducting some kind of simulation or experiment with workers and managers, repeatedly figuring out how to test ideas as quickly and inexpensively as possible. People bolt what they would otherwise weld, tape what they would otherwise bolt, and just hold in place what they would otherwise tape. The objective is to compress the time between when an idea is formulated and when it is tested.

The pharmacy at the University of Pittsburgh Medical Center (UPMC) South Side hospital used this approach in identifying and solving problems with its medication delivery process. The pharmacy was supposed to make timely deliveries of medication throughout the hospital so that nurses could administer drugs to their patients according to the appropriate schedule. But when nurses went to get the medications, they often found that what they needed was missing. This triggered work-arounds. Nurses would interrupt their work to call the pharmacy, requiring pharmacy staff to stop what they were doing to track down orders: Had they been received? Had they been entered? Had they been prepared? Had they been delivered? Where was the missing medication? How quickly could it be rushed to the person needing it? Tracking down a missing medication, with all the attendant interruptions, could consume hours of nurse, pharmacist, and technician time.

The problem, the pharmacy realized, was that medication administration was done in batches. Physicians would make rounds early in the morning – before office hours or surgery – and follow up throughout the day. As patients' conditions changed, doctors would write further orders for medication, which would be collected and delivered periodically to the pharmacy. There, pharmacists would enter the orders into the computer system, their expertise allowing them to identify potential problems with dosage, interactions, allergies, and the like. Orders would accumulate in the computer system throughout the day and then be printed out for all patients in the late afternoon. The next day, the pharmacy staff would begin filling these orders, assembling the proper mix and volume for each patient. This work would be completed in the early afternoon, at which point, a delivery technician would bring the completed orders to the nursing units. In view of the 12 to 24 hours that elapsed between the writing and the filling of an order, it was quite likely that medication needs would change, triggering workarounds to get patients the right medicines, as well as a lot of unnecessary work restocking the old orders and making sure that patients were not billed for drugs they no longer needed.

The temptation in these situations is to brainstorm your way to an answer, with everyone proposing solutions drawn from his or her personal experience. But this was not the approach chosen here. As a first step in determining how to fix the medication preparation process, the pharmacy staff sat down as a group to determine what demands the nursing units were actually placing on the pharmacy. They counted out the previous day's orders, divided that by the number of hours the pharmacy operated, and concluded that if the pharmacy were operating at the pace at which medication was being consumed, it would have to produce and deliver one order every three minutes. This gave them a concrete goal – instead of asking what changes they needed to make the process "better," they asked what specifics prevented them from performing perfectly.

To answer that question, they set up a simulation. One pharmacist and one technician were lined up in the pharmacy, and every three minutes they were handed one order, which they tried to fill. This being an experiment, the staff used the previous day's orders, not that day's, and they delivered the medication into a cardboard box rather than having a delivery technician bring the medication all the way to the nursing unit. A stopwatch was started, a colleague handed the pair the first order, and they filled it. Three minutes later, the pharmacist and technician were handed a second order, which they filled. They were handed a third order, but before they could complete the work of finding the medication in inventory, taking out the right sized dose, labeling it, checking it, and bagging it, the three-minute interval had elapsed, and they were handed the fourth order.

At this point, they halted the experiment and asked themselves: "Why couldn't we fill the third order?" This question was critical, and semantics mattered. Asking "Why *didn't* you do your work?" elicits a very different response, typically a defensive explanation about how hardworking someone is, how he isn't trying to fail, and so on. Asking why one *couldn't* fill the order elicits a specific impediment, such as some ingredient being stored too far away or someone's handwriting being too hard to read.

In this case, the pair realized that they couldn't fill the order because the medication they were seeking couldn't be found, and by the time they were done searching for it, their time was up. That very specific reason was recorded – "medicine X was in an uncertain location" – and the experiment resumed. A new order was handed to the team, and it was filled. Three minutes passed. Another order, another successful delivery to the cardboard box. Three more minutes. Another order – and another problem. When one of them tried to take a label off the printer, it jammed, delaying the process and preventing the team from keeping pace – another specific problem to be solved. The process of trying to fill one order every three minutes continued throughout the morning, and by the lunch break the experimenters had dozens of very specific answers to why the pharmacy couldn't fill each order in time.

Some of the problems were easy to fix, such as storing drugs according to how frequently they were used rather than alphabetically. Others were more complicated, such as changing the timing at which drugs left the pharmacy, the delivery route technicians took through the hospital, and the way orders were placed with distributors. But simple or complex, the changes had a big cumulative impact. The pharmacy was ultimately never able to process and deliver each order individually, largely because the doctors writing the orders tended to do so in batches as they made their rounds, and delivery techs could not run so many individual orders to their various destinations at the same time. But the pharmacy did manage to process batches of medication once every two hours instead of once every 24 hours. As a result, the incidence of missing medications in the wards dropped 88%.

INSTEAD of asking what changes they needed to make the process "better," they asked what specifics prevented them from performing perfectly.

The savings in terms of pharmacy time and medication management were equally impressive. Time spent searching for medication fell by 60% and stock-outs fell by 85% – with no investment in technology. Overall medication inventory was reduced, and medication costs dropped because drugs were less likely to be lost, spoiled, or wasted. Under the old system, for instance, IV medications were delivered as much as 48 hours *before* they were actually needed. That was problematic because many IV medications had to be refrigerated or otherwise kept in a controlled fashion, taking up valuable storage space in nursing units. What's more, a patient's condition often changed before the IV was to be administered, so more than 30% of IV medications were returned to the pharmacy. Since some medications spoil quickly once mixed with a saline solution, the pharmacy staff was often obliged to throw out the returns. Under the new process, IV medications were prepared and delivered shortly before being needed, significantly reducing both waste and demands on storage in the wards.

What happened after the UPMC South Side experiment was almost more interesting than the experiment itself. When OR support staffers at UPMC Shadyside hospital learned of the improvements at South Side, they tried to apply the same tools and practices. But they soon discovered that the South Side solutions were inappropriate because of differences in the two organizations' work. So the Shadyside people visited South Side and walked through the simulation process I've just described. As they did so, they came to see that what they needed to do was master the problem-solving *process* rather than the problem-specific *solutions.* Accordingly, they set up a similar experiment at their own site, uncovered different problems, and found different solutions.

The Model Line Approach

When organizations first analyze their problems, they are inevitably tempted to roll out their solutions throughout the organization by installing a common set of tools and procedures broadly and quickly. But there are a couple of difficulties with that approach.

First, as Shadyside discovered, the solutions from one situation may not apply in another. Second, the most effective changes – at West Penn, South Side, and elsewhere – are small ones, generated by rapid experiments. Draw too big a group into the initial deployment, and the experiments become unwieldy, requiring too many people to change too much of their work at the same time. After all, even a small nursing unit includes several nurses in each day, evening, and night shift, as well as fill-ins for weekends, vacations, and the like and dozens of doctors who can admit patients to the unit. Finally, what sets companies like Toyota apart is not their portfolio of existing solutions but their ability to generate new ones repeatedly. One way to hone that ability is through the "model line" concept – creating, essentially, a model of the production line, a small incubator within the larger organization in which people can develop and practice the ability to design and improve work through experiments, and managers can rehearse their roles in facilitating this ongoing problem-solving and improvement process.

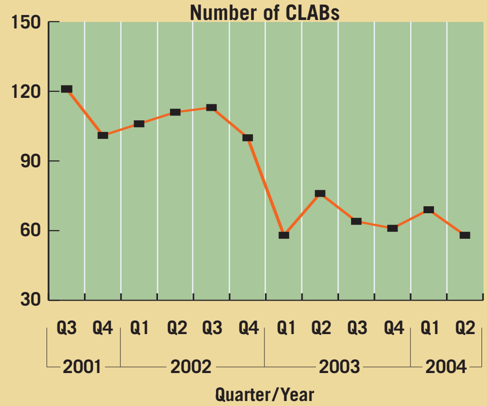
Shadyside used the model line approach with great success in its efforts to raise several aspects of the quality of its care. Rather than swamp the staff with a large initiative, the hospital began with a few beds within a single nursing unit and at first addressed just one of the many problems affecting nurses' ability to care for patients.

Like many hospitals, Shadyside found that its nurses spent a disproportionate amount of time nursing not the patients but the system – tracking down materials, services, and information. One consistent aggravation was with patient-controlled anesthesia (PCA) pumps. Nurses needed access keys to adjust dosages, but for security reasons the pharmacy had assigned the unit only a few keys, which were often hard to find. So, as a work-around, the nurses would go looking for the most recent user. Nurses in each shift searched for keys to the narcotics cabinet on average 23 times, wasting 49 minutes a shift and delaying pain relief to patients.

In discussing the problem, the nurses quickly realized that the limited number of keys was the issue. A nurse needing a key would check it out with the unit secretary but often fail to return it when rushing to meet another

Radically Reducing Infection

In less than three years, using techniques adapted from the Toyota Production System, the Pittsburgh Regional Healthcare Initiative slashed the number of reported central line–associated bloodstream (CLAB) infections by more than 50%. The rate per 1,000 line days (the measure the hospitals use) plummeted from 4.2 to 1.9.



patient's needs. The solution piloted was to have a numbered key available for every nurse, which would be signed out at the beginning of the shift and signed back in only when the nurse left the unit or ended his or her shift. In this way, the pharmacy's need to control drug access was satisfied without inconveniencing the nurses. The time spent searching for keys was reduced to almost zero, and the practice was subsequently deployed throughout the hospital, saving an estimated 2,900 nurse-hours each year.

The nurses in the unit then applied their problem-solving approach to another issue: patient falls. An estimated 2% to 4% of patients fall during their hospitalization in the United States every year (which translates into 670,000 to 1.3 million individuals) and 2% to 6% of those spills (13,000 to 78,000) lead to injury. At Shadyside, the average was one fall every 12 hours. When the nurses looked into the problem, they realized that they hadn't made it clear who was at risk of falling. What's more, patient escorts were not trained in helping patients in and out of beds or on and off gurneys. That meant escorts would leave patients to find a trained nurse. Bit by bit, the unit's nurses introduced changes, in much the same way the West Penn team did. Whey they first arrived at the unit, patients were rated at risk or not. Escorts were taught how to safely transfer patients so that they wouldn't have to leave patients unattended. Danger areas were clearly marked (for instance, labels that said, "Don't leave me alone!" were placed by bedside toilets). Nurses and nurse assistants built into their work the regular inquiry, "Do you need to use the bathroom?" so patients wouldn't try to get out of bed on their own. Sensors were placed on beds to indicate if a patient was trying to get out of bed unassisted. And patients who needed but arrived without walkers or canes were lent the equipment they needed. After the changes were introduced, the number of falls declined dramatically – at one point, the unit went 95 days without one.

The nurses' success with PCAs and falls was not lost on the staff from the dietary department serving the same unit. The problem facing the dietitians was that they could not tell how well patients adhered to the dietary regimens appropriate for their medical conditions. Patients on restricted diets would cheat ("I can't eat this tasteless mess: Honey, can you grab me a burger, fries, and shake from the cafeteria downstairs?"). Even if patients did stick to the regimen in the hospital, they often stopped when they left, potentially compromising their recovery.

After discussing the problem-solving approach with the nurses, the dietitians realized that they could use patient meals as a way to identify precisely which patients would need further education. Rather than restrict choices, they decided to let the patients in the unit pick from the hospital's entire menu – a counterintuitive approach if your objective is to control what patients eat but not if your objective is to teach patients how to select wisely and discover when your efforts have not succeeded. Allowing patients to choose from the whole menu was coupled with counseling from dietary and nursing staff about what foods should be chosen or avoided. Menu selections were coded – with a "healthy heart" sticker, for example, to indicate low-fat options – to make it clear which choices were appropriate for the various restricted diets. Then, after patients ordered food, dietitians would compare the orders with the instructions in the patients' charts. Inappropriate picks – say, a cardiac patient ordering a high-cholesterol meal – would be treated as problems, and dietary and nursing staff would visit every problem patient before the meal was even served to provide nutritional instruction. If, after repeated counseling, patients continued to make choices contrary to recommendations, dietary and nursing staff would inform their doctors, who could modify their postdischarge medication orders appropriately, changing, for example, the type or dosage of blood pressure medication for a patient who wouldn't cut his sodium intake.

Conemaugh Health System in west central Pennsylvania used an interesting variant of the model line approach to reveal problems that spanned the boundaries of individual units and departments. To find out what was falling between the cracks, the hospital tracked the treatment of certain patients all the way from admission to discharge.

One patient had come for a cardiac catheterization following symptoms that included chest discomfort. Testing revealed no blockage, and the patient was scheduled for discharge. From the patient's perspective, this was a happy outcome, but from the hospital's perspective, the findings were sobering: The team dealing with the patient documented that fully 27 distinct and potentially dangerous problems had occurred. While none actually compromised the care given to this particular patient, team members didn't want to leave the ambiguities that caused the problems in place to be worked around again, so they worked with the pharmacy, the lab, and other departments to resolve them.

> IF ONE ASKS THE QUESTION, Can the Toyota Production System be applied in health care? the quick answer is yes.

Institutionalizing Change

If one asks the question, Can the Toyota Production System be applied in health care? the quick answer is yes. The experiments I've just described all demonstrate that possibility. But to realize the full potential of TPS, senior health care leaders – hospital CEOs, presidents, chiefs of staff, vice presidents for patient care, medical directors, unit directors, and the like – will need to do more than provide support for pilot projects. They will need to embrace and embody TPS in their own work. An example from the Virginia Mason Medical Center (VMMC) illustrates what it means for managers to try to master this new approach.

VMMC is a 300-bed, Seattle-based teaching hospital with 5,400 employees and 400 physicians who admit some 16,000 patients a year and serve more than a million outpatients at ten sites. VMMC's management first became interested in TPS in 2001, after executives from local businesses described the dramatic improvements they had achieved in quality, customer satisfaction, safety, staff satisfaction, and, not least, profitability. At the time, VMMC was in sorry straits. The hospital was struggling to retain its best people, and issues of quality, safety, and morale were on everyone's mind.

VMMC started by piloting a few projects along the lines I've described in previous sections. But managers didn't really understand the potential of establishing a continuously self-improving organization until the hospital's chairman and its president, together with its professional and physician executives, went in 2002 on a two-week visit to Toyota factories, during which they all took part in an improvement project at a Toyota affiliate. Impressed by the knowledge that it was possible to establish such an organization, VMMC formally adopted TPS as a model for its management system and began to train all of its staffers in its philosophy, principles, and tools. That included a public commitment to retain all full-time employees so that people would not feel that they were expected to improve themselves out of a job.

Since then, VMMC's leadership has taken a number of steps to reduce tolerance for ambiguity and work-arounds and to make change a regular part of work. To help institutionalize a role for process experts in an organization otherwise filled with experts within disciplines, VMMC created Kaizen Promotion Offices, which support the improvement efforts of its various divisions. To emphasize the idea of quick, constant change, VMMC has conducted several hundred rapid-improvement projects. To make it easy not to work around problems, VMMC created a patient safety alert process, which allows any employee to immediately halt any process that's likely to cause harm to a patient. There's a 24/7 hotline for reporting problems, a "drop and run" commitment from leadership at the department-chief and vice-president levels to immediately respond to the reports and to exhibit a willingness to stop processes until they are fixed. To further bolster the connection between leadership and the "shop floor," department chiefs and managers conduct safety walkabouts, asking staff to alert them to specific instances in the previous few days of events that prolonged hospitalization, caused a near miss, harmed a patient, or compromised the efforts of people to do their work. Such alerts rose from three per month in 2002, the year the patient safety alert process started, to ten per month in 2003, to 17 per month in 2004. Despite the increase in the number of alerts, the average time to resolution declined from 18 days in 2002 to 13 in 2004.

This commitment to process improvement has indeed increased quality and reduced costs. In 2002, for instance, 34 patients contracted pneumonia in the hospital while on a ventilator, and five of them died. But in 2004, only four such patients became ill, and just one died. Associated costs dropped from $500,000 in 2002 to $60,000 in 2004. And the overall number of professional liability claims plummeted from 363 in 2002 to 47 in 2004. Improved efficiencies in labor, space, and equipment allowed VMMC to avoid adding a new hyperbaric chamber (saving $1 million) and avoid moving its endoscopy suites (saving another $1 million to $3 million), even as it increased the number of patients its oncology unit treated from 120 to 188.

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So far, no one can point to a single hospital and say, "There is the Toyota of health care." No organization has fully institutionalized to Toyota's level the ability to design work as experiments, improve work through experiments, share the resulting knowledge through collaborative experimentation, and develop people as experimentalists. But there's reason for optimism. Companies in a host of other industries have already successfully followed in Toyota's footsteps, using common approaches to organizing for continuous learning, improvement, and innovation that transcend their business differences. And these approaches have been successful when piloted in health care.

More to the point, the health care system is populated by bright, dedicated, well-intentioned people. They have already demonstrated a capacity to experiment and learn in order to master the knowledge and skills within their disciplines. One can imagine few people better qualified to master the skills and knowledge needed to improve processes that span the boundaries of their disciplines.

1. John P. Burke, "Infection Control – A Problem for Patient Safety," *New England Journal of Medicine* (February 2003); William R. Jarvis, "Infection Control and Changing Health-Care Delivery Systems," *Emerging Infectious Diseases* (March–April 2001); Robert A. Weinstein, "Nosocomial Infection Update," *Emerging Infectious Diseases* (July–September 1998).

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ALL STRATEGY IS LOCAL

True competitive advantages are harder to find and maintain than people realize. The odds are best in tightly drawn markets, not big, sprawling ones.

by Bruce Greenwald and Judd Kahn

"Strategic" is the most overused word in the vocabulary of business. Frequently it's just another way of saying, "This is important." The reality is that there are only a few situations in which companies' strategies affect outcomes. Such situations are, however, worth trying to create since the alternative, achieving superior efficiency, is a more demanding route to success, and a more impermanent one.

The aim of true strategy is to master a market environment by understanding and anticipating the actions of other economic agents, especially competitors. But this is possible only if they are limited in number. A firm that has privileged access to customers or suppliers or that benefits from some other competitive advantage will have few of these agents to contend with. Potential competitors without an advantage, if they have their wits about them, will choose to stay away. Thus, competitive advantages are actually barriers to entry. Indeed, the two are, for all intents and purposes, indistinguishable.

Firms operating in markets without barriers – that is, where competitive advantages do not exist or cannot be established – have no choice but to forget about strategy and run their businesses as efficiently as possible. Even so, many neglect operations and divert attention and resources to purportedly strategic moves like acquiring companies in related businesses or entering bigger markets.

In markets without barriers, competition is intense. If the incumbents have even brief success in earning more than normal returns on investments, they will find new entrants swarming in to grab a share of the profits. Sooner or later, the additional competition will push returns down to the firms' cost of capital. The process that drives down profits also makes strategy irrelevant since there will be too many other players to take into account and their roster will always be changing. (See the sidebar "Efficiency in Place of Strategy.")

Even for companies operating behind solid barriers to entry, life is not necessarily serene. If the incumbents are

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well matched, they may try to gain market share by cutting prices, improving services, or making some other costly move. However, chances are good that they will succeed only in lowering their returns. Still, such competitors might recognize that the market is roomy enough not to require head-to-head confrontation at every turn. Avoiding competition that leaves every participant worse off is an especially enlightened choice, and one that deserves to be called "strategic."

The erosion of profitability due to increased competition from new entrants isn't confined to commodity markets, as one might expect. It occurs as well in markets for differentiated products, so long as all actual and potential competitors have equal access to customers, technology, and resources. Consider the luxury car market in the United States. When Cadillac and Lincoln were the only significant competitors, their brands commanded higher prices, relative to costs, leading to high returns on invested resources. These returns attracted other competitors to the market: First the Europeans (Jaguar, Mercedes-Benz, BMW), and then the Japanese (Acura, Lexus, Infiniti), started to sell cars in America.

The arrival of these competing products did not lower prices as it might have for a commodity like copper. Differentiation protected against that possibility. But profitability still suffered. Cadillac and Lincoln lost sales to the newcomers. As sales volumes fell, fixed costs per car sold–such as advertising, product development, special service support, market intelligence, and planning–inevitably increased, since these costs had to be covered by the revenues from the smaller number of units sold. Margins fell–same old prices, higher unit costs–so profits took the double hit of lower margins and reduced sales. If there were very low barriers to entry, entrants attracted by the reduced but still above-average return on investment would have continued to arrive until all the excess profits were eliminated.

Barriers to entry are easier to maintain in sharply circumscribed markets. Only within such confines can one or several firms hope to dominate their rivals and earn superior returns on their invested capital. When competition is global in scope, the need to circumscribe the competitive arena is even greater. That is why Jack Welch, instead of just setting revenue and growth targets, insisted that the only markets in which GE would do business were ones where it could be first or second.

The conduct of strategy, then, requires the competitive arena to be "local," either in the literal, geographic sense or in the sense of being limited to one product or a handful of related ones. The two most powerful competitive advantages, customer captivity and economies of scale – which pack an even bigger punch when combined – are more achievable and sustainable in markets that are restricted in these ways.

Indeed, it's perilous to chase growth across borders. Because a global market's dimensions are wider and less defined than a nation's or a region's, firms face a higher risk of frittering away the advantages they have secured on smaller playing fields. If a company wants to grow and still maintain superior returns, the appropriate strategy is to assemble and dominate a series of discrete but preferably contiguous markets and then expand only at their edges. As we will show, Wal-Mart's diminishing margins over the past 15 or so years are strong evidence of the danger of proceeding otherwise.

The Varieties of Competitive Advantage

A competitive advantage is something a firm can do that rivals cannot match. It either generates higher demand or leads to lower costs. "Demand" competitive advantages give firms unequaled access to customers. Also known as customer captivity, this type of advantage generally arises from customers' habits, searching costs, or switching costs. "Cost" (or "supply") advantages, by contrast, almost always come down to a superior technology that competitors cannot duplicate–because it is protected by a patent, for example–or a much larger scale of operation, accompanied by declining marginal costs, that competitors cannot match.

These three factors (customer captivity, proprietary technology, and economies of scale) generate most competitive advantages. The few other sources – government support or protection, for instance, and superior access to information – tend to be limited to particular industries.

Intel benefits from all three fundamental factors. Its customers, the PC manufacturers, are reluctant to switch to another supplier because of their long-established relationships with Intel as well as *their* customers' preference, thanks in part to the "Intel Inside" campaign. Intel's many patents and years of production experience allow the company to reach a higher yield rate–fewer defects–in chip production more quickly than its competitors. And because it can spread the fixed costs of R&D for each new generation of chips over many more units than its rivals, it enjoys major economies of scale.

Technological advantages have their limitations, though. The technologies on which they rest may rapidly become obsolete. And in cases where such tech-

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Efficiency in Place of Strategy

Companies can vary enormously in their operating efficiencies, and these differences can be sustained for many years. But operating efficiencies are not a competitive advantage because they can be, and usually are, adopted by other companies. Also, competitive advantages are related to characteristics of the external environment in which a firm operates – primarily, its competitors – and not to its internal practices.

Take bar code scanning in the retail industry. The first firms to install scanning equipment had a big advantage over their slower competitors. They knew on a daily and ultimately instantaneous basis what they had sold and thereby gained better control of inventory and ordering processes. But since the bar code systems were not proprietary to the retailers (they had been developed and manufactured by third-party firms that were all too willing to see them installed everywhere), the first movers did not sustain any advantage. A company's best and most innovative uses of information technology, business models, financial engineering, and almost everything else that applies to operations suffer from the same availability to rivals. What a firm can do, its competitors can eventually do as well. IT effectiveness, HR policies, financial strategies, and so on are essentially aspects of what it means to operate efficiently. And operating with superior efficiency is the only method of competing available to a company that is separated from the conditions in which strategy can make a difference.

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nologies are highly stable, they eventually become available to all firms. Advantages based on customer captivity are similarly perishable. Aside from literally passing away, currently captive customers may move or age into new markets.

Economies of scale can make up for these sorts of losses. Coca-Cola's infrastructures, for example, enable the company to attract more new customers, and to do so more profitably, than its smaller and less-established competitors can. Its weapons include more extensive advertising and, thanks to scale advantages in distribution, lower prices. Because of similar scale advantages, Intel can spend many times as much as Advanced Micro Devices, IBM, or Freescale (a spin-off of Motorola) on developing new microprocessors and thus achieve dominance with each new generation of its signal product. Even when a rival has temporarily moved ahead, Intel (so far, at least) has always had the time and the resources to recover.

However, economies of scale must be accompanied by some degree of customer captivity if they are to confer *sustainable* competitive advantages. And without such advantages, firms that have a dominant share of their market will be forced to surrender some of it to new entrants. Even trivial switching costs can enhance captivity and thus multiply the advantages of scale. For example, before the advent of the remote control, sheer inertia kept fans of a popular TV program from abandoning whatever show came next, which might have been one the network was trying to launch. Now, the most sedentary couch potatoes will not hesitate to seek something more to their liking. To their delight, their fondness for choice has brought forth a proliferation of program options; to the major networks' detriment, it has spawned a greater number of competitors and, hence, smaller viewerships.

Sustainable dominance is more likely in markets of restricted size. It is paradoxical but true that economies of scale are subject to scale limitations themselves. First of all, economies of scale require levels of production above a certain size. Such scale is easier to attain in large markets. Past a certain point, however, economies of scale cease being commensurate with continued increases in quantity. In fact, they become subject to diminishing returns, disadvantaging a larger competitor. In a restricted market, by contrast, economies of scale are much more difficult for a new entrant to achieve because it may have to capture 20% to 25% of the market – a difficult threshold to reach when each incremental gain comes out of the incumbent's existing share. But unless the new entrant reaches those levels, its economies will not come close to paralleling the incumbent's.

The second reason that sustainable dominance is more likely in markets of restricted size is that many fixed costs are fixed only within the region or product market in question. Expanding into another region that cannot be served by an existing distribution infrastructure, for instance, will necessitate new investment. To take another example, economies of scale in advertising may be limited to the area in which the language of the ad is spoken.

When a market gets too big, diseconomies of coordination can prevail over economies of scale. In expanding markets, globalization has undermined profitability by undercutting existing economies-of-scale advantages. The story is told most clearly in manufacturing. When the automobile industry was fragmented into national segments, each had room for only a small number of highly profitable participants – such as GM, Ford, and Chrysler, in the United States, and Renault, Citroën, and Peugeot, in France. With globalization, these segments increasingly coalesced into a single international market capable of supporting a large number of competitors. A viable share of this global market–that is, one offering absolute scale advantages–was much easier to attain than a viable share of a local market, which would have required gaining a substantial market share. As a consequence, entry and competition accelerated, to the marked detriment of automobile manufacturers' competitive positions in their home markets.

Scale advantages that endure in the face of increased globalization are in markets limited enough to be dominated by one or a small number of competitors. These are the "local" markets, in geography or product space, that the Microsofts, Intels, Ciscos, Coca-Colas, and Best Buys have focused on, either by instinct or by design.

Wal-Mart and the Retail Industry

Wal-Mart offers the most powerful demonstration of the importance of dominating a local market. The retailer began in the south-central region of the United States, expanding steadily at the periphery of its territory. But it did not stop there. It is now the largest retailer in the country–indeed, in the world.

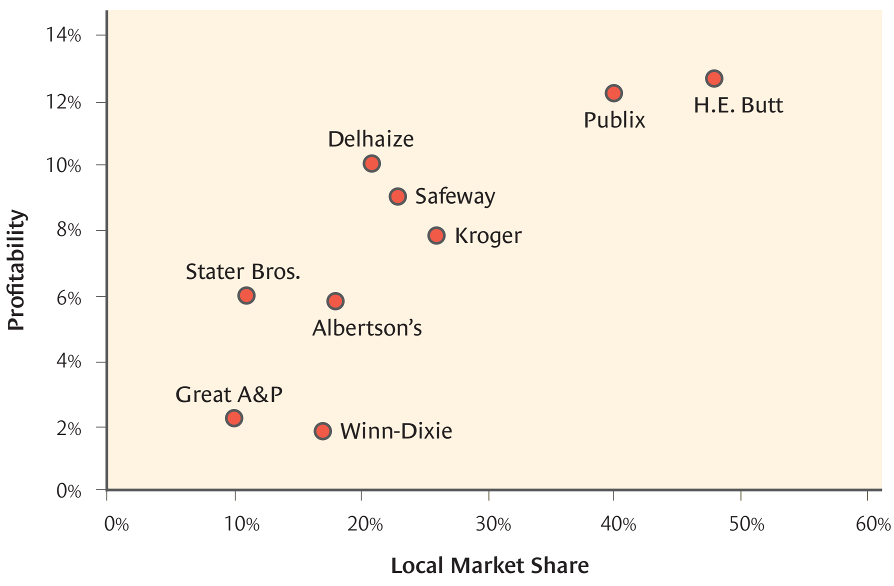
Although we attribute Wal-Mart's historical performance primarily to a strategy of local dominance, there are competing explanations for the retailer's success. Some observers have argued that Wal-Mart owes its superior returns to its enormous size and, as a consequence, its purchasing power. Alternatively, Wal-Mart is held up as a model of operating efficiency, which, critics charge, sometimes comes at the expense of its labor force.

But enormous size alone does not deliver a competitive advantage. If the purchasing power that comes with size were responsible for the company's success, then Wal-Mart's profitability should have increased as the company grew. Yet its operating margins (earnings before interest and taxes) have not increased since hitting their high watermark in the mid-1980s. In the years around 1985, Wal-Mart had operating margins of 7% to 8% of sales. Recent margins in its U.S. discount stores division have been about the same. But with Sam's Club (Wal-Mart's warehouse centers) and foreign operations included, overall margins drop below 5%. Also, in the early 1980s, Wal-Mart was no more than one-third the size of Kmart and should have suffered from a purchasing-power disadvantage. Yet Wal-Mart's margins at the time were substantially higher than Kmart's were. As Wal-Mart has grown, however, its profit margins have suffered in comparison with those of more geographically concentrated competitors, such as Target.

The purchasing-power explanation also defies economic logic. At least 90% of Wal-Mart's sales are made up of nationally branded products that are sold through a wide range of competing outlets. The producers of these brands, by their own testimony, are reluctant to favor one retailer over others and risk antagonizing a majority of their distributors. As a result, they offer discounts to Wal-Mart only to the extent that Wal-Mart's more efficient distribution systems lower their own costs. Looked at closely, purchasing power does not seem to be chiefly responsible for the Wal-Mart success story.

Supermarket Profitability and Local Market Share

Despite an increasingly global retail market, thinking locally paid off for certain grocery chains in the fiscal year ending in 2002. The most profitable were the ones that dominated their local markets. (Here, profitability is defined as pretax return on invested capital.)



Source: Accenture report *Grocery Study: High Performance Characteristics,* September 2003

margins. Especially in countries like Germany, where Wal-Mart faces entrenched competitors with dominant local-market shares, Wal-Mart's earnings performance has been markedly substandard. Our point is that while Wal-Mart's operations may be more efficient than those of its competitors, that advantage loses its power in a foreign market dominated by a domestic company.

Substantial, regionally determined fixed costs for advertising, distribution, and store supervision provide the locally dominant competitors with operating cost advantages that most likely overwhelm any differences in efficiency that companies like Wal-Mart obtain by applying widely available retailing technologies. In its discount store operations within the United States, where Wal-Mart is the one that benefits from local economies of scale, the company is an almost irresistibly powerful competitor. Overseas and even in the U.S. warehouse store category, where others enjoy these advantages, Wal-Mart is merely ordinary. Sam Walton's genius was to recognize these facts first by establishing dominance in a core region and then by attacking weaker competitors at the margins of that territory, where his core advantages could be extended with relative ease.

What is true for Wal-Mart appears to be equally true for other areas of retailing, including banking. In Jim Collins's list of "good to great" retail companies, Kroger, Wells Fargo, and Walgreens all had strong positions in local or regional markets. The one retail company that made Collins's list without being in such a position – Circuit City – has fallen on very hard times indeed. Moreover, a systematic analysis of particular sectors shows a close connection between local or regional market share and profitability (see the exhibit "Supermarket Profitability and Local Market Share"). And retailer-manufacturers like Benetton that were the evangelists of a new wave of global retailing have since largely retreated to their core markets.

Are superior operating efficiencies, then, the key factor? Certainly, Wal-Mart enjoys some advantages of efficiency – for instance, lower labor costs than those of Kmart. But as with purchasing power, economics and the broad historical record suggest otherwise. Greater operating efficiency should lead to greater profitability. If Wal-Mart has a special talent for efficient operation, then that strength should be apparent in all the company's divisions. Yet Sam's Club appears to be no more profitable than the other two major warehouse chains, Costco and BJ's Wholesale Club. The fact that Sam's Club is the least geographically concentrated of the three competitors appears to have offset any advantages derived from Wal-Mart's efficiency. Even though competitors over the years have copied many of Wal-Mart's cutting-edge techniques, such as outsourcing to China and requiring leading suppliers to put RFID tags on their goods, the deterioration in the company's margins can be blamed on its inability to replicate the same local economies-of-scale advantages in the new regions it has entered. (The 2002 McKinsey study "Retail: The Wal-Mart Effect" illustrates this point in greater detail.)

Wal-Mart's experience overseas tends to confirm the limited impact of the retailer's operating advantages. Because the operations and technologies of Wal-Mart's foreign competitors are less advanced than those of competitors in the United States, the company should be able to parlay this competitive edge into operating margins abroad at least as high as those of its domestic operations. In fact, overseas returns for Wal-Mart, whether on sales or on invested capital, are less than half its domestic

Pharmaceuticals and R&D

Pharmaceutical firms have been dramatic producers of shareholder value throughout the past 20 years of globalization. As this record unfolded, the industry's structure changed to reflect the logic of specializing in particular areas of research and the drugs that emerge from them

TO CONFER SUSTAINABLE COMPETITIVE ADVANTAGES, economies of scale must be accompanied by some degree of customer captivity.

and to encompass a global network of local distribution systems.

What has happened is that basic research has migrated out of large pharmaceutical companies and into smaller, more narrowly focused firms that specialize in research. Roughly half of the licensed new drugs that big firms seek to bring to market are licensed from these smaller research companies, and this portion seems to be increasing.

With the expansion of global markets, such companies can achieve scale advantages formerly the exclusive property of large companies, given the size and expense of the infrastructure required for major research. The result is that large companies themselves–having lost their scale advantages – must now focus on particular product areas.

Another new development for big drug companies is cross-border mergers – as we saw with Britain's Beecham and the U.S. company SmithKline (before the merger with the UK's Glaxo Wellcome), for instance, and with Sweden's Pharmacia and the U.S. firm Upjohn (before their acquisition by Pfizer). Cross-border mergers and concentration on particular diseases (such as Amgen's focus on arthritis–not the company's only specialization) both represent responses to the increasingly local imperatives of global competition.

Globalization has eroded competitive advantages among the established drug companies just as it did in the automobile industry. Fortunately, the benefits of specialization by research area have allowed small drug firms to seek, though not always find, competitive advantages and operational efficiency within particular product market niches. By acquiring licenses from these focused companies, the major pharma firms are simply adapting to the new strategic mandates that the advent of global markets has brought about.

In contrast to the development of new drugs, their marketing remains an essentially local operation. Selling new drugs through U.S. doctors, hospitals, and pharmacies has always involved U.S.-based clinical trials, sales teams, and distribution systems. Marketing is also targeted to medical specialties. For a U.S. firm to carry out all these functions in Germany, for instance, it would have to have an elaborate infrastructure there; similar infrastructures would be needed in all the other significant national markets. Each of these organizations would have a large fixed-cost component as well. The patients reached by such marketing efforts happen to be consistent in their purchases, which translates into substantial customer captivity. As a result, each national drug-marketing organization enjoys competitive advantages in both its geographic and its specialty markets.

The efficient marketing of drugs, therefore, requires a full range of national marketing organizations. Comprehensive global networks of locally dominant entities can be formed by several means, including licensing, joint ventures, and cross-border mergers. The recent wave of transnational mergers is easily explained by the presence of competitive advantages based on local economies of scale.

Thus, the structure of the modern large pharmaceutical organization looks like a giant tree trunk connecting sets of roots and branches. The drug research and development, or "root," end is increasingly handled by firms specializing in particular sciences and products, and the distribution end is handled by strong local organizations, either of the now merged pharma company or of its affiliates. Perhaps this trunk, through which specialized producers pass their creations to equally specialized distributors, should replace "drug pipeline" as the industry's defining metaphor.

Consumer Nondurables: Coke and Pepsi

Producers of consumer nondurables constitute another group of companies whose prosperity has withstood the challenges of globalization. Companies such as Coca-Cola, Colgate-Palmolive, Nestlé, PepsiCo, and Procter & Gamble, all of which were market value leaders 20 years ago, have continued to produce high returns. The products they sell have well-established global identities. However, their relative competitive positions vary dramatically across national markets. Local economies of scale in advertising and distribution are an important competitive advantage for all these companies, especially when combined with habit-based customer captivity. The geographic advantages these multinational corporations possess have allowed them to do a good job of defending themselves against one another (although no domestic company has stepped forward to challenge them).

Local strategic factors have always been an essential aspect of competition among these well-established companies. But when Pepsi announced that it would challenge Coca-Cola's global dominance, with the goal of more than doubling its sales outside the United States, it made the mistake of ignoring the local nature of the markets in which it presumed to compete. Coca-Cola responded with a focused attack in the one market – Venezuela – where Pepsi was the leader. Pepsi's position there depended on its local bottler and distributor, which enabled Pepsi to realize economies of scale in advertising, sales, support, and distribution. In 1996 Coca-Cola made the bottling and distribution company an offer it could not refuse, displacing Pepsi as its cola source and wiping out Pepsi's strongest presence outside the United States.

Coke and Pepsi may be quintessential global brands, but their competitive advantages, as Pepsi found out the hard way, must be defended one local market at a time.

Telecommunications and Media

In no other industry has the chasm between broad global ambition and local success been as great as in telecommunications and media. The Internet, with its global reach and ubiquitous presence, has been the protagonist in the narrative of increasing global interconnectedness. Satellites and other new distribution technologies, coupled with the digitization of virtually everything, have been widely expected to usher in a new era of universal integrated content. Yet the companies in this industry that have achieved high returns on capital and created value for their shareholders have traditionally been – and still are – those dominating local markets. Nothing seems to have changed in this ostensibly new era.

In telecommunications, would-be global heavyweights WorldCom and Global Crossing had bouts with Chapter 11 bankruptcy protection. Traditional long-distance competitors like Sprint and Qwest have had negative returns on invested capital, little if any revenue growth, and awful stock performance. Some have been absorbed by local telephone companies, and others, namely Qwest, have survived only by buying a regional Bell. Even AT&T, once the dominant long-distance and international communications firm, saw its performance deteriorate steadily before being acquired this year by SBC (formerly Southwestern Bell, one of the regional companies created in the breakup of AT&T in 1984). In the United States, the telecommunications companies at the head of the pack after two decades of upheaval are former local Bell operating companies – Verizon, SBC, Qwest, and BellSouth.

The situation in Europe and Asia is similar to that in the United States. The leading (as measured by profitability and market value) telecommunications firms providing landline services, such as NTT in Japan, France Télécom, Deutsche Telekom, and Telefónica in Spain, all have strong local franchises.

The same pattern holds for wireless communications. The profitable operators in the United States are Verizon and Cingular. Verizon's strength is in the Northeast; its base consists largely of the former wireless subsidiaries of NYNEX and Bell Atlantic. Before Cingular acquired AT&T Wireless, Cingular's customers came mostly from the wireless operations of BellSouth and SBC – again, regionally based organizations. The more nationally oriented providers, AT&T (whose acquisition by SBC awaits regulatory approval) and Sprint, have fared poorly. The only successful national competitor has been Nextel, which has specialized in business communications and offers a walkie-talkie service with its phones. In Europe, the only company with strong positions in more than its host country is Vodafone, which has a major share in the United Kingdom and some other markets. Otherwise, the field is populated by national champions.

In media, broadly defined, actual experience has been even more strikingly at odds with prevailing strategic wisdom, which in the last ten to 20 years has proclaimed that successful media companies would be those that integrate content and distribution, are global in reach, and embrace and master new technologies. The premier companies pursuing these strategies have been four U.S.-based media giants: Time Warner, Viacom, Disney, and News Corporation (which was originally based in Australia). One European company that followed this path, Vivendi Universal, imploded spectacularly, and another, Bertelsmann, has pulled back from America. But the American companies have also stumbled. In the past ten years, they have all been able to grow revenue, but their top-line growth has not translated into substantial value creation. None of the leading global media companies has equaled the performance of the S&P 500 over the past 14 years; their average has been lower by almost 5% per year.

This performance history is in sharp contrast to that of the old-fashioned, locally based newspaper companies in the United States. These companies have not grown their revenues as fast as the big media firms, which is understandable, given the dated nature of their products. However, their shareholders' returns have generally exceeded those of the broad market indexes. Their strategies, focused on dominating their local markets, have yielded far greater returns than those of the big media companies. (See the exhibit "More Isn't Always More.")

The economics underlying these experiences in both the telecommunications and the media industries should by now be familiar. Landline telecommunications, cellular phone systems, and local newspapers all involve significant fixed costs within each regional market, which are a requirement for economies of scale. These economies have created barriers to entry, protecting the incumbents. Potential entrants would have to seize sufficient local market share to become viable competitors, and the incumbents' existing degree of customer captivity has made this difficult to achieve. By contrast, global markets for long-distance telecommunications, film production, recorded music, and books are so large that they will support many entrants, each with a relatively limited market share. As a result, these industries lack effective barriers to entry, must cope with intense and uncontrollable competition, and suffer from disappointing profitability and shareholder returns.

Information Technology

The history of distributed personal computing illustrates the importance of concentrating on narrowly defined product markets in establishing competitive advantages. In the early 1980s, at the dawn of the PC era, a number of large, well-financed companies were in command of the technologies that are now at the core of modern information processing. Apple and IBM, early leaders in the market, demonstrated their abilities as developers of software, hardware, and microchips. Digital Equipment was a leader in time-share computing, the precursor to modern distributed-computing networks, and in Ethernet connectivity technology. Xerox, with its Palo Alto Research Center, was a pioneer in software technology, and the company enjoyed a strong marketing presence at the office level, where much PC equipment was purchased. AT&T was a leader in digital communications, systems software (the UNIX system was AT&T's creation), semiconductor technology, and fiber optics. Motorola had well-developed capabilities in chips and communications. Hewlett-Packard was strong in a wide area of individual computing technologies and incubated many of the leading technologists in Silicon Valley. Yet, with the exceptions of HP in the specialized market of printers and IBM in enterprise applications software, none of these giant companies is a significant player in today's information technology world.

Instead, competitive advantages and the value creation they spawned have been in the hands of companies that took a far more local approach to product development. Microsoft began by focusing narrowly and obsessively

More Isn't Always More

A common strategy among U.S. media giants has been to expand, both in geographic reach and in products offered. The big four have delivered revenue growth over the past decade – but, as their low shareholder returns show, they haven't managed to generate value.

They could take a lesson from U.S. newspaper companies, whose shareholder returns have, in general, beaten market indexes. The key to the newsies' success? Domination of local markets.

BIG MEDIA COMPANIES

Company	Annual Revenue Growth 1994–2004	Annual Shareholder Returns 1991–2004
Time Warner	21.3%	1.4%
Viacom	16.0%	5.8%
Disney	13.4%	8.3%
News Corporation	11.4%	7.8%
Average	15.5%	5.8%
S&P 500		10.5%

TRADITIONAL NEWSPAPER COMPANIES

Company	Annual Revenue Growth 1994–2004	Annual Shareholder Returns 1991–2004
Tribune	11.6%	13.3%
McClatchy	10.5%	13.9%
Washington Post	8.3%	13.7%
Gannett	7.7%	14.1%
Scripps	6.4%	12.6%
New York Times	3.8%	11.6%
Knight Ridder	1.5%	9.7%
Pulitzer	–1.0%	13.8%
Average	6.1%	12.8%
S&P 500		10.5%

Source: Value Line. Both tables list shareholder returns for 1991 through 2004 but include revenue growth only for the past ten years. The reason for using a later starting point to track revenues is to ensure that revenue growth rates were not built into the share prices at the start; high rates of revenue growth might have lowered subsequent investment returns by raising the initial share prices.

NONE OF THE LEADING GLOBAL MEDIA COMPANIES has equaled the performance of the S&P 500 over the past 14 years.

on the PC operating system, designing its early word-processing, spreadsheet, and browser software to protect and extend that franchise. Intel concentrated solely on chips and, after the mid-1980s, microprocessors. Cisco specialized in routers and other intracompany network systems, incorporating both hardware and software. Dell initially devoted itself entirely to personal computers sold directly to customers, bypassing established and, it proved, less efficient channels. Even IBM and HP have been successful in "local" rather than general markets. Firms with strategies like Apple's, designed to dominate the PC market as a whole, have not succeeded. In the new industry of personal-computing networks, successful companies have confined themselves to local product markets.

Two factors account for this outcome. First, economies of scale apply within particular segments, not to the information technology market as a whole. Network effects, through which customers receive greater value as more users acquire the same products or technology, are specific to individual segments. Those accruing to users of operating systems, for example, don't spill over to users of communications software. These effects have contributed significantly to the leading positions of Microsoft and Cisco in their respective markets. Large fixed development costs are characteristic of both software code and microprocessor design and production. By adding features and capabilities to successive generations of their basic products, Microsoft, Intel, and Cisco have managed to distribute those costs across a greater number of unit sales. Since all three companies enjoy powerful customer captivity and a dominant market share, they can in turn afford to spend much more on the fixed costs necessary to produce the next generation of technology, yet they will still have lower costs per customer than their rivals, an advantage that helps them maintain their dominance. Apple's recent decision to switch to Intel microprocessors underscores the power of this advantage.

For a company like Dell in PC manufacturing, a commodity business that is not evolving much, development costs are far less significant, meaning that economies of scale are also less important. Customer captivity is also considerably weaker in the interchangeable world of PC hardware. Although Dell has tried to induce habit formation and boost switching costs among its institutional customers through ordering systems that are tightly integrated with production, evidence suggests that its customers are far less attached to its products than Microsoft's, Intel's, and Cisco's users are to theirs.

For Dell, the primary benefit of its narrow product focus–until recently, only PCs–appears to have been simplicity and clarity, which have allowed Dell to concentrate on operational efficiency. Compaq, the most challenging competitor in Dell's early years, seemed to have similar success after it refocused itself in 1991 to produce generic PCs as efficiently as possible. But Compaq lost this clarity of vision. It acquired first Tandem and then Digital, and its performance deteriorated. Clarity and simplicity – especially in markets without barriers to entry, where operational efficiency is everything – are two of the greatest benefits that a local focus imparts.

Keeping It "Local"

For all the talk of the convergence of global consumer demand, separate local environments are still characterized, in both obvious and subtle ways, by different tastes, different government rules, different business practices, and different cultural norms. (The single most glaring exception may be in luxury goods, where brands like Prada and Louis Vuitton have outlets throughout the developed world. These products have global appeal for the special category of cosmopolitan, high-income consumers.) And as our comparison of vertically integrated media and newspaper companies makes clear, the decision to concentrate in a narrow set of products or services has its own benefits. Coping with either regional differences or an unwieldy range of offerings puts heavy demands on any company's management.

The more local a company's strategies are, the better the execution tends to be. Localism facilitates decentralization–and since the days of Alfred Sloan, decentralized management has consistently served as a superior structure for concentrating management attention. Decentralization matters for both product space and physical territory. GE has always been noted for its stock of management talent, but the efficiency with which it deploys that talent is equally important. This efficiency can be attributed to a decentralized organizational structure: The company's many activities are organized into independently focused divisions with clearly formulated, local strategic objectives, such as the need to be first or second in the relevant industry segment.

Another powerful illustration of the virtues of concentration is the performance of Microsoft, whose remarkable success is built primarily upon two related types of software, versus that of Apple, which has never stopped striving to excel in software, hardware, and media products but has enjoyed only intermittent successes mixed with frequent disappointments. Apple's current profitability is attributable to the iPod, not the personal computer.

Strategies that are local in the nongeographic sense improve companies' competitive strength by facilitating cooperation across product boundaries. If, like Apple, Intel had decided to produce computers and software as well as CPUs, it would clearly have had much more difficulty forging its partnership with Microsoft, a relationship that has contributed so heavily to Intel's dominance of its own industry. Intel's skill at designing and producing microprocessors and Microsoft's at writing software constitute a joint enterprise of exponential efficacy.

With the globalization of manufacturing has come an increase in competition, along with a decline in profitability. Companies and countries that ignore this reality and try to compete in global markets for manufacturing face stagnation and poor performance, not to mention the challenge of going up against billions of capable, low-wage Chinese and Indian workers. The countries that have tried to follow this path – most notably Japan, Germany, and France – are suffering the consequences of low economic growth and underemployment.

At the same time that manufactured goods (even as they increase in variety, quality, and functionality) represent a shrinking portion of people's consumption budgets, especially in the developed world, services of all kinds, including necessities like medical care and desirables like entertainment, represent a growing one. Because services are more often than not provided locally, their ever-increasing fraction of countries' gross domestic products could create the conditions for a renaissance in another local pursuit: the making of corporate strategy.

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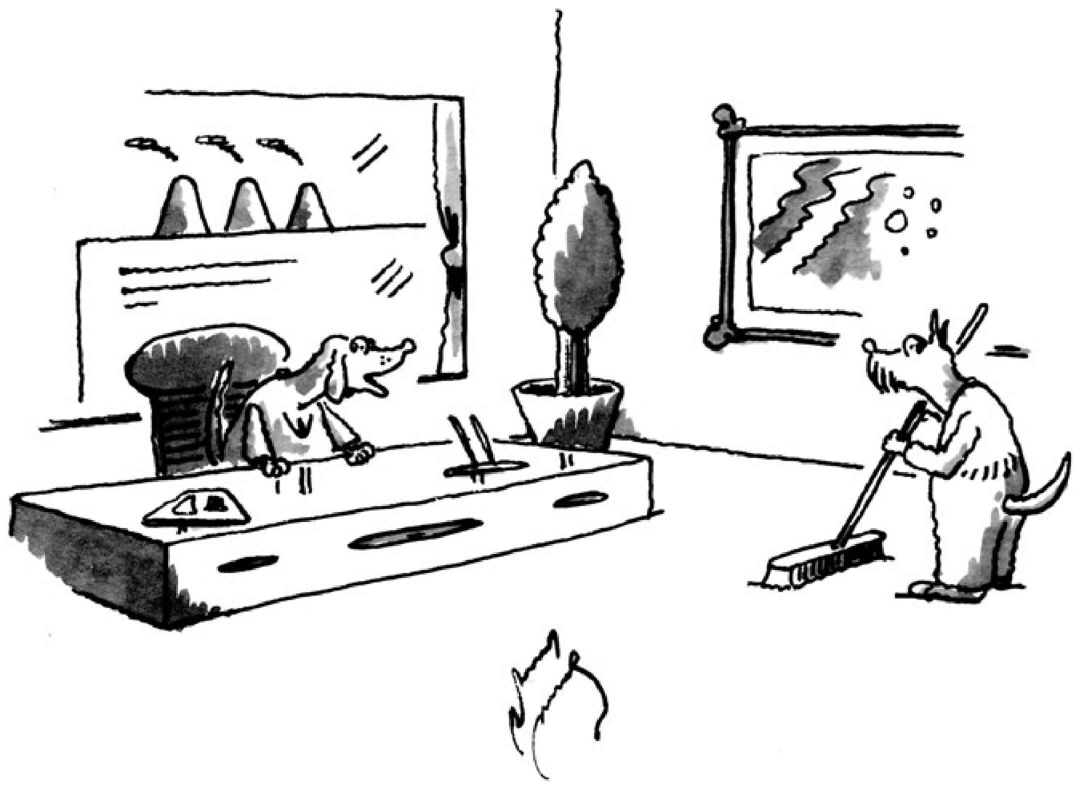
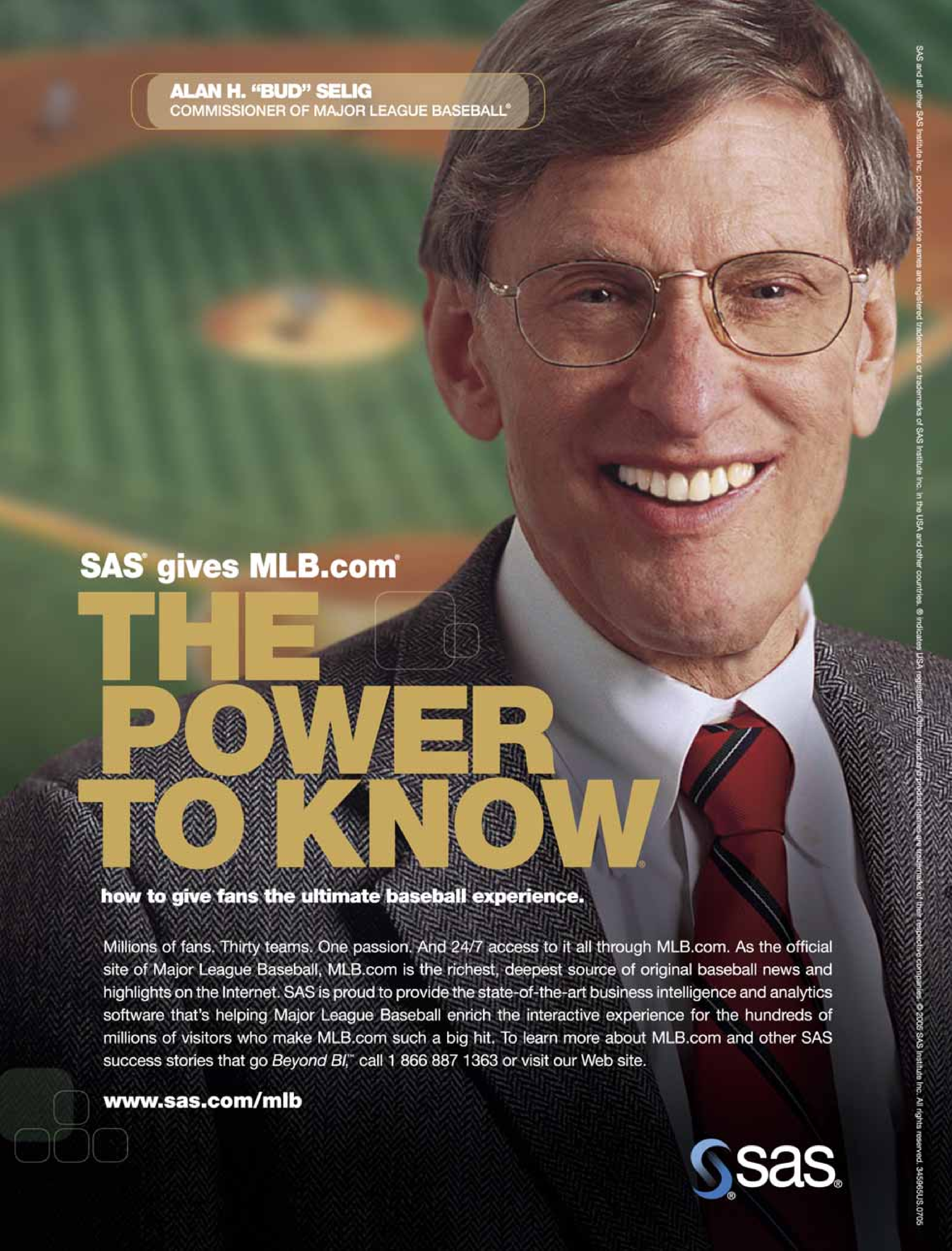
To order, see page 161.



"The only difference between you and me, Flanders, is that I read the homework before eating it."

SCOTT ARTHUR MASEAR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Executives Behaving Badly

"Why is business ethics a problem that snares not just a few mature criminals or crooks in the making but a host of apparently good people who lead exemplary private lives while concealing information about dangerous products or systematically falsifying costs?"

Kenneth R. Andrews
"Ethics in Practice"
Harvard Business Review
September–October 1989

"Someday we'll look back on this and lie to a grand jury about it."

"We could form an ethics committee, but I wouldn't want it to bite us in the ass."

LEO CULLUM, C. COVERT DARBYSHIRE, ROY DELGADO, AND P.C. VEY

“His total ignorance makes him an asset for deniability.”

“Right now I’m in between core values.”

Many skilled, accomplished executives fear that they're not good enough – impostors who are bound to be found out. By undervaluing their talent, are they ruining their careers and companies?

THE DANGERS OF FEELING LIKE A FAKE

by Manfred F.R. Kets de Vries

A few years ago, a middle manager in a telecommunications company came to see me upon his promotion to a senior management role. I'll call him Tobin Holmes (all case study names in this article have been disguised). A young Englishman who had studied classics at Oxford before graduating in the top 5% of his class at Insead, Holmes was very clever. But he feared he couldn't take on the new job's responsibilities.

At the root of Holmes's dilemma was his suspicion that he was just not good enough, and he lived in dread that he would be exposed at any moment.

STEPHEN SWINTEK


EXECUTIVE

Yet, at the same time, he seemed bent on betraying the very inadequacy he was so anxious to conceal. In his personal life, for example, he indulged in conspicuously self-destructive behavior, such as public affairs with numerous women and a drinking spree that resulted in a disastrous car accident. At work, he found it increasingly difficult to concentrate and make decisions. He worried – and now for good reason – that his problems at the office would be noticed by the CEO and other members of the board. When would they realize that they had made a horrible mistake in promoting him to the senior executive team?

When the fear and stress overwhelmed him, Holmes quit his job and accepted a junior position at a larger organization. Given his genuine talent, however, it didn't take long before he was asked to head up one of that company's major country units, a role widely known to be a stepping-stone to the top. In this new role, Holmes's feelings of doubt resurfaced. Rather than risk being exposed as incompetent, he left the job within a year and moved on to yet another company. There, despite his performance, top management looked at his employment record and concluded that Holmes just didn't have the right stuff to make it to the highest levels of leadership.

Holmes couldn't let himself move up to the most senior levels in an organization because, deep inside, he feared that he was an impostor who would eventually be discovered. In many walks of life – and business is no exception – there are high achievers who believe that they are complete fakes. To the outside observer, these individuals appear to be remarkably accomplished; often they are extremely successful leaders. Despite their staggering achievements, however, these people subjectively sense that they are frauds. This *neurotic imposture*, as psychologists call it, is not a false humility. It is the flip side of giftedness and causes many talented, hardworking, and capable leaders – men and women who have achieved great things – to believe that they don't deserve their success.

To some extent, of course, we are *all* impostors. We play roles on the stage of life, presenting a public self that differs from the private self we share with intimates and morphing both selves as circumstances demand. Displaying a facade is part and parcel of the human condition. Indeed, one reason the feeling of being an impostor is so widespread is that society places enormous pressure on people to stifle their real selves.

But neurotic impostors feel more fraudulent and alone than other people do. Because they view themselves as charlatans, their success is worse than meaningless: It is a burden. In their heart of hearts, these self-doubters believe that others are much smarter and more capable than they are, so any praise impostors earn makes no sense to them. "Bluffing" their way through life (as they see it), they are haunted by the constant fear of exposure. With every success, they think, "I was lucky this time, fooling everyone, but will my luck hold? When will people discover that I'm not up to the job?"

Neurotic impostors can be found at all levels of an organization. Typically, the misgivings begin with the first job, right after graduation, when people are fraught with anxiety and particularly insecure about their ability to prove themselves. Promotion from middle management to senior management is another tricky time because an executive must negotiate the difficult switch from being a specialist to becoming a general manager. But neurotic impostors face their greatest challenges when they are promoted from senior management to CEO. In my work with senior managers and CEOs, I've found that many neurotic impostors function well as long as they aren't in the number one position. Often, a leader's feelings of self-doubt and anxiety are less pressing when he is lower on the totem pole, because senior executives usually provide support and mentoring. But once a leader becomes the CEO, everything he does is highly visible. He is expected to stand on his own.

For this reason, people like Tobin Holmes abound in business. In my career as a management professor, consul-

WITH EVERY SUCCESS, neurotic impostors think, "I was lucky this time, fooling everyone, but will my luck hold? When will people discover that I'm not up to the job?"

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tant, leadership coach, and psychoanalyst, I have explored the topic of neurotic imposture with individuals and with large groups of senior executives. My experience has shown that feelings of neurotic imposture proliferate in today's organizations, and I encounter this type of dysfunctional perception and behavior all the time – particularly when working with executives in consulting firms and in investment banking. In the following pages, I will describe the phenomenon of neurotic imposture; explore how perfectionist overachievers can damage their careers by allowing their anxiety to trigger self-handicapping behavior; and discuss how such an executive's dysfunctional behavior can have a ripple effect throughout a company, hurting not just the morale of colleagues but also the bottom line.

Why You Might Feel like a Fake

The term *impostor phenomenon* was coined in 1978 by Georgia State University psychology professor Pauline Clance and psychologist Suzanne Imes in a study of high-achieving women. These psychologists discovered that many of their female clients seemed unable to internalize and accept their achievements. Instead, in spite of consistent objective data to the contrary, they attributed their successes to serendipity, luck, contacts, timing, perseverance, charm, or even the ability to appear more capable than they felt themselves to be. (See the sidebar "Women and the Impostor Phenomenon.")

Numerous doctoral theses and research papers have followed that original study. Although their findings have not always been consistent, most studies suggest that neurotic imposture is by no means limited to women. Men can also exhibit it – though, interestingly, genuine imposture (that is, deliberate fraud) is more common in men than in women (see the sidebar "Genuine Fakes"). Further, the incidence of neurotic imposture seems to vary by profession. For example, it is highly prevalent in academia and medicine, both disciplines in which the appearance of intelligence is vital to success.

Not surprisingly, my clinical interviews with CEOs and other high-level executives suggest that specific family structures can be breeding grounds for feelings of imposture. Certain dysfunctional families – particularly those in which parents are overinvested in achievement and where human warmth is lacking – tend to produce children who are prone to neurotic imposture. Individuals who have been raised in this kind of environment seem to believe that their parents will notice them only when they excel. As time goes on, these people often turn into insecure overachievers.

Paradoxically, a predisposition to neurotic imposture is also quite common in individuals who are *not* expected to succeed. In socially disadvantaged groups (often with a blue-collar background, for example), parents may withhold encouragement because their children's ambitions are inconsistent with family expectations. Children who manage to advance to positions of real power as adults, however, often transcend their families of origin in such a spectacular way that a lingering insecurity remains about having become so "grandiose" in their success. Frequently, because of conflicting signals, these executives wonder just how long that success will last. This fear of surpassing one's parents can cause feelings of neurotic imposture to persist long after the parents have died.

WOMEN AND THE IMPOSTOR PHENOMENON →

Women who reach successful positions that conflict with their family of origin's way of thinking about gender roles are especially prone to feeling fraudulent. The gender socialization that women are often exposed to – for instance, being told that they should become nurses or secretaries when choosing a career – tends to augment their sense of imposture when their achievements rise above those expectations. Ironically, this feeling might, at an unconscious level, carry benefits: A woman might be able to deal with ambivalence about her real career achievements by keeping them out of conscious awareness.

Inner confusion develops into genuine neurotic imposture for many women when they reach critical junctures in their lives concerning marriage, work, and children. These decisions are especially difficult for women who have had traditional mothers. Consciously or not, women tend to compare their chosen roles with the roles their mothers played. The fact that working women choose not to stay at home but rather to pursue a career – a lifestyle so different from what they witnessed as children – often makes them feel like bad mothers to their own children and bad wives to their husbands.

Gender role socialization isn't the only thing that makes women more vulnerable than men to neurotic imposture. The fact that businesswomen have to function in an environment dominated by men compounds their insecurity, because when women are successful, they're not the only ones who suspect imposture. Many of their competitive male colleagues likewise assume that chance or an affirmative action program – not talent or skill – was responsible for the success. Though few men will express such an opinion publicly, subtle insinuations from male colleagues add to a woman's fear that the "luck" won't last. As a result, many very gifted women don't know that they have superior talents. Moreover, if they *do* realize it, they are more likely than men to hide those talents and to play dumb as a strategy for dealing with others' envy and their own recurring feelings of self-doubt.

Birth order also influences the development of neurotic imposture. Feelings of imposture are more common among firstborn children, reflecting the new parents' nervous inexperience and greater expectations of these children. For example, older children are often expected to help out in the care of brothers and sisters and are held up to younger siblings as models of maturity.

How Your Fear Becomes Reality

How does neurotic imposture get out of hand? The trigger is often perfectionism. In its mild form, of course, perfectionism provides the energy that leads to great accomplishments. "Benign" perfectionists, who do not suffer feelings of inadequacy, derive pleasure from their achievements and don't obsess over failures. Neurotic impostors, however, are seldom benign in their perfectionism. They are "absolute" perfectionists, who set excessively high, unrealistic goals and then experience self-defeating thoughts and behaviors when they can't reach those goals. They are driven by the belief that they are currently not good enough, but that they could do better if only they worked harder. For this reason, perfectionism often turns neurotic impostors into workaholics. Fearing discovery of their "fraudulence," they burden themselves with too much work to compensate for their lack of self-esteem and identity. Work/life balance is a meaningless concept to them.

I'm reminded of a cartoon that depicts a CEO handing over a dossier to one of his subordinates. He says, "Take your time. I'm not in a hurry. Take the whole weekend if necessary." Neurotic impostors commonly enter into abusive, self-defeating collusions of this sort. They don't realize that they may be pushing themselves and others too hard, often to the detriment of long-term success. By exploiting themselves so brutally in this way, they risk rapid and early burnout.

The vicious cycle begins when the impostor sets impossible goals. She fails to reach these goals, of course (because *no one* could reach them), then tortures herself endlessly about the failure, which incites further self-flagellation, accentuates the feelings of imposture, and inspires her to designate yet another unattainable set of goals – and the entire cycle of workaholism and fraudulence begins again. That's what happened to Robert Pierce, an extraordinarily gifted trader at a highly prestigious investment bank, who set ever increasing goals of financial compensation for himself to deal with his anxieties about being a fake. Initially, Pierce felt elated whenever he reached his goal; but he became more desperate every time he learned that someone else earned more than he did. This kicked off an orgy of self-blame that did little to improve his career or his organizational effectiveness.

When Fakes Court Failure

Because they are so ambivalent about their achievements, neurotic impostors often appear to be engagingly humble. Self-deprecation, of course, is a perfectly respectable character trait and, from a career management point of view, can be seen as a protective strategy. Underplaying one's achievements defuses other people's envy and directs attention away from success, thereby lowering others' expectations – a useful maneuver in case of future failure. A display of self-deprecation also seems to convey a sense of modesty, which can elicit encouragement and support from others.

But the neurotic impostor's humility actually stems from another kind of protective impulse: the need for an exit strategy. Failure (at least at a subliminal level) becomes a desirable way out. Think of the journalist who wins a Pulitzer prize at a relatively young age. Such a "gift" can turn out to be a poisonous boon. When such good fortune occurs, what can one do for an encore? Great achievements have ruined many a neurotic impostor because they can lead to paralysis. Indeed, to neurotic impostors, granting wishes for success can be one of fate's cruelest jokes.

For many neurotic impostors, the heart of the problem is the fear that success and fame will hurt them in some way – that family, friends, and others will continue to like them much better if they remain "small." After all, people who covet success are likely to envy those who have achieved it. As Ambrose Bierce wrote in *The Devil's Dictionary,* success is "the one unpardonable sin against one's fellows."

In extreme cases, neurotic impostors bring about the very failure that they fear. This self-destructive behavior can take many forms, including procrastination, abrasiveness, and the inability to delegate. As Tobin Holmes's experience illustrates, it can also take such extreme forms as inappropriate womanizing or substance abuse on the job.

Neurotic impostors are also quite creative at destroying their own successful careers. It's as if they *want* to be discovered. Perhaps assisting in their own unmasking is a proactive way of coping with their anxiety; maybe it offers a sense of relief.

Mike Larson, a senior executive I worked with a few years ago, exemplifies this propensity. After a brilliant career as a medical researcher, Larson was offered the position of director of research in a global company specializing in over-the-counter drugs. When he embarked on this challenging new research agenda, however, Larson's incessant fear of exposure harmed rather than enhanced his performance. It was one thing to be a member of a team, but taking on the number one research position was another question altogether. To be so visible made him feel increasingly anxious, contributing to his drive to do even better; but his inability to delegate and his tendency toward micromanagement led to a greater sense of malaise.

Larson realized that he was digging a hole for himself, but it was difficult for him to ask for help. He was afraid that doing so would give his colleagues proof of what they surely suspected – that he was an impostor, a fraud. To avoid being found out, he withdrew into himself, agonized over what his colleagues thought about him, worried about not living up to their expectations, and waffled over every decision. The result was anxiety-filled days, sleepless nights, and an intense fear of making mistakes – a fear that made him unwilling to experiment, develop, and learn.

Like most neurotic impostors, Larson engaged in faulty reality testing. This distortion in his cognition caused him to dramatize all setbacks – he blew small incidents out of proportion and cast himself as the helpless victim. Larson lived with the misconception that he was the only one prone to failure and self-doubt, and this made him feel even more insecure and isolated. Like other neurotic impostors, he focused on the negative and failed to give himself credit for his accomplishments. He also harmed his career by becoming a master of catastrophizing – reaching exaggerated conclusions based on limited evidence.

Only when Larson was awarded the top research position did he realize how much he missed the mentors he'd had at earlier stages of his career. Those mentors had helped him to deal with the pressures of his job and to maintain equilibrium under stress. But when he was promoted, he found it much harder to ask for advice and to find people who would challenge his faulty cognition. As a result, he executed a number of poor management decisions that contributed to his organization's ineffectiveness. Eventually, he was asked to step down from the director's position.

The Neurotic Organization

Neurotic impostors can, and do, damage the organizations they try so hard to please. Their work ethic can be contagious, but because they are so eager to succeed, they often become impatient and abrasive. Neurotic impostors are extremely tough on themselves and thus not predisposed to spare others. They drive their employees too hard and create a gulag-like atmosphere in their organizations, which inevitably translates into high employee turnover rates, absenteeism, and other complications that can affect the bottom line. Moreover, neurotic impostors can intimidate others with their intensity. And because they don't have what it takes to be effective leadership coaches, they are not generally talented in leadership development and succession planning.

More dangerous, however, is neurotic imposture's effect on the quality of decision making. Executives who feel like impostors are afraid to trust their own judgment. Their fearful, overly cautious kind of leadership can easily spread across the company and bring about dire consequences for the organization. For instance, a neurotic impostor CEO is very likely to suppress his company's entrepreneurial capabilities. After all, if he doesn't trust his own instincts, why should he trust anyone else's?

Neurotic impostor CEOs are also highly likely to become addicted to consulting companies because reassurances provided by "impartial" outsiders compensate for the executives' feelings of insecurity. Of course, judicious use of consulting advice does have its place; but neurotic impostor executives all too easily turn into puppets whose strings are completely manipulated by those same advisers. Ralph Gordon, the CEO of a global engineering firm, suffered just such an experience. In a group session during one of my seminars, he explained that he really didn't choose engineering–his father had chosen it for him. Gordon conceded to his father's wishes and entered the business world, where he never felt comfortable in his corporate role. When he reached more senior positions, Gordon began to rely on consultants, some of whom took advantage of his insecurity at a very high price. Not only did they charge Gordon's firm substantial fees for their services, but their predatory behavior increased Gordon's feelings of dependency.

This type of behavior is exacerbated when neurotic impostors work in an organization that punishes failure. If the company culture does not tolerate mistakes, the leader's level of anxiety will increase, making neurotic behavior all the more likely. This is paralyzing for the perfectionist whose fear of failure will have an even more negative impact on the organization.

Consider Lynn Orwell, who had a successful career at a consulting firm before accepting an offer from a prominent media company. In her consulting job, Orwell had functioned exceptionally well. But this changed when she accepted an assignment to run the new firm's European operation.

Although Orwell was an outstanding source of good ideas, her fear of failure led her to manage in ways that seemed countercultural. In an organization that had

GENUINE FAKES →

In contrast to neurotic impostors, true impostors are con artists – and they tend to be men. Consider Ferdinand Waldo Demara, for example. In the fall of 1951, this real impostor's career came to an abrupt halt after a woman became alarmed by an article she saw in her daily newspaper. The article described a successful emergency operation performed by Joseph Cyr, a surgeon, on the deck of a Royal Canadian Navy destroyer during the Korean War. Worried, the woman contacted her son, also a physician named Joseph Cyr, who assured her that he was safe and sound and practicing medicine in New Brunswick. Unsettled by the odd coincidence of names, however, Dr. Cyr then contacted the police, an initiative that led to the unraveling of Demara's bizarre career.

It didn't take long for the authorities to find out that Demara was masquerading as Dr. Cyr. In fact, the bogus doctor's medical "training" had been limited to a few weeks working as an unskilled hospital orderly in the United States. That experience, however, along with the help of the ship's medical attendant and the navy's generous supply of anesthetics and antibiotics, was enough for him to successfully play the role of medical doctor. Fortunately, despite Demara's lack of qualifications, his patients survived their treatments.

Further investigation revealed that Demara had gone through most of his life masquerading as other people. His career as an impostor spanned three decades and included a wide variety of pseudo-identities, such as deputy sheriff, prison warden, psychologist, university lecturer, Trappist monk, and cancer researcher. This chameleon-like career didn't come without a price, however. At one point, Demara's impersonation resulted in a term of imprisonment.

Apparently, his inability to figure out what to do with his life motivated him to masquerade as other people, with the professed hope of eventually "finding" himself. Personal gain wasn't a major part of the equation. Interestingly enough, his talent at playing different roles was remarkable, and many of his unsuspecting employers were quite satisfied with his work. He was a master of improvisation, gathering from textbooks and observation the necessary knowledge to fill each role he took on.

Demara's exploits fascinated the public. After his discharge from the Canadian navy, he sold his story to *Life* magazine and became the subject of a book by Robert Crichton, which led to the making of the film *The Great Impostor*, starring Tony Curtis. Crichton reported that he'd had a hard time pinning down the impostor's motives for engaging in all his masquerades. At one point, Demara is said to have told him, "I'm a rotten man," adding that he was prompted by "rascality, sheer rascality." But Demara also suggested that his activities served a good cause. According to him, his various impostures were instrumental in making organizations more vigilant about confidential records, thereby helping to better secure people's privacy.

always been decentralized, for example, she decided to centralize many of the functions in her part of the business. But what really grated on many people was that Orwell wanted to make most of the decisions herself. Her perfectionist attitude and her need for immediate results made delegation anathema to her and dampened the team's productivity and creativity. Orwell's coworkers started to worry about the abrasiveness that had crept into her manner, and her prickliness about criticism–whether real or perceived–began to irritate a growing number of her colleagues. She reacted with defensiveness and hostility to comments about any of her proposals, reports, or decisions. Furthermore, anxious not to be found wanting, she took ages to prepare for meetings, trying to anticipate every conceivable question that could be asked. Such precautions extended her already lengthy workweek into weekends, and she expected others to show the same commitment.

Orwell's sense of neurotic imposture deeply affected the organization. As time went on, many of Orwell's team members began to ask for transfers to other parts of the organization. Others quietly sought out headhunters. Those who stayed took a passive-aggressive attitude toward Orwell. Since they felt it was not worth the effort to reason with her, they let her make all the decisions but undermined them in subtle ways. As a result, her European division–once hailed as the flagship operation–was increasingly seen as a liability. By the year's end, profitability for Orwell's division had fallen into a deep slump, confirming the company's belief that she was truly incompetent. Ultimately, the division was sold to a competitor. Orwell's neurosis had ruined not only her career but a perfectly robust business as well.

The Light at the End of the Tunnel

Neurotic imposture is not an inevitable part of the human condition, and it is avoidable. Early prevention, for instance, can completely ward it off. If caregivers identify and deal with factors that lead to this phenomenon very early in life, the dysfunctional effects will never surface. Parental awareness of the downside of setting excessively high standards for children goes a long way toward preventing later misery. But there is hope for late-diagnosed impostors as well. Experience has shown that psychotherapeutic interventions can be very effective in changing distorted self-perceptions.

Yet the best–and often most appropriate–way for you to manage feelings of imposture can be to evaluate yourself. After all, you are the best person to assess the source of these problems. And though a leadership coach or psychotherapist can certainly help you on this journey of self-discovery and change, a mentor or good friend can also put things in perspective. Realizing that you may repeat with your children the same pattern of behavior you learned from your parents, for instance, can be a great motivator.

If you are unable to take the initiative to deal with your feelings of imposture, however, your boss needs to intervene. Such was the case with John Stodard, the CEO of a large telecommunications company, who came to talk to me upon the recommendation of his chairman. In our sessions, Stodard wondered if he needed pointers on how to be a more effective executive. A 360-degree feedback exercise showed that he was inclined toward micromanagement and perfectionism and that he possessed poor listening skills. Some of the written comments also noted that his impatience put intense pressure on his directors and that morale at the office was quite low. As we discussed the problem together, Stodard began to realize the extent to which he had internalized the expectations of his extremely demanding parents, and he started to change. He began to experiment with new behavior in the office and received a surprisingly positive reception, which increased his sense of self-efficacy. When I met him a year later, Stodard mentioned quite proudly how morale at the office had dramatically improved, how the company had become more profitable, and how his ability to let go of his controlling tendencies had contributed to these successes.

Like Stodard's chairman, good bosses remain alert for symptoms of neurotic imposture in their employees: fear of failure, fear of success, perfectionism, procrastination, and workaholism. In performance reviews, bosses should signal (uncritically) any danger signs to their direct reports. They should also explain how anxiety about performance can take on a self-destructive quality, and they should emphasize the value of work/life balance, pointing out that extreme strength can easily become a weakness.

Above all, bosses need to make sure that a subordinate suffering from neurotic imposture understands that with

> **NEUROTIC IMPOSTORS** are quite creative at destroying their own successful careers. It's as if they **WANT** to be discovered.

responsibility comes constructive criticism. This means teaching – by word and by example – that open, honest, critical feedback is an opportunity for new learning and not an irredeemable catastrophe. They must point out that *everyone* in a responsible job occasionally feels unequal to the task and needs time to adjust and learn the ropes. The worst thing a neurotic impostor can do, especially in a new position, is to compare his abilities with those of seasoned executives. This is guaranteed to be an exercise in self-flagellation.

At the same time, leaders must strengthen the perceived link between positive achievements and efforts. They can do this not only by offering praise when it's due, but also by acknowledging that making mistakes (though not repeating them!) is part of a successful corporate culture. The wise organization does not punish "smart" mistakes; indeed, to "fail forward" should be part of an organization's implicit cultural values. Mistakes can offer great opportunities for learning and personal growth, and leaders need to help neurotic impostors understand that a fear of failure is normal and need not be debilitating.

When it's the CEO himself who feels like a neurotic impostor, the situation is more complicated. A leader at the top does not find it easy to ask for support from mentors or from subordinates who feel their boss "has it all." For this reason, many high-performance organizations now have leadership-coaching programs to help their executives cope better with the vicissitudes of working life. When leadership coaches recognize the signs of neurotic imposture, they are in a good position to give constructive advice. In the 15 years that I have been running top-level seminars at Insead, I have listened to executives discuss significant experiences in their work and personal lives. Being willing to talk about these neurotic imposture problems and accept peer support not only has a profound effect on leaders but also has a deep impact on the organization that the neurotic impostor has helped to shape.

• • •

It's often said that a person's strengths are also his weaknesses. The same is true for an organization. In most well-run organizations, senior managers remove low performers or develop them to become high performers. But these same managers are less effective in managing people who appear to be problem-free. By their very nature, neurotic impostors are very hard to detect because the early stages of an executive's career are so conducive to high performance. It is, in fact, a rare leader who does not suffer from neurotic imposture. All the more reason, therefore, for managers to be on the lookout for it in themselves, their reports, and their potential successors. Failing to recognize and deal with neurotic impostors has serious consequences both for individual sufferers and for the organizations relying on them.

GOOD BOSSES REMAIN ALERT for symptoms of neurotic imposture in their employees: fear of failure, fear of success, perfectionism, procrastination, and workaholism.

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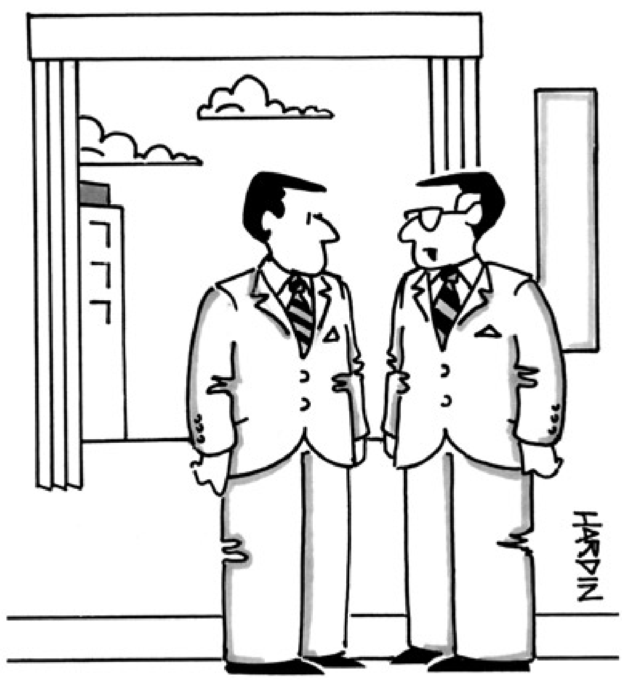

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STRATEGY AS ACTIVE WAITING

Huge business opportunities are rare, and their timing is almost never under the control of an individual company. So it's important to be ready when they come and to manage smart during the long periods of business as usual.

by Donald N. Sull

SUCCESSFUL EXECUTIVES who cut their teeth in stable industries or in developed countries often stumble after entering more volatile markets. They falter, in part, because they mistakenly believe they can gaze deep into the future and draft a long-term strategy that will confer on them a sustainable competitive advantage. But visibility in volatile markets is sharply limited because so many different variables are in play. Uncertainty would be manageable if only one thing changed while the rest remained fixed, but of course business is rarely so simple. In volatile markets, many variables are individually uncertain, and they interact with one another to create unexpected outcomes.

I use the phrase "fog of the future" to describe this unpredictability. To illustrate, recall how senior executives of Europe's telephone companies predicted that third-generation mobile technology would revolutionize their industry, and bid $100 billion for licenses based on their assessment. Five years later, 3G looks a lot more like evolution than revolution, with consumer adoption, as well as technical and economic benefits, lagging behind projections. Because the value to telecommunications firms of a new technology depends on multiple, interacting variables – for example, regulatory policy influencing returns on capital, the progress of substitute technologies, investors' willingness to support follow-on technologies, and consumers' shifting conception of what a phone should and shouldn't be – predicting how the market will play out in the long term has proven to be virtually impossible.

This is not to say the big bet on 3G will never pay off. Maybe it will, maybe it won't. Maybe China will overtake the United States in our lifetime, or maybe it will strike terror into the hearts of executives for a few years and then slip down the CEO's agenda, as did the perceived threat of dot-coms in the 1990s and Japan Inc. in the 1980s. Maybe genetically tailored drugs will curb health care costs. Or maybe they won't. That's the nature of volatile markets: We won't know whether these changes will happen or how they will interact with other factors until after the fact.

Much of the existing research on managing in unpredictable markets focuses on the U.S. information technology industry between 1980 and 2005. This article expands the scope of research by drawing on companies in volatile markets across a range of countries, time periods, and industries. Over the past six years, I've led a research project on more than 20 pairs of companies in some of the world's most volatile markets, from national markets like China and Brazil to industries like enterprise software, telecommunications, and airlines. In most cases, my collaborators and I paired a company that successfully navigated uncertainty with a similar but less successful company. By analyzing differences between companies in each pair, as well as similarities across the successful companies, I identified a small number of management principles for surviving and thriving in unpredictable markets. One of the most striking findings from this research is the importance of actions taken during comparative lulls in the storm. In even the most unpredictable markets – Internet portals in China, for example, or aircraft production in Brazil – major opportunities and threats emerge sporadically; they're separated by long periods of relative calm. What executives do during these lulls often matters more than the dramatic actions taken during times of crisis.

Golden Opportunities and Sudden-Death Threats

Managers advancing into the fog of the future tend to either cling to the fiction of prediction despite limited visibility or veer to the other extreme, relying on good luck and hustle and hoping for the best. Neither extreme is effective or necessary. Indeed, a careful examination of volatile markets over time reveals recurrent patterns. Understanding these patterns can help executives navigate a foggy future.

Let's start with the basics. The purpose of a business is to create and capture value and sustain it into the future. Changes in an unpredictable market should thus be viewed through the lens of the opportunities they engender or the threats they pose to a firm's ability to do so. The exhibit "Fog of the Future" plots the impact of environmental and market changes on value creation and highlights the good news and the bad news about volatile markets. The good news is that they present opportunities to create new value. Volatile markets often generate new resources such as technical innovations, privatized assets, or new knowledge. And churning interactions among variables frequently create new customer needs. Demand for automobiles in China, for example, results from many factors: increased disposable income, government investment in roads, rising middle-class aspirations, easy credit, and the demise of employer-provided housing. The combination of new resources and shifting customer preferences creates possibilities for companies to fill gaps in the market by deploying resources in novel ways.

Not all opportunities are created equal. Companies that play in volatile markets face a steady stream of small and medium-size opportunities, interspersed with periodic chances to create significant value. *Golden opportunities* are the infrequent occasions when a firm can create significant value disproportionate to the resources invested, in a short period of time. Many variables influence the nature and timing of an opportunity; these include technology evolution, customers' evolving needs, government policy, changes in the capital markets, and rivals' priorities. Golden opportunities arise when several windows of opportunity open simultaneously. Golden opportunities are rare. They pass quickly. And generally they emerge because of exogenous factors – that is, variables outside the company's control. The case of BEA Systems illustrates these traits. From its founding in early 1995, BEA seized a golden opportunity in the emerging enterprise software market and achieved $1 billion in revenues faster than any other software firm had at that time.

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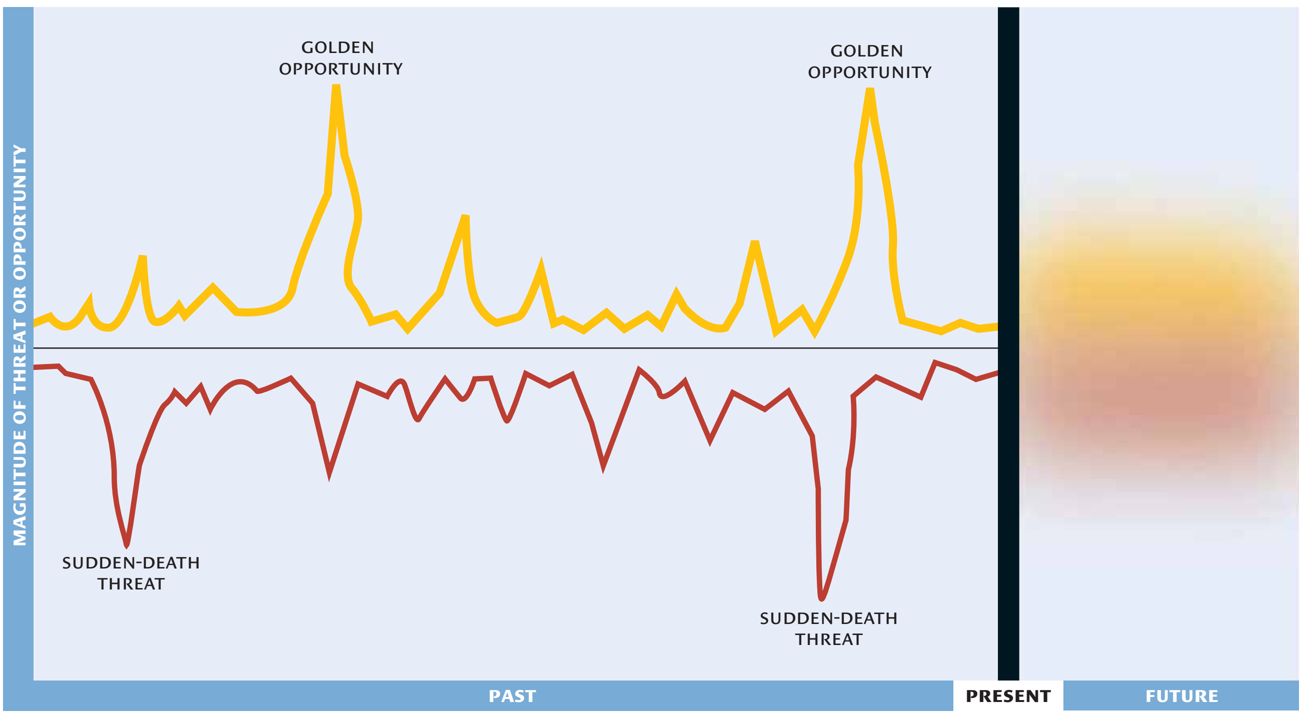
Rare. BEA's golden opportunity arose when several windows of opportunity opened at the same time: Internet adoption created new demand for software that could link disparate applications; the technology was ready for prime time; established firms were distracted by other priorities; and the relative scarcity of venture capital funding limited the number of start-ups pursuing the same opportunity. Such a favorable confluence of factors is rare. Among the unpredictable markets that I studied, golden opportunities typically occurred once or twice in a decade. In other words, the frequency of opportunities is inversely related to their magnitude, a pattern consistent with research on complex systems ranging from traffic jams to earthquakes.

Fleeting. The variables that influence the magnitude of an opportunity shift constantly. One window might open a crack, while another widens abruptly and a third threatens to slam shut. For this reason, a company must grab an opportunity at just the right time. Too early can be as bad as too late. Had BEA's founders entered the market a year or two earlier, customers' pain would have been less acute and the technology fix less developed. A few years later, and venture capitalists might have funded multiple start-ups, or established firms such as Novell and NCR might have modified their existing products to fill the market gap.

Exogenous. Except in rare cases, an executive cannot will a golden opportunity into existence. BEA's founders could not have accelerated Internet adoption, stopped venture capitalists from funding start-ups, or prevented established players from filling the gap. The golden opportunities we studied across industries and countries shared this quality. When we asked entrepreneurs and executives to explain why they pursued a specific opportunity when they did, their answers generally hinged on shifts in the external environment that were beyond their control. Chinese appliance leader Haier, for example, made its move to expand beyond refrigerators into other white goods when important external factors aligned: The local government approached the company to restructure a floundering rival shortly after a brief window of opportunity to acquire land for industrial parks and to

FOG OF THE FUTURE

Managers in turbulent markets cannot manufacture the timing of the rare golden opportunity (or the equally rare sudden-death threat). These events are clear in retrospect, but impossible to predict. Knowing what to do during periods of relative calm can spell the difference between industry leadership and extinction.



MANAGERS CANNOT CONJURE UP A GOLDEN OPPORTUNITY JUST BECAUSE THEIR BUSINESS IS IN DECLINE OR INVESTORS DEMAND GROWTH.

borrow funds had opened. At the same time, many consumers who already had refrigerators were now looking to buy washing machines or air conditioners.

Managers can and should take steps to encourage a golden opportunity – they can lobby governments, help to shape industry standards, preempt competitors, and so forth. They must recognize, however, that many of the variables influencing their firms' ability to create and sustain value in volatile markets lie outside their control. They cannot conjure up a golden opportunity just because their business is in decline or investors demand rapid growth. Attempts to declare a golden opportunity where the contextual stars are not aligned generally end in tears.

Golden opportunities are the good news about turbulent markets, and *sudden-death threats* are the bad news. These are major environmental shocks that can put a company out of business in relatively short order. They typically arise when two or more variables take a downturn simultaneously. No single factor plunged the global airline industry into crisis. Instead, it was the perfect storm of 9/11, SARS, and rapidly rising fuel prices. Sudden-death threats, like golden opportunities, are rare, and they're generally the result of changes in the environment outside any single company's control.

Active Waiting

Managers can rarely manufacture a golden opportunity, nor can they predict its precise form, magnitude, or timing. That said, there is much they can do to prepare their firms to capitalize on a golden opportunity, or weather a sudden-death threat, when one arises. In explaining their success, the managers in our sample emphasized the preparation they took during periods of relative calm rather than their heroic actions (or rivals' boneheaded blunders) in the heat of battle. To survive and thrive in volatile markets, managers can pursue a strategy of *active waiting,* which consists of anticipating, preparing for, and seizing opportunities and dealing with threats as they arise. Like an advancing army, a company proceeding into an unpredictable future can follow a general direction, probe the future for potential opportunities and threats, keep resources in reserve, remain battle ready, and, when the big opportunity or threat arises, strike hard.

Keep the vision fuzzy and the priorities clear. Active waiting begins with the acknowledgement that managers cannot predict or control how the future will unfold. Based on this recognition, they avoid marching headlong toward a well-defined future and instead articulate a fuzzy vision, which describes a company's domain, geographic scope, and aspiration in broad terms: "We aspire to global leadership (or excellence or quality) in our industry," for example. A fuzzy vision works because it provides general direction and sets aspirations without prematurely locking the company into a specific course of action.

In contrast, overly specific long-term visions can prove hazardous in unpredictable markets. They often distract employees and managers from emerging opportunities and threats. Microsoft was slow to grasp the Internet's importance in part because the company's vision emphasized stand-alone personal computers. A crystal clear vision can also tempt managers to bet too much, too early. In 1992, Kun-Hee Lee, the chairman of South Korea's Samsung Group, set a bold strategy to become one of the world's ten largest car manufacturers by 2010. Seduced by the clarity of the vision, Samsung bypassed staged entry through a joint venture or initial supply contract. The company instead borrowed heavily to build a state-of-the-art research and design facility and erect a greenfield factory complete with cutting-edge robotics. Samsung Auto suffered operating losses and crushing interest charges from its inception, and the business was divested for a fraction of its initial investment within a few years.

Rather than hiring consultants or convening off-site meetings to wordsmith the perfect long-term vision, managers in unpredictable markets should concentrate on getting the short- and medium-term priorities right. A small set of clear operating, financial, or market priorities can align the organization. As IBM's incoming CEO, Lou Gerstner refused to provide a long-term vision that would bind the company to specific targets such as revenue goals. Instead, he articulated five clear priorities – including restoring the company to profitability and attacking the client/server market – to focus the organization on the specific opportunities and threats Big Blue faced at that point. Shifting circumstances informed the priorities, which then guided action.

Conduct reconnaissance into the future. The first step in reconnaissance is to send out multiple probes to explore potential opportunities and threats. Companies may conduct environmental scans, such as tracking macroeconomic forecasts. They may also make exploratory forays into potential new markets, including investments in promising start-ups and small-scale market experiments. Consider AmBev. Today, AmBev represents half of InterBev, the largest beer maker in the world. Fifteen years ago, the company's predecessor firm, Brahma (then Brazil's number two brewer), was recovering from a hostile takeover bid and losing ground to market leader Antarctica. To turn the situation around, Brahma executives began actively probing opportunities outside its core Brazilian beer market. It made inexpensive forays to explore the Argentinean and Venezuelan markets and solidified a position in soft drinks as a low-cost call option on future growth in that sector. To keep abreast of risks at the low end of the beer market, Brahma maintained a second brand–Skol–with a separate sales force that competed with low-price regional brewers and monitored their movements. Brahma executives also made regular trips to more developed beer markets, such as the United States, to see how the industry might evolve and routinely met with government officials and macroeconomists to spot trends that might affect their business.

When conducting reconnaissance, managers must above all remain alert to anomalies–to information that surprises them or doesn't jibe with what they expected. Anomalies include initiatives that should work but don't, things that shouldn't work but do, a connection among apparently unrelated events, an unexpected competitive move, and customers who want a product you wouldn't have predicted. In fast-changing markets, a manager's mental map of the competitive terrain can quickly become outdated. Incongruities draw attention to discrepancies between a stable map and a fluid situation and often highlight deeper shifts that may give rise to golden opportunities or sudden-death threats. When managers observe an anomaly, they should investigate it by gathering firsthand data about the source of the discrepancy.

Consider the case of Wahaha, China's largest beverage company by volume. In 1987, Wahaha founder Zong Qinghou was selling school supplies and ice cream from a bicycle-drawn cart. While peddling his wares, Zong noticed an anomaly. Nearly ten years into China's economic reforms, increasingly wealthy parents shopped at well-stocked grocery stores, yet they continued to fret about their children's diets. Having survived the harsh years of China's famine and Cultural Revolution, Zong found their anxiety surprising. He dug deeper and discovered that Beijing's one-child-per-family policy had produced a generation of "little emperors." Spoiled by their parents and grandparents, these children were finicky eaters who favored junk food over more nutritious fare. Zong spotted a golden opportunity to sell nutritional supplements that would stimulate children's appetite for healthy food while providing needed vitamins and minerals. More than 300 nutritional supplements already filled the shelves of Chinese stores, but they were marketed to adults to boost vitality and sexual potency. Exploring the anomaly led Zong to create an innovative category of children's nutritional supplements.

Managers can follow two broad principles when conducting reconnaissance into the future. First, "recon pull" trumps "headquarters push." That is, managers closest to

the facts on the ground should act on the basis of first-hand data about the shifting situation rather than relying on a preconceived plan from headquarters. Executives at established companies often ignore this rule – at their peril – when entering more volatile markets. When Taiwanese food leader Uni-President expanded into mainland China, executives developed a market entry plan at their headquarters in Taiwan. They assumed that what worked in Taiwan would fly in China. Bypassing detailed market research, Uni-President launched its best-selling shrimp-flavored instant noodles at a price point slightly below what it charged at home and attempted to replicate its existing distribution model in China.

The company's offering failed to gain traction, however, because local tastes differed significantly from those in Taiwan (and across provinces), distribution channels were evolving, and customers' willingness to pay was much lower. While Uni-President doggedly followed its preexisting plan from headquarters, a small Taiwanese cooking oil company, Ting Hsin, relied on recon pull to launch its own noodle product. Three of the four brothers who ran the company relocated themselves and their families to the mainland to be closer to the evolving situation and later built a 280-villa housing complex near Tianjin to induce Taiwanese managers to do the same. Immersed in the local market, Ting Hsin's founders learned about consumer tastes, price points, and distribution. This knowledge of the facts on the ground allowed Ting Hsin, rather than its deep-pocketed rival Uni-President, to dominate the instant noodle market.

Another principle is "passing surfaces and swarming gaps." Reconnaissance into the future can be pictured as a process of probing along a wall of resistance looking for gaps. Most of the time, a company encounters hard surfaces: competitors who won't get out of the way, customers who don't want to buy, technologies that won't work, distribution that costs more than it's worth, potential partners who won't play ball. Rather than exhausting resources trying to smash through the wall, executives should probe for gaps in the market. When they do find a gap, managers should swarm it. Ting Hsin hit the wall twice – unsuccessfully launching high-quality cooking oil and egg rolls in China – before spotting a gap in the instant noodle market. An anomaly revealed the gap. During an 18-hour train ride to Beijing, the youngest brother was surprised when the instant noodles he had bought in Taiwan attracted the hungry glances of his fellow passengers (with whom he shared the noodles). He might have shrugged off the event and gone back to his newspaper. Instead, he probed further and learned that instant noodles in China were generally dirt cheap and tasteless, while the savory noodles he took for granted in Taiwan were hard to find and priced beyond the average consumer's budget. After spotting the gap, Ting Hsin swarmed it with a massive television advertising campaign, as well as investments to roll out production and distribution nationwide.

Keep a war chest. During periods of relative calm, executives should preserve a war chest of cash to deploy quickly when faced with a golden opportunity or sudden-death threat. Much of recent strategy theory argues that specialized resources are a firm's primary source of sustainable competitive advantage. In an uncertain world, though, cash has the great advantage of fungibility – it can be deployed against a variety of opportunities and provides the perfect hedge against unexpected threats. Everyone knows that time is money, but the reverse is equally true. Money provides a firm the time to wait actively for a golden opportunity to arise.

Keeping a war chest requires restraint. Spreading a company's chips across too many probes or doubling down on too many bets at the same time leaves little cash in reserve when a big opportunity or threat emerges. To avoid this risk, senior executives should scrutinize the firm's resource allocation process, monitor the number of probes, cap the investment allocated to probes, and increase investment only after explicit evaluation. Executives should also resist pressure from investors or directors to throw money at a market just because it happens to be in fashion.

Large up-front investments are difficult to avoid in some industries, but managers can still take steps to preserve their war chests. Consider Embraer, one of the world's largest aircraft manufacturers, with 2004 revenues of $3.4 billion. Aircraft design and production require big bets, which makes staging investments difficult. During the fat years of the 1990s, however, the Brazilian company adopted a very conservative financial policy, stockpiled cash, avoided debt, and listed on the New York Stock Exchange to build its cash reserves. To minimize its own investment, Embraer slashed component suppliers from 350 to 22, while forging partnerships with firms to provide subsystems. These partners bore approximately two-thirds of the development costs for Embraer's next-generation regional jet, thereby allowing the company to conserve cash. Some analysts criticized Embraer for accumulating a reserve of nearly $700 million in net cash by June 2001, while rivals Fairchild Dornier ($700 million in long-term debt) and Bombardier ($1 billion in long-term debt) borrowed heavily to fund new product development. Then came 9/11. Customers refused to take delivery of planes, and Embraer's inventories soared by $500 million in four months. Its war chest kept the firm afloat, while Bombardier struggled and Fairchild Dornier went bankrupt.

Maintain the pressure. During periods of active waiting, companies must focus on routine operational improvements – cutting costs, strengthening distribution, improving products. These mundane initiatives lack the all-hands-on-deck drama of surviving a crisis or seizing

GOLDEN OPPORTUNITY—OR FOOL'S GOLD?

How do entrepreneurs and managers distinguish between a golden opportunity and fool's gold? Although no cookie-cutter approach can eliminate the need for judgment, the following list of questions can help managers make the call.

What is the anomaly, and why does it exist? Anomalies signal discrepancies between a manager's mental model and the realities of a situation in flux, but not every anomaly signals an opportunity, let alone a golden opportunity. Digging into an anomaly's source can clarify shifts that might give rise to a golden opportunity. In the mid-1990s, aircraft manufacturer Embraer's managers noticed that airlines often used planes that were too large for the routes they flew. It turned out that union contracts restricted the use of smaller planes, which could be flown by less-qualified pilots. Further analysis revealed that these restrictions were under severe pressure as carriers faced increasing competition and financial difficulties. Based on this assessment of the anomaly's sources, Embraer developed a regional jet optimized to the shorter routes.

What changed in the external environment to give rise to the opportunity? If you can't point to a change in the regulatory, market, technical, or social context that generated the opportunity, it may be fool's gold. But gut feel and a plausible story are not enough–you need thorough analysis. The three cofounders of BEA Systems hired two additional employees and spent six months analyzing technological, competitive, and customer trends to test their initial hunch that their windows really were open. Then they pounced.

Is your company under pressure to manufacture a golden opportunity? Too often, executives declare an opportunity "golden" for the wrong reasons. Investors clamor for growth or a new CEO wants to make his mark with a bold stroke. These internal events might coincide with the emergence a golden opportunity, but don't bet on it.

Why is the $20 bill still on the ground? An old joke describes two economists walking down the street. The first looks down and exclaims, "There is a $20 bill on the ground!" The other replies, "That's impossible. If it were there, someone would have picked it up already." The underlying insight is clear–attractive opportunities will be seized rapidly. Ask yourself, If this really is a golden opportunity, why hasn't someone jumped on it already?

How quickly will competitors move? The question is not whether competitors will notice a golden opportunity–they always do–but *when* they'll spot it and move. There are good reasons why worthy rivals might be slow to see and seize an opportunity. A competitor's management turmoil, strategic myopia, or resource constraints might last a year, but they probably won't last forever.

Can you get big fast? Seizing a golden opportunity requires an organization to scale up quickly. Many organizations aren't up to the task. Executives should standardize key processes, metrics, and resources, as well as identify and address any binding constraints in order to go for the gold.

a golden opportunity. The cumulative effect of getting them right, however, can prove decisive in the long run. Not because efficiency alone wins–it rarely does. Rather, because operating efficiency can position a company to snatch a golden opportunity from the jaws of rivals.

When Marcel Telles took over as CEO of Brahma in 1989, he eschewed grand strategy and vision – indeed, one of his first actions was to kill a strategic consulting project. Instead, he set three corporate-level priorities each year. In his first years, Telles prioritized aggressive operational improvements, such as improving product quality, rationalizing the factory footprint, consolidating distribution, and cutting head count. Ruthless pressure to execute on a small number of priorities enabled the beer maker to close the efficiency gap and build a war chest in the span of five years, while rival Antarctica rested on its oars. Then golden opportunity knocked. In 1994, the Brazilian government's currency plan vanquished hyperinflation (which had been running at as much as 2,000% per annum), thereby increasing consumers' disposable income. The Brazilians put their newfound purchasing power to good use and bought more

MANAGERS MUST REMAIN ALERT TO ANOMALIES – INITIATIVES THAT SHOULD WORK BUT DON'T, THINGS THAT SHOULDN'T WORK BUT DO.

beer, increasing average annual beer consumption 60% in two years. At the same time, tariffs limited imports. Brahma's operating improvements allowed it to seize the opportunity before its complacent rival could. Brahma rapidly built up production capacity, accelerated investment in its second brand, Skol, to capture growth in the low end of the market, and built a commanding lead over Antarctica.

Operating efficiency also allowed Brahma to weather a sudden-death threat. In the late 1990s, new low-cost entrants triggered vicious price competition in the Brazilian beer market. The price wars coincided with a sharp devaluation of the Brazilian currency, which doubled local firms' cost of servicing dollar-denominated debt. Brahma could endure the price wars because it had relentlessly reduced its fixed costs in the years of relative calm. It could draw on its war chest to hedge its currency exposure. High fixed costs left Antarctica vulnerable to price reductions, and its weak balance sheet precluded hedging. When Antarctica suffered a financial crisis, Brahma swooped in and acquired its weakened rival to create AmBev.

During periods of relative calm, managers and employees often let up on the pressure, an understandable but deadly temptation. Consider again Haier, which has grown from a struggling employee-owned refrigerator workshop in 1984 to the fifth-largest white goods maker in the world today. In periods of active waiting, Haier uses public posting of performance against objectives to keep the heat turned up. Each manager is evaluated monthly on his or her performance against negotiated goals and ranked relative to peers. Haier posts photographs of all managers in a unit, with their rank for that month, and smiling or frowning faces denoting how they are doing. This system extends all the way to the top of the organization.

Let me be clear. This is not an argument for execution instead of strategy – indeed, execution versus strategy represents a false dichotomy. In unpredictable markets, execution is strategic. Operational improvements keep companies in the game. Firms that maintain the pressure during lulls can outlast less efficient rivals when sudden-death threats descend and can capitalize on golden opportunities beyond the reach of lesser firms. Companies that rely on execution alone, however, will over time lose ground to efficient firms that can also seize golden opportunities when they arise.

Declare the main effort. One of the hardest parts of active waiting is calling it to a close. Executives conducting recon into the future will detect countless opportunities and threats that never rise above the routine. Periodically, however, they will encounter an opportunity or threat so important that it demands the company's full focus. Executives can provide this focus by declaring the opportunity or threat to be the *main effort* – the top priority for a period of time. A manager declaring a main effort resembles a guerrilla commander summoning his widely dispersed forces from the countryside to concentrate forces on a traditional battle at a point in time. Executives must reevaluate all other investments and activities in terms of how well they support the main effort. This declaration confers several advantages: It creates a sense of urgency, focuses the organization, prioritizes resource allocation, lays the groundwork for coordinated effort, and increases the odds of winning big.

Declaring a main effort is often a gut-wrenching decision. Behemoths such as Microsoft or Wal-Mart can fund major initiatives from their bulging balance sheets without batting an eye. But less well-endowed firms – including start-ups, midsize enterprises, companies in countries with high costs of capital, or firms rebuilding their balance sheets – must often commit their entire war chests. A company might have to exit from an established business to free up resources, as Nokia's managers did in the early 1990s, when they sold diversified businesses accounting for approximately 90% of corporate revenues to bet everything on the mobile telephone. A company might also have to give up ownership or control to secure the resources required to scale up quickly. In established companies, managers may need to kill projects or divert cash and talented managers from a profitable division to support the company's main effort. That's what Embraer's CEO did when he halted all other plane development to focus cash, engineers, and management talent on the first regional jet program, which he dubbed the Redemption Project.

At its core, declaring the main effort remains a judgment call. Managers must commit resources before it becomes perfectly clear whether the opportunity is as golden as they suspect. If they wait for complete certainty, rivals will seize the initiative. Many leaders say that declaring a golden opportunity the main effort was the most difficult decision they ever made. Haier's chairman, Zhang Ruimin, for example, faced near total resistance from his management team when he decided to acquire a rival firm to expand beyond refrigerators. (See the sidebar "Golden Opportunity–or Fool's Gold?" for guidance in evaluating whether an opportunity is as golden as it seems.)

But in an unpredictable market, playing it safe in the short term can prove hazardous in the long term. If Haier had remained focused on refrigerators, it would not have achieved the scale and scope necessary to withstand the entry of multinationals when China entered the World Trade Organization. If Brahma had not acquired Antarctica, Anheuser-Busch or another global player would have, leaving the brewer vulnerable in its home market. Because Embraer had launched its regional jet, it was able to maintain growth as demand for its turbojet declined.

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Leading a company into the fog of the future places great demands on top executives. During periods of active waiting, leaders must probe the future and remain alert to anomalies that signal potential threats or opportunities; exercise the restraint to preserve their war chests; and maintain the discipline to keep the troops battle ready. When a golden opportunity or sudden-death threat emerges, they must have the courage to declare the main effort and concentrate resources to seize the moment. This is a tall order. Many executives will naturally prefer the disciplined execution of active waiting but will shy from the big bets. Others will yearn to grab the initiative with the bold stroke but may grow bored with the blocking and tackling of active waiting. It is possible for the same person to excel at both, as the leaders of AmBev, Embraer, and Wahaha demonstrate. The key is to recognize that both are valuable aspects of leadership. It is currently fashionable for hard-nosed managers to praise execution and reject big moves as reckless. But recall that only a few years ago, gurus dismissed execution as the domain of "mere managers" while singing the praises of bold leaders. Surviving and thriving in an unpredictable world requires both. But knowing which skill is required at a specific point in time depends not on a manager's personal predisposition or the ebb and flow of management fads. Rather, it hinges on a sober assessment of the external environment. There is a time to wait and a time to strike, and wisdom lies in aligning the action to the time.

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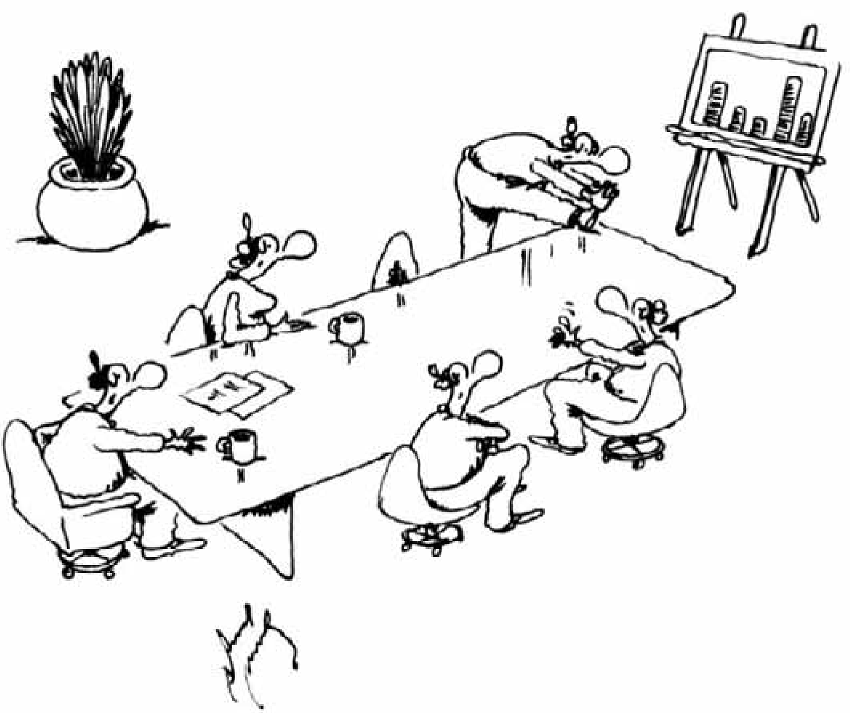

SCOTT ARTHUR MASEAR

"Just get on with the presentation, Winslow!"

In business-to-business markets, the benefits of customer loyalty are enormous – but the means by which companies create and sustain it are not the same as in consumer markets.

TIM ROBINSON

Building Loyalty in Business Markets

by Das Narayandas

PARADOXICAL THOUGH IT may sound, the strategies that companies use in business markets often come between them and the customers they desire. Every organization knows that in order to succeed, it must acquire and retain customers, especially profitable ones. Companies start by asking the vision question: What businesses are we in? Then they segment the businesses and deploy branding strategies, communication tactics, and sales tools. That top-down approach may work well for consumer products, but in business markets, it leads companies astray, hampering their efforts to acquire and retain customers.

Business markets are very different from consumer markets. In a consumer market, large numbers of buyers have similar wants, transactions are usually small in value, products can be mass-produced, consumers' perceptions determine products' value, and companies focus on managing brands. In addition, the selling process is brief, retailing strategies play a vital role, and sales efforts are focused on end users. A business market, by contrast, has fewer customers, and transactions tend to be larger. Customers often need a customized product or price, the usage of the product or service determines its value, and brands mean very little to customers. Moreover, selling is a long and complex process, retailing isn't a factor, and the target of the sales pitch may not be the product's end user.

Still, companies tend to apply consumer marketing solutions to business markets willy-nilly, with poor results. For example, the classic consumer marketing approach of segmenting people by characteristics or behavior, and communicating the product features that matter to each segment, doesn't work in business settings. That's because in business markets, a given customer will use a vendor's products in numerous different applications. Also, industrial commodities (think of cement, for instance, or soda ash) aren't easily differentiated by their features. Customers are interested only in the money they can save by buying from one vendor instead of another.

Another textbook strategy in consumer marketing is to group people with similar needs, so that a company can reach out to them through advertising and other forms of mass communication. That, too, fails to work in business markets because each customer uses machines and materials differently, often specifying distinct characteristics for them. Almost every customer needs a customized product, quantity, or price. In fact, each segment effectively consists of one customer. Such "segments of one" render marketwide selling tactics expensive and ineffectual; instead, firms must communicate directly to each customer the value they deliver. Thus, companies in business markets must use an approach that is based on benefits ("Here's how our product or service can help solve your specific problems") rather than features ("Here's how our product is superior").

Managing individual customers is tough, but it has become an imperative in business markets today. In many industries, suppliers have no choice but to focus on the few large customers that survived the wave of mergers and acquisitions in the 1990s. In addition, vendors have zeroed in on a few midsize buyers that are the profit bulges in their customer bases. And as competition has intensified in business markets, customers have demanded more services and support. Suppliers can deliver those services only if they understand what each customer wants. Besides, technological advances have reduced companies' costs of collecting and analyzing data on each customer. Despite executives' fears about the additional costs, my research shows that companies benefit by entering into long-term, individual relationships with most customers in business markets.

Clearly, marketers need to think – and sell – in terms of the benefits they provide customers or the customer problems they solve. I have been researching business markets for more than 14 years. I find that most marketers are so busy figuring out how their companies can create value that they don't pay attention to communicating the benefits their companies deliver to customers. Marketers rarely even think about the different types of benefits their companies offer and are often unable to convey the value of benefits to the executives who want them. I also find that companies often don't focus on developing individual relationships so that each customer becomes more loyal. That's a mistake, because in business markets, loyalty offers companies several advantages. In the following pages, I will show how companies can communicate benefits effectively to acquire customers and to develop loyal customers over time.

A Typology of Benefits

Companies rarely, if ever, take the trouble to communicate to prospective customers all the economic, technical, service, and social benefits they provide. Most sellers simply assume that buyers grasp the value of products and services. That's a reasonable assumption, but it's dead wrong. My studies show that business buyers don't keep track of all the products and services they get and that they cannot quantify the value of many benefits. For instance, Arrow Electronics started coordinating parts of customers' supply chains and offering engineering design services in the late 1980s. A decade later, the electronic-components distributor was shocked to find that companies regularly using those services weren't aware that they were provided by Arrow. Similarly, a medical instruments manufacturer found from annual surveys that not one of the executives who worked for its customers was aware of all the services that the company provided his or her organization. In fact, buyers don't use some services that suppliers routinely provide, and they stop using others if vendors charge for them. When Owens & Minor, a medical supplies distributor, made customers pay for each service instead of charging them for a bundle, it discovered that hospitals quickly learned to do without many services.

When I work with companies, I find it's useful for executives to think about a product's value by grouping its benefits into four categories:

Tangible financial benefits have value that sellers can communicate and buyers can verify. For example, Volvo can use standard measures like horsepower and torque to prove that its truck engines are more powerful than competitors', and fleet owners can calculate the money they will save by using Volvo engines to haul greater loads or to move loads faster. Industrial marketers often highlight tangible financial benefits because prospects grasp their value easily and can verify claims before purchasing products. However, if one vendor can offer such benefits, so can rivals. That kind of competition inevitably leads to price wars.

Nontangible financial benefits are those with value that sellers can convey but buyers cannot easily validate. For instance, when SaleSoft, an early entrant in the sales software market, told potential customers that it could estimate the additional revenues they would generate by using its software suite, most prospects were skeptical about the claims. Such situations pose a challenge to marketers, particularly because nontangible financial benefits are an effective way of differentiating industrial products.

Companies can convince prospects of the value of nontangible financial benefits in several indirect ways. They can use research from independent agencies to overcome prospects' skepticism. Alternatively, suppliers can conduct pilot projects at potential customers' facilities. Siebel Systems, for instance, started out in the early 1990s by doing everything it could to get prospects to agree to pilot projects. The company realized that once buyers estimated the

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In business markets, almost every customer needs a customized product, quantity, or price. In fact, each segment effectively consists of one customer.

savings from those projects, they found it easy to make purchase decisions. Vendors can also offer customers money-back guarantees or penalty payments if products don't perform as well as advertised. However, customers demand large sums as compensation, and marketers find it difficult to provide credible guarantees in business markets. For instance, when a leasing company offered $100 rebates if it didn't process orders within a specified time period, customers weren't impressed. They wanted the firm to reimburse them any money they lost because of processing delays, a promise the leasing company could not afford to make.

Whenever possible, vendor companies should change the game's rules by proposing pay-for-performance contracts. In my experience, that's the most effective way for companies to get the value of benefits across to customers. For instance, a manufacturer of wire harnesses (essentially, bundles of wires with connectors) was for years unable to get airlines to pay higher prices, even though its products were more reliable than competitors'. Eventually, the vendor asked customers to pay a part of the savings that accrued from the products' longer life and a portion of the additional revenues that came from keeping planes aloft for more hours. The airlines agreed because they could track the relative durability of wire harnesses and estimate the monetary impact. Since then, the vendor has generated higher revenues from existing customers every year.

Tangible nonfinancial benefits have value that is difficult for sellers to quantify, even though buyers perceive it. For instance, no one was ever fired for buying IBM, as the adage goes, but Big Blue can't quantify in financial terms what that level of comfort means for customers. Tangible nonfinancial benefits, such as corporate reputations, global scale, and innovation capabilities, take time and money to create, but in commodity markets, they often influence firms' choices. Buyers reward companies that offer this genre of benefits by paying premium prices for products or by specifying, in requests for quotations, benefits that are offered only by those companies. In fact, specialty manufacturer Raychem focuses its marketing efforts to ensure that customers mention its products in RFQs.

Nontangible nonfinancial benefits have value that both sellers and buyers are unable to quantify, especially in monetary terms. Since they must be experienced to be appreciated, such benefits play a more critical role when companies try to retain buyers than during the customer acquisition process. For example, many vendors go beyond the letter of contracts and do such things as deliver supplies on holidays to keep customers' production lines going. V. Kasturi Rangan of Harvard Business School and I have found that benefits like these keep buyers loyal; customers have no way of knowing if new vendors will offer similar levels of service (see, for instance, our July 2004 *Journal of Marketing* article "Building and Sustaining Buyer-Seller Relationships in Mature Industrial Markets"). In fact, nontangible nonfinancial benefits often bind buyers to troubled sellers. In the 1990s, Lucent Technologies found that many customers bought its switching systems even though it didn't offer the latest technology. Because of the relationships that the company had built over the years, customers were willing to give Lucent a chance to catch up with rivals.

If suppliers don't want to lose loyal customers, they must learn to tell them about the nontangible nonfinancial benefits they provide. For example, the specialty chemicals division of a global oil company routinely informs customers about the services it has delivered over and above its contractual obligations. A matter-of-fact monthly letter, designed not to read like a sales pitch, documents all the additional benefits that the supplier provided and the efforts it had to make to deliver them. It also identifies the buyer's executives who requested the extra services. Those executives have become the supplier's champions, and buyers' trust in the vendor has risen, I daresay, every month.

To acquire customers, companies must try to be at par with rivals on tangible financial benefits and use tangible nonfinancial benefits to differentiate their products. They can build relationships by shifting customers' focus from tangible benefits to nonfinancial nontangible benefits. For instance, a leading manufacturer of tires for earthmoving equipment woos customers by offering them products that outperform competitors'. Once it has broken into an account, the firm offers free services that reduce customers' operating expenses. The company studies conditions at customers' mines, uses benchmark data to suggest new operating procedures, and changes the composition of the materials in tires for each customer, all to help customers control costs. Over time, buyers have learned to trust the supplier's account management teams almost as much as they do their own executives.

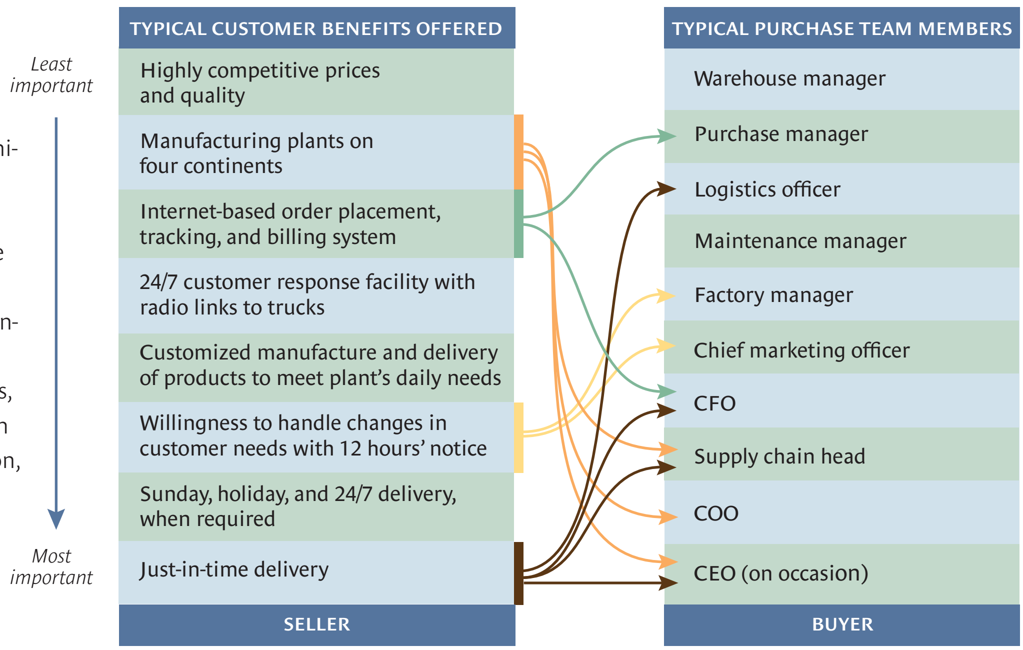
I find that most marketers are so busy figuring out how their companies can create value that they don't pay attention to communicating the benefits their companies deliver to customers.

Linking Benefits to Decision Makers

Marketers find it difficult to communicate benefits to customers because, often, the buying decisions in companies are made not by individuals but by groups of managers. When purchases

The Benefit Stack and the Decision-Maker Stack

You can effectively communicate the value of your offerings by linking the benefits to the executives who desire them. You must make each manager aware of all the benefits you've offered others, because in business markets, purchase decisions are often made jointly. (For illustration, only some of the links are shown.)



affect the entire organization and involve large financial outlays, several functions and executives are involved in the process. I have seen six-function, 40-member purchase committees in many corporations. Moreover, the manufacturing plants of a multilocation business may use the same materials or machines, but each will have special requirements. Vendors must first woo the headquarters' buying group and later focus on factories' purchase committees. But few marketers are comfortable with multilevel processes and decisions by committee.

The key to success in such situations is keeping in mind that each member of a buying group is usually interested in only one benefit or, at most, a few benefits. For example, when a manufacturer debates the purchase of new machining centers, the factory head mainly wants to know how much time will be required for the vendor to install the machines and train operators. The maintenance manager will focus on the vendor's service contracts. The procurement manager will be interested in prices. As for the top executives on the team, the CEO will only want to know how the purchase will affect the business's bottom line; the COO will be concerned about the switchover to a new manufacturing process; and the CFO will harp on the deal's financial terms. Since most marketers don't track the needs and concerns of each member of the buying team, they don't communicate the benefits to the team members who want them.

To help companies manage that communication process, I developed a simple set of devices, the benefit stack and the decision-maker stack. The vendor lists all the benefits it offers, placing the most important at the base of a stack. This exercise, I find, facilitates marketers' understanding of the relative importance of the benefits. The supplier then creates a stack of decision makers and places it beside the benefit stack. If possible, the supplier also lists the main concerns, motivations, and power bases of each member of the purchase committee. By linking the two stacks, the vendor can systematically tackle each decision maker's concerns and communicate how it will meet his or her specific needs. Marketers must also brief each buyer about the concerns of the other people in the stack, as well as the solutions the vendor proposes, so that the entire committee gets the full picture. (See the exhibit "The Benefit Stack and the Decision-Maker Stack.")

The concept is simple but effective. In 1996, the $2.5 billion Kone introduced an elevator system in Germany that was superior to other products in three ways. The MonoSpace was more energy efficient, its motor didn't have to be housed in a rooftop structure, and its installation and maintenance costs were much lower. However, Kone had traditionally been a low-end player and had marketed its products only to contractors. Since the performance of the top five elevator systems in the market had been roughly the same before Kone launched the MonoSpace, price had been the sole differentiator.

Kone wanted to charge a premium for the MonoSpace and decided to study the market afresh to figure out a way of doing so. The company found that decisions about elevators were made jointly by owners, architects, structural engineers, and building contractors. Owners were interested in keeping project costs low, and, to a lesser extent, in minimizing maintenance costs; architects were interested in the elevator's aesthetics and design; engineers worried about how elevators affected buildings' structural integrity; and contractors, Kone knew, sought to reduce the costs of installing elevators.

Kone began its marketing campaign by educating owners about the MonoSpace's lower operating and maintenance costs and by explaining its design benefits to architects. When Kone's executives met with purchase teams, they found that most engineers were neutral because the new product didn't affect buildings' structural integrity. Architects sold the MonoSpace's value to owners, and, together, architects and owners usually convinced contractors to install the new product. Kone found it tough to reinvent its selling process to communicate the MonoSpace's benefits. But it eventually succeeded in doing so, and the company doubled its share of the German elevator market in three years.

Levels of Loyalty

Retaining customers in business markets isn't just about keeping them in the fold; companies must also develop relationships with customers and grow their loyalty over time. Unfortunately, more than 80% of companies use satisfaction scores to monitor customer loyalty. That doesn't work, because there is very little correlation between satisfaction and loyalty in business markets. Besides, customer satisfaction scores measure how well vendors have done in the past but aren't reliable indicators of future customer behavior.

There is very little correlation between satisfaction scores and customer loyalty in business markets.

A few businesses, having realized the limitations of satisfaction scores as a proxy for loyalty, use composite measures such as a combination of satisfaction scores, recommendations, and repurchase ratings. Other firms look at the revenues they generate from the same customer over time or the word-of-mouth recommendations that customers provide. Those metrics are a distinct improvement over satisfaction scores alone, but they don't give vendors a complete picture of customer relationships. Nor do they let companies compare the rewards from loyalty with the costs of managing customers.

Companies can decide how much time and money they should expend on customer relationships with the help of what I call loyalty ladders. (See the exhibit "The Loyalty Ladder.") Managers define loyalty as a commitment to continue buying a product or service, whatever the circumstances. In business markets, the gains from loyalty go well beyond repurchase. Loyal customers display a number of other behavioral characteristics as well, usually in the following sequence. They:

Grow the relationship. The customer will want to buy more products or services at this stage and expand the scope of its relationship with the vendor. It costs very little to serve the customer, because the supplier has already incurred customer acquisition costs.

Provide word-of-mouth endorsement. The customer is likely to promote the company by talking about it positively. The vendor incurs lower costs for acquiring new customers.

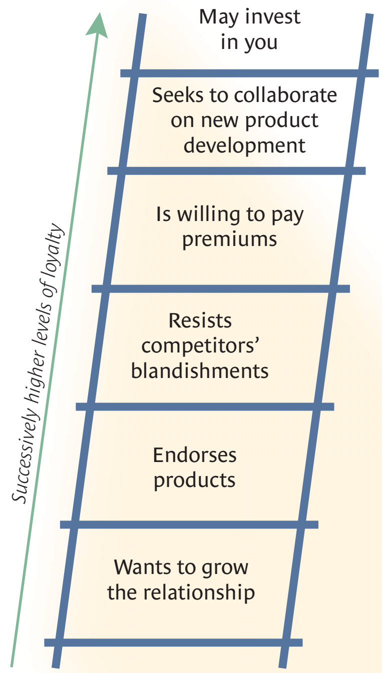
Resist competitors' blandishments. By this time, the customer is less likely to switch to rivals, even if their products are superior, because it expects that the preferred vendor will develop similar products. It costs the vendor very little to retain the customer.

Pay premiums. A customer this loyal may be willing to pay higher prices for the vendor's products and services.

Collaborate. The customer believes that the feedback it provides will foster future improvements and wants to help the supplier develop new products and services.

Invest. Loyal customers often invest in their vendors. In addition to creating an exit barrier, such investments reduce vendors' risks.

These behaviors can be thought of as rungs on a ladder, with higher positions representing higher levels of loyalty. Ladders may vary a little across sectors, but my studies show that they are the same for all customers in an industry. Companies can map the locations of customers on loyalty ladders every year by analyzing sales records, interviewing account management teams, and conducting customer surveys. For example, firms can check to see what customers bought from them in the previous year and the prices they paid for those products. By talking to salespeople, executives can learn about complaints or feedback from customers that resulted in design changes or new products. Customer surveys sometimes provide companies with early indicators of loyalty. For instance, buyers are unlikely to pay premiums for products unless they have said in customer surveys that they are "very likely" to repurchase products. Similarly, customers are usually "willing to pay a 10% premium" for products before they collaborate with vendors on developing new products.



The Loyalty Ladder

Business customers display their loyalty in a predictable sequence as they move up the loyalty ladder. You can determine which rungs your customers stand on by analyzing sales records, talking to sales teams, and conducting surveys.

Each successive rung is a source of higher revenues, which vendors can calculate in two ways. First, they can ask account management teams to forecast the likely increases in business as a customer moves up the ladder. My field experience suggests that such forecasts are often accurate. Second, vendors can use historical data to estimate the additional revenues they earned as customers moved up one rung. In the same way, firms can calculate, from account managers' experience and past data, the costs of moving a customer to the next rung. That allows companies to calculate the returns on their efforts and to make decisions on how much to invest in each customer relationship in the future.

The $40 million software firm Unitech Systems did just that. It drew up a list of customers that together accounted for 80% of its annual revenues. After analyzing several years of data, the firm found a three-rung loyalty ladder in its markets: making repurchases, providing word-of-mouth recommendations, and paying premium prices. Unitech asked sales managers for information on the three parameters and used the data to place each customer on the loyalty ladder. The firm then calculated the average revenue from customers on each rung to evaluate that rung's revenue potential and asked marketers to estimate the costs of moving customers up one or more rungs. The information allowed Unitech to classify its customers into four types, which I describe below, and to decide whether it wanted to keep them on the rungs they occupied, move them up, or reduce the time and money it spent and force some customers to move down the ladder.

Types of Customers

When companies map customers' locations on loyalty ladders and compare the rewards of loyalty with the costs of managing customers, they usually find that they have four kinds of customers (see the exhibit "Four Kinds of Buyers").

Commodity Buyers. Some customers force vendors to strip away all the value-added services they provide and sell them only the basic offering. They view products as commodities and are likely to switch if other suppliers offer them lower prices. In business markets, a large number of high-volume customers tend to be in this category. In most cases, vendors shouldn't bother to educate these customers about the value-added services they offer; they should focus instead on reducing their customer service costs. Sometimes, vendors can benefit by entering into long-term contracts with commodity buyers or by pushing them into one of the other customer categories, because assured demand is important in business markets.

Underperformers. Companies that operate in industries with high fixed costs will find that their biggest customers are in this quadrant. That's because vendors often provide free services to large customers in order to retain them. For the same reason, this category includes showcase accounts that companies use to enhance their reputations. Some marketers also make the mistake of acquiring customers by offering low prices, hoping it will be possible to increase prices in the future. That never happens; companies only lose money on those customers.

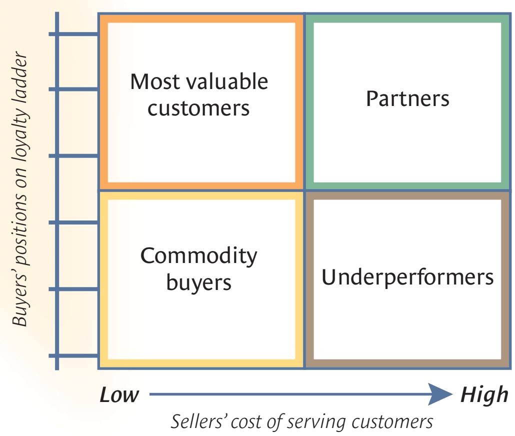
Underperformers should be in customer portfolios only temporarily. At one extreme, companies can try to turn them into commodity buyers by slashing services that the customers don't need or value. At the other extreme, vendors can make these companies partners by getting them to pay for benefits that they appreciate. Suppliers can also cut costs by offering underperformers standard products and services or by serving them more cost-effectively. Similarly, since showcase customers often demand free services, vendors should guesstimate the advantages of having them in their portfolios. If the costs greatly outweigh the advantages, a vendor must try to move such a customer to another category.

Finally, companies can get rid of underperformers. That requires resolve; it is never easy to walk away from big customers. A supplier of engineered components found that one of its biggest customers was planning to hold Internet-based reverse auctions to procure those components. Desperate to keep the business, the vendor dropped prices to win the auctions. Not long afterward, the vendor realized that the customer wanted the same levels of service as before. When the vendor couldn't get the customer to pay extra for the services it provided, it decided to drop the account. Firing the customer paid off: When the ex-buyer started working with new suppliers, it found that they couldn't or wouldn't provide many of the services it needed. The company had to go back to its original vendor, and the two firms negotiated a fresh agreement on the vendor's terms.

Partners. Such customers are expensive to serve, but the returns usually

Four Kinds of Buyers

To determine whether to invest in, maintain, or divest a relationship with a customer, compare the advantages of having that buyer remain on its current rung of the loyalty ladder with the cost of moving it up and the savings from moving it down. That calculation yields four customer categories.



justify the effort. Since partners choose not to develop in-house expertise or make investments that would reduce their need for vendors' services, they want turnkey solutions from suppliers. They view suppliers as value-adding partners and look for long-term commitments. These customers also want the latest and best products and are willing to pay premiums for them. Although they may not be involved in codeveloping new products, partners are often drivers of product innovation.

It isn't easy for companies to manage partners. For example, partners in high-tech industries often ask vendors to reduce prices because their products become commodities quickly. If vendors comply but can't subsequently reduce costs, such partners become underperformers. Similarly, as markets mature, procurement managers, rather than technical staffs, dominate purchase committees. Unless suppliers educate the new members about how they have helped reduce customers' costs in the past, they will lose their partners to the lowest bidders.

Most Valuable Customers. MVCs are as loyal as partners but often less expensive to serve. That's because vendors have become more efficient at serving them or buyers have taken over functions that suppliers traditionally provide. For instance, some firms prefer to customize products themselves with tools provided by vendors. Similarly, the Internet enables buyers to place orders, track deliveries, print bills, and deliver payments, reducing vendors' costs.

A company's MVCs may be willing to pay premium prices as rewards for vendors' past efforts. That may seem to be irrational behavior at the transaction level, but it is rational when viewed through the lens of a long-term relationship. Such customers are often willing to vouch for their vendors. In most business markets, MVCs account for less than 10% of a vendor's revenue base, and companies cultivate them assiduously. When new rivals or technologies appear, it's a good idea for suppliers to move such customers to the partner quadrant by offering them more benefits.

Turning Switchers into Valuable Customers

In most business markets, customers don't show up in the shape desired by vendors. Companies can develop profitable relationships by investing time and money to migrate customers from one category to another. As the case of the $3.7 billion electrical parts distributor Wesco Distribution demonstrates, businesses need discipline to do that. When Wesco analyzed its OEM customer base, it found that most of the companies in it were commodity buyers. They shopped for the lowest price and played vendors against each other. Wesco was willing to offer low prices as well as a full range of products, but it wanted customers to make long-term purchase commitments. Few OEMs were willing to do so; they wanted to see the benefits of building a relationship with Wesco before they made any promises. Wesco took the plunge and made investments that allowed it to provide services such as inventory management and energy audits, which trimmed customers' costs of procuring components and operating electrical systems. Naturally, Wesco's costs rose, and since customers were still cherry-picking products from its portfolio, they became underperformers.

Most companies would have given up at this stage, but Wesco persisted with its

Many companies believe that because they sell solutions rather than products, they have gone beyond offering features. But most suppliers continue to base solutions on preconceived notions of customer wants.

strategy. Over the next 12 months, several customers noticed that Wesco had invested in building relationships with them and that their costs had fallen. They also realized that by integrating their procurement and supply chain processes with Wesco's systems, they could reduce costs even further. The buyers' focus was no longer on purchase (or product) costs, but on the costs of ownership (or procurement). Customers started buying greater volumes from Wesco, and Wesco's costs began to drop because of scale economies, predictable demand patterns, and lower inventory costs. When the benefits became large enough, the supplier even passed on some of its savings to customers. Because Wesco realized that it takes time to shift customers to a new category, the company eventually succeeded in turning a group of commodity buyers into valuable customers.

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Few companies try to build relationships with individual customers, because that approach differs entirely from current practice and, more important, requires considerable discipline in planning and execution. For instance, many companies believe that because they sell solutions rather than products, they have gone beyond offering features. But most suppliers continue to base solutions on preconceived notions of customer wants instead of tailoring products and services to meet each customer's needs and processes. As a result, they push the features of their solutions packages rather than offering benefits that customers really want. State-of-the-art customer relationship management systems focus entirely on companies' interactions with customers; that is a step toward managing customers, but it is only a small beginning. Companies still have a long way to go before they can say they manage individual customers in business markets. The silver lining is that this approach requires neither big ad budgets nor software programs; all it demands is a return to the basics of marketing.

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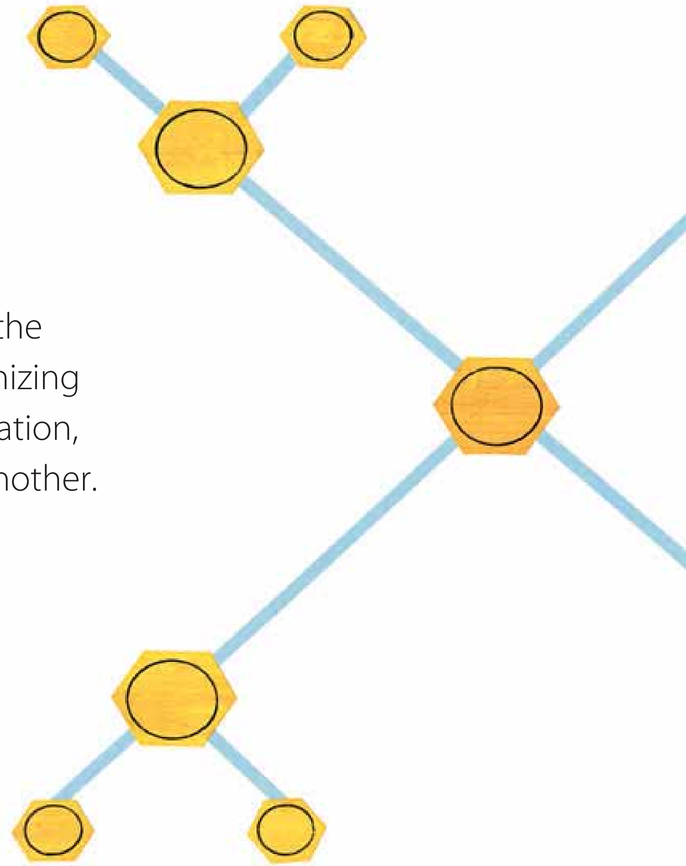


Internet telephone technology, rapidly displacing the traditional kind, isn't just inexpensive. It's revolutionizing the way companies coordinate people and information, connect with customers, and compete with one another.

Using VoIP to Compete

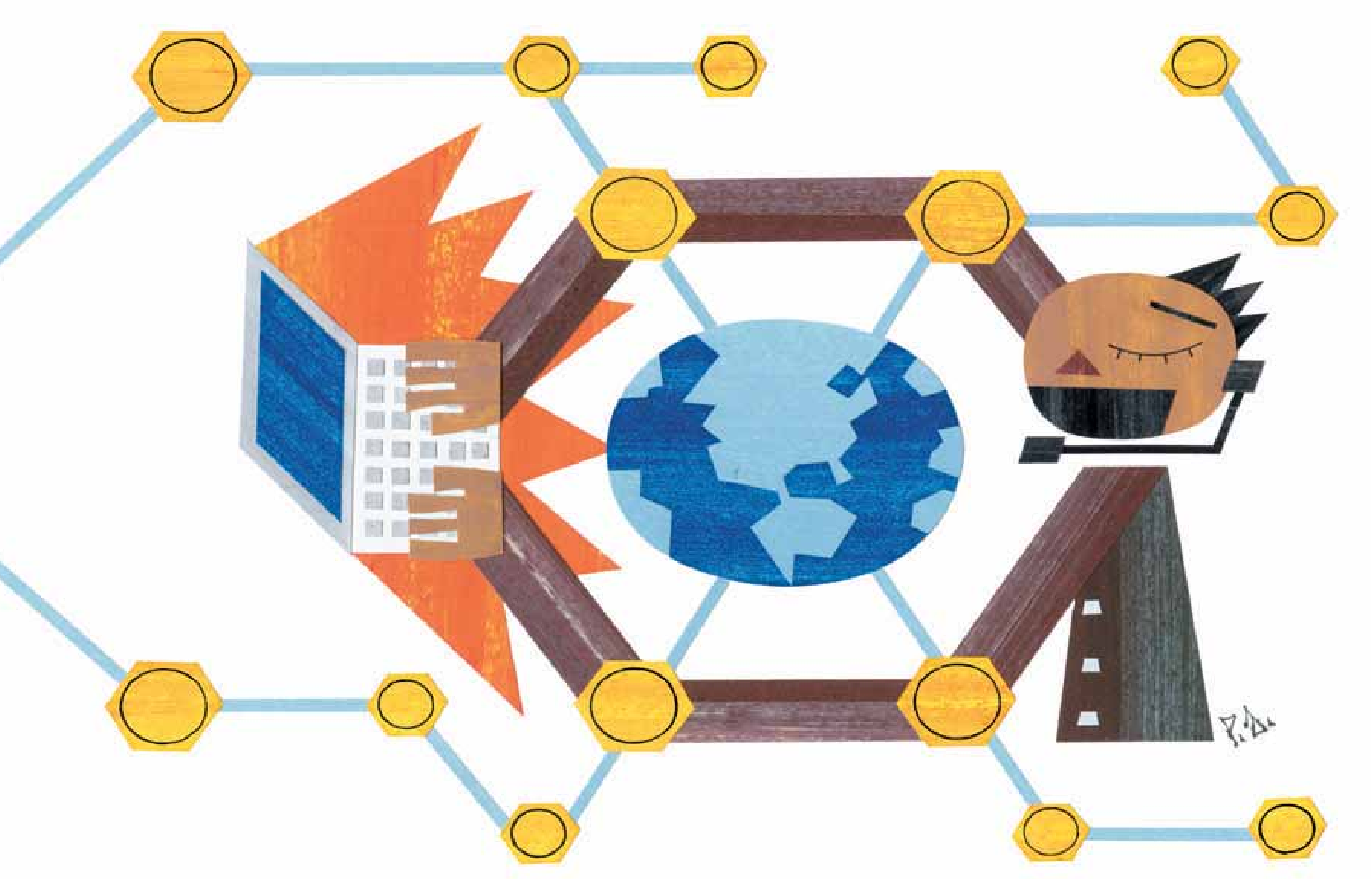
by Kevin Werbach

Since Alexander Graham Bell's day, businesses have bought telephone services the same way they've purchased electricity, janitorial functions, and water for the cooler – as packaged offerings defined by an outside provider. Sure, companies could choose from a menu of configuration options and service plans, but, in the end, the phone company or vendor called the shots. The breakup of telephone monopolies such as AT&T in the 1980s changed the mix of providers, but it left intact the century-old public-switched telephone network they employ, and it left service decisions up to suppliers. As a result, companies have been constrained – more than they know – by the legacy phone systems they've depended on.

That's changing fast. While the vast majority of individuals and companies still rely on conventional phones, an estimated 10% of international phone traffic now travels over the Internet using voice over Internet protocol, or VoIP. Most telling, this year, for the first time, U.S. companies bought more new Internet-phone connections than conventional phone lines (see the sidebar "How Big Is VoIP?").

VoIP isn't just a new technology for making old-fashioned calls cheaper. What makes it so potent is that it turns speech into digital data packets that can be stored, searched, manipulated, copied, combined with other data, and distributed to virtually any device that connects to the Internet. Think of it, basically, as the World Wide Web for the voice. IP, or Internet protocol, simply refers to the technical standards that govern how digital information is encoded. Because of these common standards, VoIP can interact seamlessly with other Internet-based data and systems.

These might seem like technical nuances best left to your CIO. But consider this: Since VoIP turns voice into Internet-friendly data packets, it can – and will – replace the rigid, packaged phone services that most companies still use. And because it will allow businesses to create their own customized phone *applications,* it will shift control of phone services from providers that have historically defined (and limited) them to the companies that use them. VoIP will serve as the unifying platform for such applications, supporting ever more customized, intelligent, and strategic uses of voice communications. As some innovative firms are already showing, this flexibility can fundamentally affect how companies use voice to compete, allowing them to set up and conduct business in ways that simply couldn't have been done before – or that were so impractical that no one would have bothered.



PHILIP ANDERSON

VoIP as a Platform

When you call a colleague's office from yours using a traditional circuit-switched phone, the call originates from the hardware on your desk, travels along one of a limited number of paths on dedicated telephone networks, and arrives at a specific location – the phone on her desk. VoIP calls, by contrast, are just bits of data on the global Internet. They are not tied to physical locations (such as the building where you work) or specific devices (such as your office or cell phone). And because VoIP uses common standards, it can talk to any device that uses Internet protocol. It can just as easily go to an e-mail in-box on a laptop computer connected to a wireless network in a London café as to the phone on that colleague's desk.

Making VoIP calls need not involve any visible changes for users. A caller can use an ordinary telephone connected to a VoIP converter box, which plugs into an Internet connection. Or he can use an IP phone that looks like a conventional telephone but connects directly to the Internet instead of a phone jack. Finally, he can install "softphone" software on any personal computer (and many personal digital assistants) and use a headset or microphone to make VoIP calls.

Installing front-office devices – the phones, converters, or software that employees see – is the initial step in developing a VoIP platform. Next, companies must install VoIP gear to replace their back-office private branch exchange (PBX) equipment – their conventional phone networks. The new VoIP software and hardware infrastructure controls what features are available and how the VoIP devices connect with corporate IT systems. (Smaller organizations may outsource this infrastructure function to a provider or simply link together individual VoIP phones and other devices.)

In a VoIP world, a phone system isn't static; it's an environment for developing and managing any capabilities that use voice or other IP communications. Building applications to take advantage of all the newly accessible IP resources is where the real benefits arise. Adding a function like videoconferencing to a VoIP system doesn't involve a major equipment change; it's akin to installing a software package on your PC. More significant, it means VoIP will be able to support new communications functions that don't even exist today. Just as the initial wave of static corporate Web sites a decade ago gave way to dynamic, interactive, truly business-enhancing uses of the Internet, VoIP will serve as a platform for more strategic communications that combine voice with other data–so-called "converged communications."

In thinking about VoIP's potential as a strategic tool, consider its roles in terms of three types of capability: virtualization, customization, and intelligence.

Virtualization

VoIP makes it simple to take a virtual version of one's phone to any location at any time. And it makes it possible to launch service for an unlimited number of phones anywhere in the world with a few mouse clicks. This combination of portability and scalability takes features of conventional communications that are fixed and expensive and makes them variable and cheap. It allows companies to build inexpensive redundancy to manage risk, and, most important, it gives companies flexible communications that can easily adjust to fluctuating demand.

Portability. With VoIP service, a businessperson in the U.S. could take a VoIP terminal adapter–a converter currently about the size of a paperback–to Tokyo, plug it into a broadband connection at a hotel, and seamlessly receive calls at her U.S. office phone number. (If she has VoIP software on her laptop or a portable IP phone, she could use those instead of the adapter.) She'll have all the capabilities of her desk phone–call features, directories, and security – and callers on the other end will have no idea she's answering from halfway around the world. Neither party pays anything extra.

Consider how the government of Marin County, California, uses VoIP to give its employees and officials home-office capabilities wherever they are. Using a system that integrates VoIP, voice recognition, voice synthesis, and e-mail, they can listen to and compose e-mails by phone, check and schedule appointments, create task lists, and launch calls from a contact list. They can also set preferences for notification based on priority level or sender. For example, sheriff's deputies investigating a crime could tell the system to put supervisors' calls directly through while shunting less important calls to voice mail.

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Scalability and Redundancy. The same functionality that makes a person's phone number and associated services portable also makes it simple to add phone lines wherever and whenever they're needed. Every time a new employee arrives at a company, or another employee moves to a new office, hooking up that person's phone service is simply a matter of changing a setting on a Web page. Similarly, a company with an established VoIP infrastructure can just point and click to outfit a new office anywhere in the world with the full suite of corporate communications capabilities – and shut it down just as easily.

One Wall Street investment bank, for example, realized after the attacks on the World Trade Center that it needed greater operational resilience in the event of a disaster. It created a backup location just outside New York City, linking it to headquarters through VoIP. In a disaster, all calls can be rerouted to the new location in minutes. Without VoIP, such rerouting would have required days or weeks of rewiring and reprogramming. VoIP made it easier to add true redundancy, not just in equipment but in the continuity of business operations.

Flexibility. Other businesses are being built from scratch entirely around VoIP, because it allows them to respond flexibly to fluctuations in demand across time and space. LiveOps, a Silicon Valley call center start-up, made VoIP central to its strategy of servicing direct-response television advertisements, where demand comes in bursts. It's inefficient to maintain a full call center staff when the flow of calls is so variable. So LiveOps' 5,000 agents work part-time from home and are tapped or taken off the clock as soon as demand changes.

VoIP allows LiveOps to give its agents the same sophisticated computer-based tools they would have in a traditional call center. For example, a call can be switched from an agent to an interactive voice response (IVR) system that allows the customer to type in a credit card number and audibly record her agreement to certain terms, as required by regulations in some industries. The call can then be switched back to the agent without ever losing the tracking, analysis, and management capabilities that allow LiveOps supervisors to evaluate the call for quality assurance purposes.

Similarly, Amicus, a call center outsourcer in the UK, created a network of stay-at-home parents, disabled workers, and others from underutilized labor markets. Using VoIP, these far-flung customer-service agents can work from home and still have call center features such as call tracking and personalized computer screens that provide scripts and customer information. By avoiding the overhead of a contact center, and by tapping relatively inexpensive labor, Amicus has lowered its call center costs by about a third. That has brought its expenses close to those of call centers based in developing countries. Able to compete directly with these centers, Amicus has carved out a strategic niche: It targets UK companies that avoid offshore call centers for political or regulatory reasons.

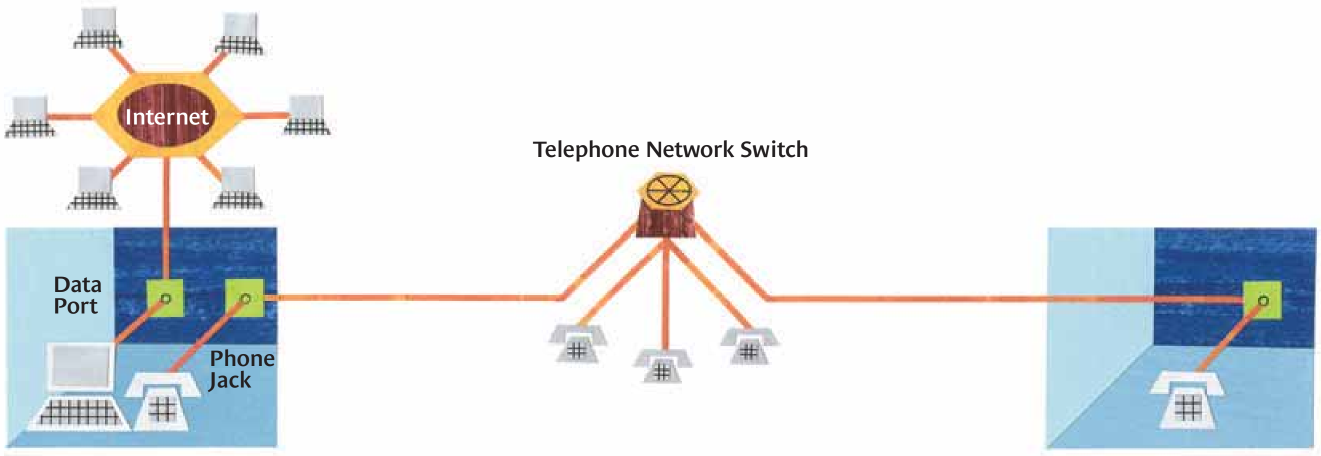
Customization

The biggest advances in the traditional phone network, such as caller ID and voice mail, took decades to design and deploy. With VoIP, new calling features, or voice applications, are easy to build and refine. Although off-the-shelf VoIP software and hardware come with a variety of features, organizations are busy writing custom applications that can reinforce branding, enhance customer service, and improve internal communications.

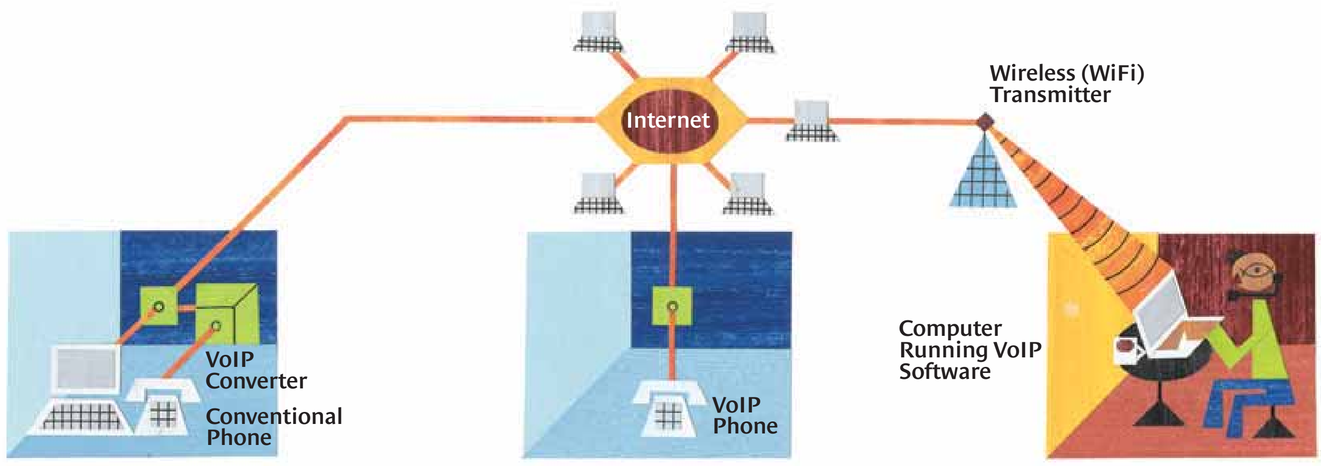
Brand Building. Fandango, an online movie-ticket service, wanted a phone-based system that differentiated it from

Conventional Calling Versus VoIP

Conventional telephony sends voice communications over a dedicated telephone network that is separate from the Internet.



VoIP telephony turns speech into digital packets that can travel over the Internet and interact with other data and devices that use the Internet. Calls can move between conventional phones with VoIP converters, specialized VoIP phones, and computers running VoIP software.



its competitor Moviefone. VoIP allowed the company to easily experiment with and hone its customer interface. Working with Tellme, a Silicon Valley provider of voice application technology, Fandango tried out more than 30 options for background music, prompts, and recorded voices before finally settling on a theme built around a classical guitar piece (a fandango, appropriately enough). The system allows Fandango to rapidly tailor and swap in new local welcome messages and movie highlights, making it an extension of the online brand.

Customer Service. And consider how one resort has used a customized VoIP system to address changing demand and differentiate its service: Over the past ten years, the primary revenue source for Las Vegas resorts has shifted from gambling to guest services such as entertainment, dining, and recreation. Recognizing this, billionaire developer Steve Wynn installed VoIP as part of a strategy to pamper and delight guests in his new Wynn Las Vegas luxury hotel and casino.

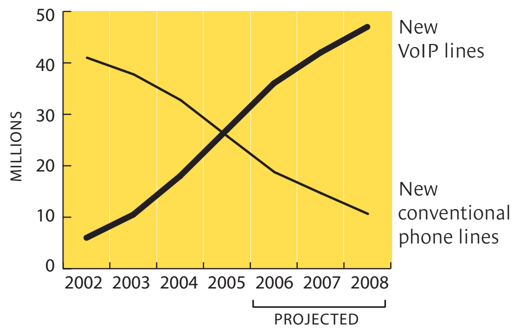
Using the VoIP phones available in every room, guests will be able to call the concierge to arrange dinner reservations while browsing menus and pictures of dining rooms on the phone's color display. When a guest calls the service staff, VoIP rings a staffer's cell phone and desk phone to assure that the guest gets through. Staff can use speech commands to manage their voice mail messages and calendars, access

How Big Is VoIP?

Today, all major phone service providers are incorporating voice-over-Internet-protocol technology into their networks. BT, the dominant carrier in the United Kingdom, plans to convert its entire infrastructure to VoIP by 2009. Soon, even when calls originate and terminate with traditional telephone technology, they will be carried over the phone companies' VoIP networks. In 20 years, and probably much sooner, the global telephone system will run largely on Internet technology. There will be no distinction between VoIP and the phone network.

VoIP's simplicity and low cost are driving its rapid adoption by both consumers and businesses. The leading U.S. retail VoIP provider, Vonage, has about 600,000 customers and is adding about 15,000 each week. A host of start-ups are marketing competing services, as are incumbent phone and cable TV companies such as AT&T, Verizon, Time Warner Cable, and Comcast. And the U.S. is hardly a leader in this field. In Japan, where broadband service is cheap and much more widespread than in the U.S., over 4 million customers – representing more than 10% of all homes – subscribe to VoIP offerings. Over 35 million people worldwide have the free Skype VoIP software on their PCs.

In 2005, companies worldwide installed more new VoIP phone lines than conventional lines.



Source: Avaya analysis from multiple analyst reports.

Consumer VoIP may get most of the attention, but there has been a steady drumbeat of enterprise VoIP adoption. Last year, Bank of America committed to deploying 180,000 Cisco VoIP phones across its 5,800 branches and offices. Boeing signed a contract to provide VoIP to its 150,000 employees, and Ford signed a $100 million deal with telecommunications carrier SBC to deploy 50,000 VoIP phones. Smaller firms are embracing VoIP as well. Cisco, one of the largest VoIP vendors, has sold more than 4 million IP phones to businesses.

Most of these initial VoIP deployments are simple ROI-driven technology investments, akin to buying sales-force automation systems or human resources software. VoIP cuts costs by replacing separate voice and data networks (both users' and providers') with one common infrastructure, eliminating duplication. Thus, instead of paying phone companies to carry their voice traffic, companies can send much of it over the spare capacity on their own data networks. Moreover, VoIP allows providers to replace centralized, proprietary "switches" – essentially, mainframe computers – with standards-based devices that drop in price as rapidly as PCs do.

In large enterprises, communications is a big enough line item that savings can add up. SunTrust Banks, for example, found that their VoIP deployment saved over $5 million annually. Although significant, such cost savings are not game changing – even Cisco claims only a 15% cost reduction from VoIP. For most companies, therefore, the initial impact of adopting VoIP will be modest. It will center on efficiency gains from replacing or consolidating legacy systems and avoiding usage-based charges from phone companies.

directory listings, and launch conference calls from any phone. And calls can be recorded and archived for managers to review, part of the overall quality assurance effort. Ultimately, the system will include features similar to those found in advanced call centers that give priority to high-value calls. In effect, Wynn is using VoIP to turn the entire resort into a state-of-the-art contact center. The phone is no longer just a communications channel; it's a form of customer service in its own right.

Internal Communications. Fandango and Wynn Resorts use VoIP's customizability to improve customer service; but other types of organizations are finding different ways to exploit this flexibility. At the U.S. Department of Commerce, for example, CIO Tom Pyke couldn't find the budget to deploy VoIP. However, a renovation of the sprawling Washington, DC, headquarters building was in the works, including plans to add a stand-alone public address system for emergency communications. Pyke realized that the same emergency communications capability could be built into a VoIP infrastructure. The customized system the department ultimately installed not only saves money but provides better emergency communications than a standard public address system. Administrators can broadcast voice messages that override every phone in the building and also come through speakers in common areas.

The Commerce Department's experience exemplifies VoIP's ability to evolve sometimes in unexpected directions, as needs change. At Commerce, it was attractive initially because it saved money, as part of a larger capital project. Yet it wound up doing something the old phone system never could have supported. The system was so well received, incidentally, that its developer has sold it to many other enterprise VoIP customers. This highlights another feature of the technology – customers are contributing to its rapid evolution.

Intelligence

As these cases show, companies are already using VoIP's customization and virtualization capabilities, although these are among the few so far to have gone beyond basic cost-saving deployments. The greatest potential of VoIP will come as companies design increasingly intelligent systems to link communications and business processes and improve the productivity of knowledge workers.

Exactly how VoIP will evolve is uncertain, but the early outlines are clear enough to allow informed speculation. Communications have always been linked to business processes. The ability to coordinate activities across distances and firms was, after all, what first made the telegraph and telephone important business tools more than a century ago. With VoIP, that coordination can become much tighter. Instead of a phone call being a shot in the dark aimed in the general direction of the intended recipient – the phone on her desk – every communication can be precisely targeted on the basis of when and why it is being sent, and to whom.

Linking Communications and Processes. Avaya Labs, the research arm of one of the largest VoIP vendors, is experimenting with VoIP to enhance supply chain management. In one project, a simulated supply chain disruption automatically launched a multicompany VoIP conference call. The VoIP system reached participants through whatever device they were closest to and then automatically linked their computers to instant messaging, streaming video, and a secure Web site with key documents.

Taking a Test-Drive

Though VoIP's biggest payoffs will accrue to those who deploy it strategically, there are several approaches for test-driving the technology without betting the farm.

Follow the upgrade cycle. Many companies are deploying VoIP today because their phone systems are becoming obsolete. Companies should therefore look at their upgrade plans as opportunities to move toward VoIP. But this evaluation shouldn't be limited to a review of communications systems. Planned upgrades to the corporate data network and computer hardware also provide an opportunity to introduce VoIP. Some firms will find themselves deploying the technology first through their customer relationship management systems. Others will introduce it as a tool for supply chain management, to make it easier for supply chain partners to communicate. Others will deploy VoIP as a feature of the corporate help desk so that computer support calls can be handled more efficiently. These deployments may be more tactical than strategic, but that shouldn't delay the initial activity.

Learn from back-door users. In the late 1970s, Wall Street analysts brought in Apple II personal computers through the proverbial back door to run VisiCalc, the first spreadsheet, because it gave them an immediate productivity boost. Most CIOs at the time considered PCs to be toys, not suitable for real business applications. Their own employees were ahead of them. A similar story played out when Mirabilis, a tiny Israeli start-up, launched ICQ, an Internet-based instant-messaging client. Most users downloaded the software to chat with family and friends, but a surprising number put it to work in business settings. AOL bought Mirabilis in 1998, and today there are hundreds of millions of instant-messaging users worldwide.

A VoIP analog to VisiCalc and ICQ is Skype, the free VoIP software. Though it's used principally by individuals looking to save on their long-distance bills, half of Skype users say they have used the service for business communications. Managers should welcome employees' experimentation with Skype and similar VoIP software packages. The VoIP killer app in an organization may be one that the CIO doesn't anticipate but that an employee devises out of personal necessity. By observing users who bring in VoIP through the back door, often on their personal PCs, managers may gain insights into how the company can use the technology and the cost/benefit equation for bringing VoIP through the front door.

Of course, companies shouldn't ignore the security issues that any software on the corporate network can create. The beauty of software like Skype is that it operates through the public Internet without requiring access behind the corporate firewall, obviating many security concerns.

Create VoIP islands. VoIP deployments need not be large scale or enterprisewide. One of the most compelling opportunities for using VoIP is in new branch offices or locations (although the full benefits of such outposts come when they can tie into a companywide VoIP infrastructure). In other cases, organizations create VoIP islands that are defined by function rather than location. Rhode Island Hospital kept its conventional phone system when it deployed the Vocera VoIP application for real-time communication among doctors and nurses.

The main advantage of this island strategy is that it gives companies a way to try out VoIP without making a huge financial or business commitment. CIOs who have presided over leading-edge VoIP deployments often point to smaller offices or departments that implemented early and gave them confidence that VoIP could meet their needs.

How Secure Is VoIP?

Early quality and reliability problems with VoIP have largely been overcome, but security remains a real issue. As the Internet has shown, a flexible, open, digital communications platform attracts parasites. It's only a matter of time before we see voice spam on VoIP systems, along with viruses, worms, and security breaches. Any business looking at VoIP systems should carefully assess its security needs and ensure that vendors can meet them. It should look at securing its VoIP infrastructure the same way it secures its intranet, e-mail system, and corporate databases.

There is no technical reason why VoIP systems can't be as good as, and probably better than, conventional phone systems in these areas. Skype, for example, encrypts every call end to end, providing more privacy than any traditional phone company. The potential security threats to VoIP are real but are no more worrisome than the security issues that are an accepted part of using the Internet in business. Companies simply need to appreciate that VoIP makes their phone systems part of the IT infrastructure, rather than a black box they trust a phone company to secure and manage.

In the Avaya demo, the VoIP platform "knew" whom to contact and how, because it linked into corporate directories, databases, and supply chain management applications. The business rules that guided the VoIP decisions, based on factors such as roles and approval processes within each organization, were fairly simple and concrete. By bringing together the right people efficiently, the VoIP system didn't substitute for human judgment; it facilitated it.

Avaya's supply chain system was a research project, but some organizations are using VoIP to link communications and business processes today. At Rhode Island Hospital in Providence, for instance, nurses wear small wireless badges made by VoIP start-up Vocera that are clipped to their scrubs. Instead of having to leave a patient's bedside for help or information, a nurse just pushes a button on the badge. The system uses speech recognition, connected to the hospital's directory system, to route the request to the right person or to broadcast it to team members.

The hospital is integrating its patient monitoring devices into the VoIP system as well. When there's an emergency–say a patient's heart starts beating erratically–the system will send a customized voice alert to the proper doctors or nurses describing the problem and indicating the patient's location. What would have been an undifferentiated call for help on an overhead paging system becomes a targeted message, informed by hospital policies, duty schedules, and individual roles. Moreover, the information generated–the sequence of calls and responses–can be captured and later analyzed in order to improve care.

Enhancing Knowledge-Worker Productivity. On a more mundane level, VoIP will improve workers' productivity by intelligently triaging calls. To take a hypothetical example, a businessperson who is out of the office might want calls to be processed as follows:

- If I don't pick up my office phone, route the caller to my voice mail.
- If the caller is my boss, forward the call to my cell phone, unless it's the weekend or after 8 PM.
- If the caller is an important customer, forward the call to my assistant, Diane. If she's not available, put the caller through to my voice mail, but send me an instant-message alert.
- If I don't pick up my voice mail in an hour, forward a copy to me as an e-mail attachment.
- If it's John calling, check my calendar to see whether I'm in a marketing team meeting in the conference room; if so, conference John into the session.

Though VoIP can already handle routing and data management like this, writing the necessary rules for the system would be cumbersome. The major challenge now for designers, therefore, is to create simple ways to teach VoIP systems to do what you want them to do – integrate computer-based knowledge management systems and human intelligence. At Avaya Labs and Rhode Island Hospital, VoIP platforms are beginning to make such connections by tapping corporate databases, work flow and knowledge management software, and other resources to support decision making. This, in fact, is where VoIP vendors are focusing their attention.

Linking VoIP to Strategy

When the telegraph first appeared in the mid-1800s, savvy traders used it to obtain critical information about stock prices. Since the Philadelphia Exchange opened an hour earlier than the New York Stock Exchange, speculators used the telegraph to create artificial opportunities for arbitrage. That helped push the major exchanges to adopt standard trading hours. Before long, the telegraph was an essential and ubiquitous technology on Wall Street, in the form of the stock ticker, but it was no longer a competitive differentiator among firms.

VoIP will follow the opposite trajectory. It will become more strategically significant over time. Most companies will deploy VoIP at first in ways that give them a return on investment but little strategic value. They may not be ready to think about the deeper potential of VoIP but will still install VoIP equipment and software for practical reasons. With that infrastructure in place, though, companies are in a position to develop a true VoIP platform.

In deciding whether and how to adopt VoIP, managers will ask the usual questions that accompany any major technology investment: What's the ROI model? How "future-proofed" is the initial investment, and how much recurring investment will be required? What legacy equipment and software need to be thrown away, and what are the migration and integration challenges? Will we be locked in to the particular vendor or integrator we choose? Is the technology reliable, scalable, and secure enough for our needs?

But managers should also ask how VoIP can improve – or transform – how they do what they do. The most successful early VoIP adopters concentrate on two things. First, they focus on achieving business objectives more than saving money. Though cost cutting may be the deciding factor for firms in making the initial investment, VoIP's cost savings are unlikely to provide real competitive advantages. More important, viewing communications purely as a cost center can do more harm than good. As companies that rushed to outsource business functions in recent years have found, reducing costs often has a cost. Saving money by alienating customers is not a good trade-off.

Second, early adopters view everyone in an extended organization as a resource. As Wynn Resorts is showing, the entire organization can become a contact center. Or, with a system that's slightly more sophisticated than the one at Rhode Island Hospital, a nurse confronted with an urgent medical need could scan a list of available doctors, and with the click of a mouse, speak instantly with the most appropriate specialist, wherever he or she was located. And VoIP, by linking with hospital databases and monitoring systems, could provide the doctor with a real-time view of the patient's history and vital statistics during the call.

Businesses that push VoIP capabilities out to their employees, partners, and customers will gain efficiencies over those who continue to think of communications as a scarce, centrally controlled resource. And companies that harness VoIP to achieve business objectives will find it is much more than an undifferentiated commodity technology.

Deployment may be incremental (see the sidebar "Taking a Test-Drive"), but companies should be thinking about where VoIP could take them. Executives should ask what they could do if, on demand, they could bring all of their employees, customers, suppliers, and partners together in the same virtual room, with shared access to every modern communications and computing channel. They should take a fresh look at their business processes to find points at which richer and more customizable communications could eliminate bottlenecks and enhance quality.

VoIP is coming. The important dividing line won't be between those who deploy it and those who do not, or even between early adopters and laggards. It will be between those who see VoIP as just a new way to do the same old things and those who use it to rethink their entire businesses.

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How Business Schools Lost Their Way

In "How Business Schools Lost Their Way" (May 2005), Warren G. Bennis and James O'Toole ignore the significant changes sweeping through today's modern business schools, which no longer run on the old-news scientific model.

Around the world, business schools are changing their curricula and forming corporate partnerships to imbue their students with practical knowledge. In fact, AACSB International requires the more than 500 schools it accredits


HOW BUSINESS SCHOOLS LOST THEIR WAY

by Warren G. Bennis and James O'Toole

to develop programs with companies to make their curricula relevant to today's business environment. And in a recent AACSB survey, more than 40% of B-school respondents said that curriculum revision and program development were among the top three changes planned for the next three years.

Some schools have actually opened small businesses – from mini brokerage houses to full-blown consulting firms – where students gain hands-on experience. Retired CEOs teach classes; corporate executives sit on B-school advisory boards and committees. Success breeds success. Companies know that if they invest in B-schools, they will encourage many bright, new employees to join their ranks.

With the economy buzzing and earnings strong, surveys indicate that MBAs are being hired about as fast as they are becoming available. Applications are up for part-time MBA programs, which account for nearly 80% of all MBA offerings. The number of degrees awarded has risen every year since 1969. And once MBAs leave school, they are being rewarded for their efforts. MBA grads are expected to earn 40% more than their undergraduate counterparts.

In the ongoing discussion about business schools, someone is always lamenting that they are not scientific enough or that they are too scientific. Today's business schools are being forced to change with the times to seek the best balance between theory and practice. There is no one-size-fits-all approach to educating future managers. For a business school to be truly successful, it must find its own level by engaging all its key stakeholders – employers, alumni, and the local business community.

John J. Fernandes
President and Chief Executive Officer
AACSB International – The Association to Advance Collegiate Schools of Business
Tampa, Florida

Bennis and O'Toole make a good point when they say that business schools risk losing their relevance if they appoint academics with little or no business experience. The work of academics in disciplines like business, law, and medicine needs to be based in the practice of those disciplines. However, when the

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authors question the place of the scientific method in business, they risk throwing the baby out with the bathwater.

The scientific method is useful because it is the only way to be certain that one event has caused another. Findings supported by a rigorous scientific approach offer a beacon of confidence in disciplines like business that are notoriously beset by fads.

Bennis and O'Toole draw a parallel between business and medicine as being fields in which judgments are made with messy, incomplete data. But medicine has not forsaken the scientific method. Quite the contrary. The trend is toward "evidence-based medicine"– medical practice based in science rather than in the beliefs of medical practitioners. This trend has been gathering momentum for the past decade because most doctors want to be sure that what they are doing works. Businesspeople have the same concern – and should take the same cure.

Patrick Bolton
Conjoint Associate Professor
School of Public Health and Community Medicine
University of New South Wales
Sydney, Australia

To my mind, two fundamental forces are at play behind the systematic homogenization of business schools that Bennis and O'Toole have so aptly articulated.

First, business schools, through their accreditation systems, are driven to adhere to a common academic model that heavily emphasizes the number of articles their faculty members publish in first-tier journals rather than the impact the research might have on practitioners. Opting out of this system carries high penalties for these institutions – possible loss of credentials, of degree-awarding powers, of access to government funding.

Second, faculty are keenly aware that this publish-or-perish rule applies not only at the host school of the moment but at all other schools. Thus, if a truly leading business school were to abandon the traditional reward system, individual faculty members would be faced with the moral dilemma of conforming to the new paradigm of their school while undermining their personal switching opportunities for life. This is hardly in their self-interest.

Breaking out of this system, if even possible, will require putting significantly more pressure on business schools than there is at the moment. What seems more likely is that a broader view of business education will continue to develop, and alternative providers – ranging from for-profit educational institutions to consultancies and specialized executive education providers – will flourish. At the end of the day, the river will flow around the stones.

Kai Peters
Chief Executive
Ashridge
Berkhamsted, Hertfordshire
United Kingdom

As a passionate believer in both the value of high-quality research and the importance of creating insights that are relevant to practice, I was pleased to read Bennis and O'Toole's recent analysis. With respect to changing the scientific bent of the business school, the authors appear to suggest that pressure from business constituents and more enlightened deans could help to rebalance the system, leading us closer to a professional school model. Let me suggest some additional mechanisms through which this critical rebalancing might occur.

First and foremost, as a recent *BusinessWeek* headline suggests, "MBA Applicants Are MIA." Prospective students are voting with their feet when it comes to traditional MBA programs. Applications at most schools are down. So is the population of individuals taking the GMAT. At the same time, more and more companies are questioning whether it makes business sense to hire MBAs. Indeed, one of the senior leaders of a company I work with confided to me that, after evaluating the benefit it derives from its MBA hires, his organization has decided to pursue customized in-house management development initiatives instead. He will draw on people from academia to staff the programs (which a business school may even conduct), but he will insist that the faculty have a strong track record of experience in the problems his company is facing.

What will happen if this trend continues? Class sizes will decline. Some programs that can't attract sufficient students will be dropped. And – guess what? – there will be fewer jobs for tenure-track faculty members who depend on degree-granting programs for their research-oriented positions.

Second, all kinds of new vehicles are emerging that are undermining business schools' traditional dominance in the generation of new management knowledge. Organizations such as Duke Corporate Education and the Center for Creative Leadership are arising that, like business schools, conduct research and produce new insights but are emphatically practical in their goals. Their faculty members serve as long as they can prove their usefulness to their clients (and only for that long!). The Internet has made short, on-demand courses for the basics accessible and affordable to everyone, eliminating the need for aspiring managers to devote two years of their lives to full-time study. And there are many venues to which practicing managers can turn for thought leadership, from conferences produced by leading business magazines to high-profile events featuring celebrity (well, for business anyway) speakers.

Third, we may be seeing a fundamental shift in the focus of business schools from educating twentysomethings to educating managers throughout their careers. Here at Columbia Business School, for instance, we have programs designed for emerging leaders, for those seeking help with the transition to general management, and for senior executives looking to significantly transform the way they think about and address problems.

All three trends are putting pressure on business school faculty: Once a significant portion of a school's time and resources is spent on nondegree executive education courses, it becomes a real issue if the faculty members who can successfully design and deliver these courses are scarce.

I joined business academia because I was excited about the capacity of thoughtful research to open managers' eyes to a different way of thinking – precisely to give them a different point of departure for tackling messy, complex problems in the face of inadequate information. I'm delighted to see this topic being raised and actively discussed.

Rita Gunther McGrath
Associate Professor
Columbia Business School
New York

We agree with 90% of Bennis and O'Toole's critique of business schools. But we'd like to sound a note of caution. Don't dump B-schools quite yet. Bennis and O'Toole, for example, cite *Harvard Business Review* and Harvard Business School as models of how things should be done. Yet a quick (quantitative!) scan of the last four issues of HBR shows that just about half the articles were written by or with faculty from a wide variety of B-schools. So there are still enough at least partially practice-oriented academics to write pieces appropriate for real-world practitioners.

Many B-schools are working hard to maintain the crucial, fragile balance between obscure, long-view research and immediately applicable practice. Much, but not all, of that research will turn out to be useless – and so, by tomorrow, will much of today's best practice. If B-schools now begin (again) to err by abandoning research and overweighting practice, much more of what they produce won't be worth publishing in HBR.

Harold J. Leavitt
Walter Kenneth Kilpatrick Professor of Organizational Behavior and Psychology, Emeritus
Graduate School of Business
Stanford University
Stanford, California
Heather Fraschetti
Research Associate
Achieving Styles Institute
Pasadena, California

Bennis and O'Toole respond: We have been overwhelmed by the volume of e-mails, letters, and phone calls we have received in response to our article. Although not all this correspondence has been supportive of our position, we are heartened by the number of serious discussions the article has prompted among business school faculties across the country. We have heard reports of healthy debates in which professors and administrators have undertaken objective reassessments of their MBA programs and then considered thoughtful alternatives to their curricular and personnel policies. Our purpose in writing the article was to encourage such open and dispassionate discussion.

In light of all those thoughtful responses, we admit to being puzzled by the letter from John Fernandes. Among the scores of comments we received, his is the only one to deny that MBA programs are facing unprecedented difficulties and the only one to suggest we needn't worry because B-schools have matters well in hand. In the event he missed recent stories in the business press about declining enrollments and growing criticism of MBA programs, we suggest he might find Rita McGrath's letter an astringent antidote to his surreal complacency.

We appreciate receiving a 90% grade from Professor Leavitt. Even in this era of grade inflation, that isn't half bad! And we agree 100% with his and Heather Fraschetti's point about the quality of the authors of HBR articles. There are, indeed, many fine B-school professors doing extremely useful writing and research; the problem is that so many of those authors are middle-aged folks who wouldn't get tenured today. Here Leavitt and Fraschetti miss our point entirely. Our argument is that those authors – separate from, and in addition to, their younger colleagues who publish in the top-tier scientific journals – bring a necessary element of practicality to the mix of faculty in what, one must remember, are professional schools. Indeed, the heart of our article is a call for restoring balance between research rigor and relevance and for a return to pluralism in the backgrounds and interests of B-school faculties. Emphatically, nowhere do we advocate abandoning research or going back to the prescientific trade school era.

Breakthrough Ideas

Medieval scholars argued about how many angels could dance on the head of a pin. Far too much of the current management literature is going the same way, with endless reworking of well-established themes.

I mulled over this thought as I went through the first four issues of *Harvard Business Review* this year, which included the HBR List of "Breakthrough Ideas for 2005" in the February issue. Some striking points emerged:

• Virtually all the articles deal with variations on principles and practices that are already well established.

• Nearly all discuss improvements to profit performance, personal growth, aspects of leadership, or strategy formulation and are fundamentally inward looking.

• There is only one reference to any of the great issues surrounding the relationship between business and society, and that article is solely concerned with the protection of existing corporate intellectual property rights.

• There is no reference at all to the environment.

This is not to say that the articles in the four issues are not useful. Some of them do provide valuable new perspectives, though in my opinion none of them is outstanding or particularly innovative. But this flagship magazine seems to reflect a somewhat complacent set of attitudes and have no appetite for engaging with the great issues of the day – nearly all of which concern the responsibilities that go with business's global dominance of society, politics, information, and legislation.

Bill Godfrey
Director
Bill Godfrey & Associates
Hobart, Australia

How Strategists Really Think

In "How Strategists Really Think: Tapping the Power of Analogy" (April 2005), Giovanni Gavetti and Jan W. Rivkin suggest that case studies are the best way of discovering analogies. I would like to put forward a better methodology: business simulations, which in essence are dynamic analogies.

Skilled strategists know that a brilliant strategy in one situation can be an utter disaster in another. A manager who does not understand this key principle is likely to repeat the mistakes of executives highlighted in the article. For this reason, strategic decision making is best learned in a dynamic environment that only real life or a business simulation can provide. But the problem with learning business in real life is that the feedback loop from decision to result is too long. A simulation can present business leaders with similarly valuable experience in days rather than years.

Good business simulations are interactive, realistic, and dynamic. Typically, students (or executives) are divided into teams representing different companies battling for market share and profits in a zero-sum arena. In such an environment, the teams must live with the consequences of their decisions.

The power of this experience should not be underestimated. In the article, the authors warn of the dangers of clinging to a poor business analogy. Simulation participants who are thus anchored will experience firsthand the consequences of their misguided assumptions.

Business simulations have been around for some time and have come a long way. Today, business simulations used at Wharton, IMD, Ivey, and other business schools can be configured to depict the global challenges modern corporations face. Segments can split, competitors can enter and exit, markets can be made to evolve to highlight specific principles or concepts of a particular industry.

Case studies, as powerful as they are, can never hope to cover all the potential situations a manager might face. Business simulations, while not perfect, are the closest thing to recreating an environment in which business skills can be practiced and honed. They are the ideal tool for giving managers the experience they need to internalize the business analogies that Gavetti and Rivkin so rightly suggest drive business strategy.

Cam Tipping
President
International Institute for Business Development
Victoria, British Columbia, Canada

Gavetti and Rivkin respond: We certainly share Cam Tipping's enthusiasm for business simulations. Indeed, more than a decade ago, one of us helped a consultancy establish its simulation practice. Simulations and case-based education belong to the same family of pedagogical tools. Both place students in managerial roles and call on them to make challenging choices in unfamiliar settings. In well-run case discussions, just as in simulations, the facilitator injects feedback and new information as the experience unfolds, and issues emerge that divide participants.

In discussing case-based education in our article, our intent was not to hold up cases as the only, or even the best, vehicle for training analogizing managers. Rather, our aim was to defend the case method against recent critics. These critics fail to see that managers often rely on analogy. Thus they overlook two ways that case-based education makes managers better reasoners: by providing rich sources of analogies and by helping managers choose analogical sources based on relevant similarity.

Tipping suggests that simulations are better than cases at equipping managers to draw helpful analogies and avoid misleading ones. The comparison is not so clear-cut to us, for two reasons.

First, simulations tend to expose managers to a small number of highly vivid sources of analogy, while case studies allow managers to weigh, with similar effort, a greater breadth of sources. Whether broad or vivid exposure is more helpful depends on the situation the management team faces.

Second, comparing several cases with one another enables managers to uncover cause-and-effect relationships, and this understanding can protect them from superficial analogies. A simulation can do the same, though its power depends crucially on how well its creators have grasped those causal relationships.

Overall, we see simulations as helpful tools for teaching managers to reason well by analogy – but more as a complement to, than a replacement for, case-based education.

Building Breakthrough Businesses

As a senior executive in a newly minted strategic venture embedded within a 168-year-old stalwart American company, I recognize the inherent value of the framework that Vijay Govindarajan and Chris Trimble present in the May 2005 article "Building Breakthrough Businesses Within Established Organizations." However, I feel that the framework is missing an element that is important to supporting both the core company and its new offspring.

When a company, whether publicly or privately held, shifts assets and brand equity to a business venture, shareholders understandably seek justifications for the decision. Yet the article suggests that the new company's initial business forecasts are always "wild guesses," which are only later developed into informed estimates.

Many factors and observations appear in companies' forward-looking statements, but rarely do they include the phrase "wild guess." In the absence of predefined performance metrics for such ventures, shareholders are bound to use the core company's own standards for performance – or seek their returns elsewhere. If established organizations want to launch strategic ventures, therefore, they will have to continue to provide shareholders with a clear view of recognizable performance metrics and timetables.

Michael J. McGrady
Senior Vice President
John Deere Landscapes
Carlsbad, California

Govindarajan and Trimble respond: Michael McGrady's observation that the forget-borrow-learn framework is relevant in his own business is gratifying. And we empathize with his concerns about managing shareholder expectations of performance.

Like McGrady, we have never seen "wild guess" in a report to shareholders. However, it appears to us that shareholders do not demand as much transparency as he suggests. Savvy investors care about both current earnings and long-term growth. And yet consider how little is disclosed about the billions that major corporations spend on basic scientific research.

Deciding when and how much to disclose about strategic experiments is tricky for CEOs. Disclose little, and investors may conclude that performance in the core business is deteriorating. Disclose more fully, and investors may punish a company for making investments that seem excessively speculative.

Whenever the choice to disclose is made, however, CEOs must make the case that the new business should be judged by different measures and standards. The worst choice is to report the new business in a format that is exactly parallel to that of the company's established businesses.

Capturing Customers' Spare Change

I enjoyed Terri C. Albert and Russell S. Winer's article, "Capturing Customers' Spare Change," in the Forethought section of the May 2005 issue but keep thinking about the sales that are lost when customers become trained, in the Pavlovian way, to expect the upsell. How much revenue did the fast-food restaurants lose by upselling just fries to customers who would normally have ordered fries with a burger? Were the 3% to 5% improvements in sales and the 30% pretax profits clocked by the restaurants that used this technique recorded in a short time frame or over an extended period?

Once customers figure out that it is less expensive to order a burger and soda and be upsold the fries for $5 than to order a burger, fries, and soda for $5.29, they will more than likely choose the less expensive alternative.

Chris White
Director, Sales and Marketing
LifeGas
Norcross, Georgia

Albert and Winer respond: This is certainly one possible consideration with the spare-change effect. Our data are not longitudinal, so we do not know if classical conditioning or customer expectations could be factors.

We are in fact conducting additional research on a number of fronts. We're looking beyond quick-service restaurants to such other product categories as electronics, groceries, and clothing. We're looking into factors that might *decrease* customers' willingness to part with their spare change. We are investigating factors that, as in White's example, might reduce per-transaction profitability, as well as to further factors that might compensate for the reduced profitability. We would like, for instance, to understand the impact such point-of-sale technological interactions have on customer satisfaction and loyalty. If they have a positive effect, the lower per-transaction profits would be offset by repeat visits and a customer base swelled by word-of-mouth buzz. We are accordingly investigating the effectiveness of offering customers the opportunity to contribute to a variety of charities with their spare change. By considering not only how effective each spare-change option might be but also its effect on customer loyalty and satisfaction levels, retailers may select the type of offer most consistent with their strategic positioning.

Fat Chance

I found most of the commentators' responses to the May 2005 case study, "Fat Chance," to be politically correct but incredibly wrongheaded. OK, I've been living in Europe for 15 years, and I'm probably insensitive to the regulatory and social nuances in America nowadays. Nevertheless, when I advise my European clients on executive selection decisions, candidate obesity is always a yellow flag for me – and sometimes a red flag in the end.

Obesity is often an indication that the individual has lost control of an important aspect of life – self-management. Most of the senior executives I've met across the globe manage themselves pretty well. They're in good physical shape. They do not smoke. They consume alcohol in moderation. Customer-facing careers require physical stamina and emotional stability. Obesity diminishes both and brings with it a higher overall health risk. That's why obesity is a warning sign to me when I assess the overall capabilities of a candidate and compare one candidate to another.

Your commentators, and the company in the case study, also overlook the fundamental question of whether Sid's personality is suitable for a customer-facing role. The attributes that make someone good at sales support – product knowledge, preparing the pitch material – are not the same as those needed for creating and nurturing face-to-face relationships. Where is the competency profile, and how does Sid measure up to the external candidate? This company needs rigor in its selection process, including psychometric testing for the personality attributes that are needed for success in key roles.

Sid has to take control of his own life and drop 200 pounds if he is to be a serious candidate for a customer-facing role. His employer needs a more rigorous, competency-based selection process.

Frank V. Sharp
Managing Director
Horton International
Zurich, Switzerland

I weigh over 400 pounds and have been in sales all my life. I have sold million-dollar accounts and today run my own business. Maybe discrimination exists. But I have found that most of the time people go out of their way to be nice to me. This kindness gives me the opportunity to do my sales work and impress my prospects with my knowledge and skills.

The world is full of shallow people like the manager you illustrated. Even he went out of his way to be extra nice to Sid. This gives Sid a big advantage.

David Brownlee
President
Brownlee Marketing and Advertising Agency
Bridgeport, Pennsylvania

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FORETHOUGHT

The Commerce Clause Wakes Up The *Granholm v. Heald* decision suggests that the Supreme Court is prepared to protect e-commerce initiatives.
Reprint F0509A

When Good Customers Are Bad Delivered-cost analytics can tell you how much those supply chain services you're offering are *really* costing you.
Reprint F0509B

Motivating Through Metrics To get frontline employees to work as a team, solicit performance rankings from customers and employees, not bosses.
Reprint F0509C

Schizophrenia at GM You can execute product line extensions without confusing, and losing, your customers.
Reprint F0509D

Create Colleagues, Not Competitors To maximize information exchange among employees, don't reward individual performance.
Reprint F0509E

Save That Thought Marc Abrahams, a cofounder of the *Annals of Improbable Research,* says some ideas deserve second and third chances.
Reprint F0509F

A United Defense Achieve better overall security by funding joint projects between physical and IT security departments.
Reprint F0509G

Benchmarking Your Staff Here's how you can decide on the right size and composition of your corporate staff.
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Give a Little, Get a Little Loosen your grip on your intellectual property, and you may realize lower fees and better service.
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Denying the Urge to Splurge To sell more goods, separate the necessities from the luxuries.
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How Markets Help Marketers Stock market simulations can help you determine optimal marketing strategies for products prior to launch.
Reprint F0509L

Book Reviews HBR reviews four books.

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HBR CASE STUDY

The Tug-of-War

Yossi Sheffi

Jack Emmons, the CEO of Voici Brands, knew his apparel company needed a supply chain overhaul. Over the past couple of years, sales had dropped because of late deliveries, stock-outs, and other supply problems. Meanwhile, a major competitor had significantly reduced its time to market and boosted its bottom line by outsourcing all its product lines to a dazzlingly efficient "supply chain city" in Shanghai.

Unfortunately, Jack's company was just too decentralized to use the supply chain city. Each of Voici's five units was like a subsidiary, with its own legacy, management, and suppliers. The unit heads (particularly Margie Rosen) wouldn't sit still for a supply chain consolidation; they had worked too hard to forge vendor relationships.

Inspired by a magazine article, Jack decided to appoint a supply chain czar to oversee changes in logistics and procurement. He could hire Ravi Chandry, an aggressive outsider who had centralized supply chain operations for the world's second-largest snack food and beverage company. Or he could promote Tony Rini, a highly capable, trustworthy Voici veteran who had no experience consolidating supply operations but could win hearts and minds. Ravi told Jack that only a Rottweiler could do the job right. Tony lobbied for a more cautious approach: Start with low-hanging fruit, get a few quick wins, then move on to other areas. What kind of leadership will get Voici's units to pull together?

Commenting on this fictional case study are Shakeel Mozaffar, group vice president of Global Supply Chain at ICI in London; Robert W. Moffat, Jr., senior vice president of Integrated Supply Chain at IBM; John D. Blascovich, a vice president of Chicago-based A.T. Kearney and head of its sourcing practice in North America; and Nick LaHowchic, president and CEO of Limited Logistics Services, an internal service subsidiary of Limited Brands in Columbus, Ohio.

Reprint R0509A

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FIRST PERSON

A Stake in the Business

Chris T. Sullivan

When Chris Sullivan and three friends opened the first Outback Steakhouse in March 1988, in Tampa, Florida, they were hoping it would be successful enough to spawn a few more and maybe some other kinds of restaurants as well. Since then, their chain of Australia-themed restaurants has grown to some 900 locations and counting – plus another 300 or so "concept" restaurants that operate from under Outback's corporate umbrella. Growth like that doesn't happen accidentally, Sullivan says, but it certainly wasn't part of the original plan.

In this first-person account, Outback's chairman describes the organization's formula for growth and development, which is consciously rooted in the founders' belief in putting people first. They've created an organizational model in which field managers make most of the decisions, garner the rewards, and live with the consequences. Specifically, the founders believe that the most effective way to make customers happy is to first take care of the people who cook for them, serve them, and supervise operations at the restaurants. Outback servers have fewer tables to worry about than those at other restaurant chains; the cooks have bigger, cooler, better-equipped kitchens; and the supervisors work their way up the ranks toward an equity stake in the restaurant or region they run. There are no administrative layers between field managers and the executives at headquarters.

Giving employees good working conditions and the chance to become owners has proved to be good business: Turnover among hourly employees is low, and Outback and its subsidiaries opened 120 restaurants last year, increasing sales by 20.1%. The company must grow in order to keep offering career opportunities to its workers; in turn, those opportunities ensure that Outbackers remain committed to making customers happy and the company successful.

Reprint R0509B

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Confessions of a Trusted Counselor

David A. Nadler

Advising CEOs sounds like a dream job, but doing so can be perplexing and perilous. At times, the questions you must ask yourself – about your own motivations and loyalty – can be thornier than the organizational problems that clients face. David Nadler knows, because he has been asking himself such questions for a quarter century while advising the chiefs of more than two dozen corporations.

If you're an adviser to CEOs, recognizing the pitfalls of your role may help you sidestep them. And understanding a problem's nuances and implications may help you uncover a solution. The challenges facing consultants include the following:

- The loyalty dilemma: *Is my ultimate responsibility to the CEO, who pays for my services, or to the institution, which pays for his?* Today's shorter CEO tenures and greater board oversight have diminished the top leader's power and autonomy; it's now routine for a CEO adviser to have conversations with directors about the CEO's performance. To defuse loyalty issues, the adviser should raise them with the executive at the outset of the relationship.
- The overidentification dilemma: *How do I immerse myself in the CEO's worldview without making it my own?* CEOs can be enormously persuasive, but if you don't push back, you're not doing your job. The trick is to ask probing questions without shaking the CEO's confidence that you fully comprehend the forces that shape her views.
- The friendship dilemma: *If the CEO and I like each other, can we – should we – become friends?* A successful, long-term advisory relationship with a CEO requires a strong personal connection; in some cases, that becomes a friendship. But the best relationships are characterized by the participants' clear-eyed recognition of each other's frailties – tempered, of course, by genuine affection and easy rapport.

Reprint R0509C; HBR OnPoint 1770

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Fixing Health Care from the Inside, Today

Steven J. Spear

Today, you are about as safe in a U.S. hospital as you would be parachuting off a bridge or a building. But it doesn't have to be that way. Right now, some hospitals are making enormous short-term improvements, with no legislation or market reconfiguration and little or no capital investment. Instead of waiting for sweeping changes in market mechanisms, these institutions are taking an operations approach to patient care.

In case after detailed case, the article describes how doctors, nurses, technicians, and managers are radically increasing the effectiveness of patient care and dramatically lowering its cost by applying the same capabilities in operations design and improvement that drive the famous Toyota Production System. They are removing ambiguity in the output, responsibilities, connections, and methods of their work processes. These changes – which can be done in the course of an ordinary workday, sometimes in a matter of hours – are designed to make the following crystal clear:

- Which patient gets which procedure (output);
- Who does which aspect of the job (responsibility);
- Exactly which signals are used to indicate that the work should begin (connection); and
- Precisely how each step is carried out (method).

Equally important, managers are being transformed from rescuers who arrive with ready-made solutions into problem solvers who help colleagues learn the experimental method. Thus, these hospitals are breaking free of the work-around culture that routinely obscures the root causes of so many problems, creates so much waste, and leads to so many unnecessary deaths.

Reprint R0509D; HBR OnPoint 1738; OnPoint collection "Curing U.S. Healthcare, 2nd Edition" 172X

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All Strategy Is Local

Bruce Greenwald and Judd Kahn

The aim of strategy is to master a market environment by understanding and anticipating the actions of other economic agents, especially competitors. A firm that has some sort of competitive advantage – privileged access to customers, for instance – will have relatively few competitors to contend with, since potential competitors without an advantage, if they have their wits about them, will stay away. Thus, competitive advantages are actually barriers to entry and vice versa.

In markets that are exposed, by contrast, competition is intense. If the incumbents have even brief success in earning greater than normal returns on investments, new entrants will swarm in to grab a share of the profits. Sooner or later, the additional competition will push returns as far down as the firms' costs of capital. For firms operating in such markets, the only choice is to forget about strategy and run the business as efficiently as possible.

Barriers to entry are easier to maintain in a competitive arena that is "local," either in the geographic sense or in the sense of being limited to one product or a handful of related ones. The two most powerful competitive advantages – customer captivity and economies of scale – are more achievable and sustainable in circumscribed markets of this kind. Their opposites are the open markets and host of rivals that are features of globalization. Companies entering such markets risk frittering away the advantages they secured on smaller playing fields.

If a company wants to grow but still obtain superior returns, the authors argue, the best strategy is to dominate a series of discrete but preferably contiguous markets and then expand only at their edges. Wal-Mart's diminishing margins over the past 15 years are strong evidence of the danger of proceeding otherwise.

Reprint R0509E

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The Dangers of Feeling like a Fake

Manfred F.R. Kets de Vries

In many walks of life – and business is no exception – there are high achievers who believe that they are complete fakes. To the outside observer, these individuals appear to be remarkably accomplished; often they are extremely successful leaders with staggering lists of achievements.

These *neurotic impostors* – as psychologists call them – are not guilty of false humility. The sense of being a fraud is the flip side of giftedness and causes a great many talented, hardworking, and capable leaders to believe that they don't deserve their success. "Bluffing" their way through life (as they see it), they are haunted by the constant fear of exposure. With every success, they think, "I was lucky *this* time, fooling everyone, but will my luck hold? When will people discover that I'm not up to the job?"

In his career as a management professor, consultant, leadership coach, and psychoanalyst, Manfred F.R. Kets de Vries has found neurotic impostors at all levels of organizations. In this article, he explores the subject of neurotic imposture and outlines its classic symptoms: fear of failure, fear of success, perfectionism, procrastination, and workaholism. He then describes how perfectionist overachievers can damage their careers, their colleagues' morale, and the bottom line by allowing anxiety to trigger self-handicapping behavior and cripple the very organizations they're trying so hard to please. Finally, Kets de Vries offers advice on how to limit the incidence of neurotic imposture and mitigate its damage through discreet vigilance, appropriate intervention, and constructive support.

Reprint R0509F

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Strategy as Active Waiting

Donald N. Sull

Successful executives who cut their teeth in stable industries or in developed countries often stumble when they face more volatile markets. They falter, in part, because they assume they can gaze deep into the future and develop a long-term strategy that will confer a sustainable competitive advantage. But visibility into the future of volatile markets is sharply limited because so many different variables are in play. Factors such as technological innovation, customers' evolving needs, government policy, and changes in the capital markets interact with one another to create unexpected outcomes.

Over the past six years, Donald Sull, an associate professor at London Business School, has led a research project examining some of the world's most volatile markets, from national markets like China and Brazil to industries like enterprise software, telecommunications, and airlines. One of the most striking findings from this research is the importance of taking action during comparative lulls in the storm. Huge business opportunities are relatively rare; they come along only once or twice in a decade. And, for the most part, companies can't manufacture those opportunities; changes in the external environment converge to make them happen. What managers can do is prepare for these golden opportunities by managing smart during the comparative calm of business as usual.

During these periods of *active waiting,* leaders must probe the future and remain alert to anomalies that signal potential threats or opportunities; exercise restraint to preserve their war chests; and maintain discipline to keep the troops battle ready. When a golden opportunity or "sudden death" threat emerges, managers must have the courage to declare the main effort and concentrate resources to seize the moment.

Reprint R0509G; HBR OnPoint 1754; OnPoint collection "Strategy Despite Uncertainty: Cutting Through the Fog" 1746

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TOOL KIT

Building Loyalty in Business Markets

Das Narayandas

Companies often apply consumer marketing solutions in business markets without realizing that such strategies only hamper the acquisition and retention of profitable customers. Unlike consumers, business customers inevitably need customized products, quantities, or prices. A company in a business market must therefore manage customers individually, showing how its products or services can help solve each buyer's problems. And it must learn to reap the enormous benefits of loyalty by developing individual relationships with customers.

To achieve these ends, the firm's marketers must become aware of the different types of benefits the company offers and convey their value to the appropriate executives in the customer company. It's especially important to inform customers about what the author calls *nontangible nonfinancial benefits* – above-and-beyond efforts, such as delivering supplies on holidays to keep customers' production lines going.

The author has developed a simple set of devices – the benefit stack and the decision-maker stack – to help marketers communicate their firm's myriad benefits. The vendor lists the benefits it offers, then lists the customer's decision makers, specifying their concerns, motivations, and power bases. By linking the two stacks, the vendor can systematically communicate how it will meet each decision-maker's needs.

The author has also developed a tool called a loyalty ladder, which helps a company determine how much time and money to spend on relationships with various customers. As customers become increasingly loyal, they display behaviors in a predictable sequence, from growing the relationship and providing word-of-mouth endorsements to investing in the vendor company. The author has found that customers follow the same sequence of loyalty behaviors in all business markets.

Reprint R0509H

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FRONTIERS

Using VoIP to Compete

Kevin Werbach

Internet telephony, or VoIP, is rapidly replacing the conventional kind. This year, for the first time, U.S. companies bought more new Internet-phone connections than standard lines. The major driver behind this change is cost. But VoIP isn't just a new technology for making old-fashioned calls cheaper, says consultant Kevin Werbach. It is fundamentally changing how companies use voice communications.

What makes VoIP so powerful is that it turns voice into digital data packets that can be stored, copied, combined with other data, and distributed to virtually any device that connects to the Internet. And it makes it simple to provide all the functionality of a corporate phone – call features, directories, security – to anyone anywhere there's broadband access. That fosters new kinds of businesses such as virtual call centers, where widely dispersed agents work at all hours from their homes.

The most successful early adopters, says Werbach, will focus more on achieving business objectives than on saving money. They will also consider how to push VoIP capabilities out to the extended organization, making use of everyone as a resource.

Deployment may be incremental, but companies should be thinking about where VoIP could take them. Executives should ask what they could do if, on demand, they could bring all their employees, customers, suppliers, and partners together in a virtual room, with shared access to every modern communications and computing channel. They should take a fresh look at their business processes to find points at which richer and more customizable communications could eliminate bottlenecks and enhance quality.

The important dividing line won't be between those who deploy VoIP and those who don't, or even between early adopters and laggards. It will be between those who see VoIP as just a new way to do the same old things and those who use it to rethink their entire businesses.

Reprint R0509J

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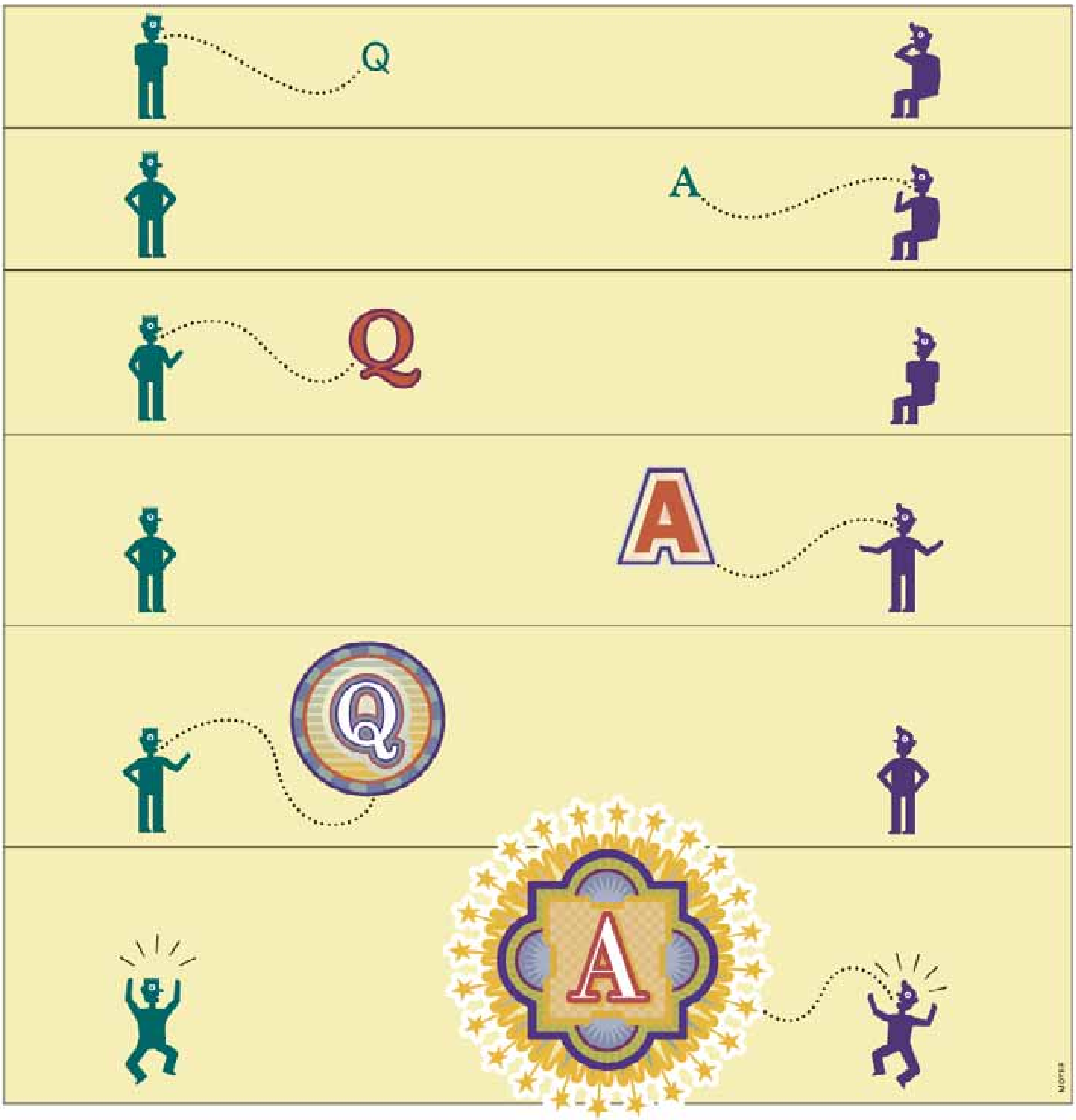
by Don Moyer



Questions That Leave a Mark

As a society, we are biased toward answers. Answers settle matters and tell us it's safe to move forward. Questions are troublemakers, poking holes in ideas and plans. But questions are also powerful tools for marshaling facts, exposing vulnerabilities, and stretching imaginations. How can we make this work? How can we make this work better? What's the worst thing that can happen? What do you want to be when you grow up?

For simple fact gathering, you can't beat the classics: Who? What? When? Where? Why? and How? But to really lift the lid off a problem, you need more provocative inquiries. In their book *Why Not?,* Barry Nalebuff and Ian Ayres propound questions that hold problems up to the light and give them a good shake. Where else would it work? Would flipping it work? Why don't you feel my pain? What would Croesus do?

Not only are great questions well conceived, they are also well timed. In "The Discipline of Innovation" (HBR, May–June 1985), Peter Drucker reminds us that innovation often occurs under special conditions – such as a change in demographics or the emergence of new knowledge – and that questions posed at such inflection points produce the best results. So sow your queries in fertile fields, and watch solutions sprout and then flower into glorious potential.

Don Moyer can be reached at don@amsite.com.

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