LEADERSHIP THAT LASTS...page 45 HELP YOUR COMPANY GET SMARTER...page 109

# Harvard Business Review

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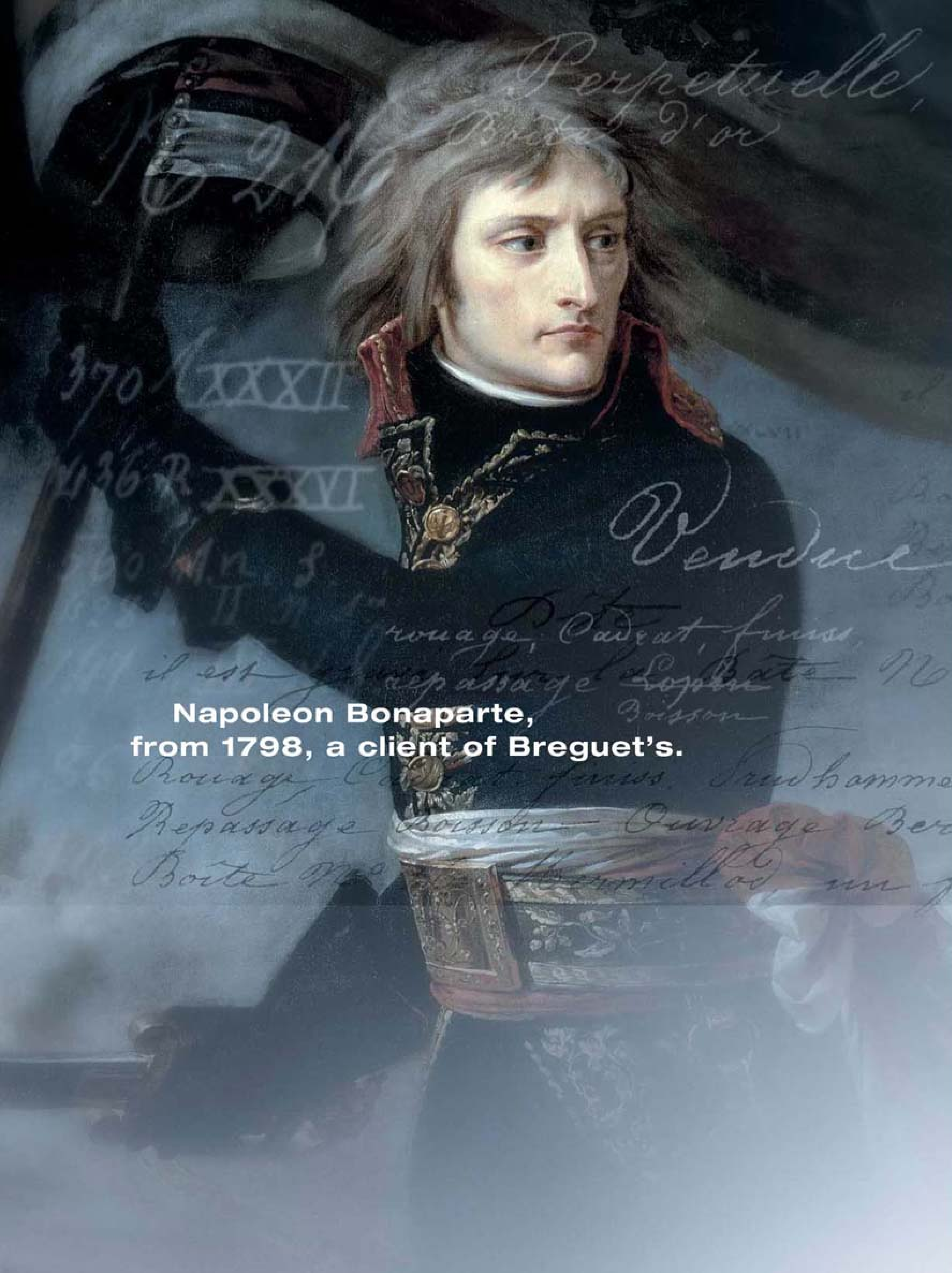

Napoleon Bonaparte,
from 1798, a client of Breguet's.


à répétition.
Breguet
Depuis 1775
Bonaparte

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## Features



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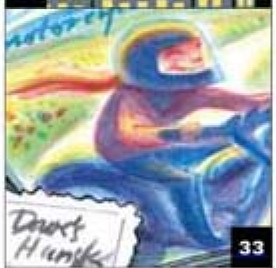

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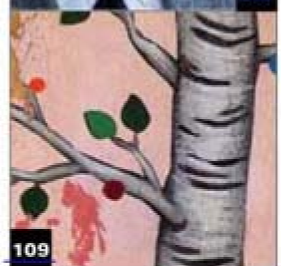

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## Departments

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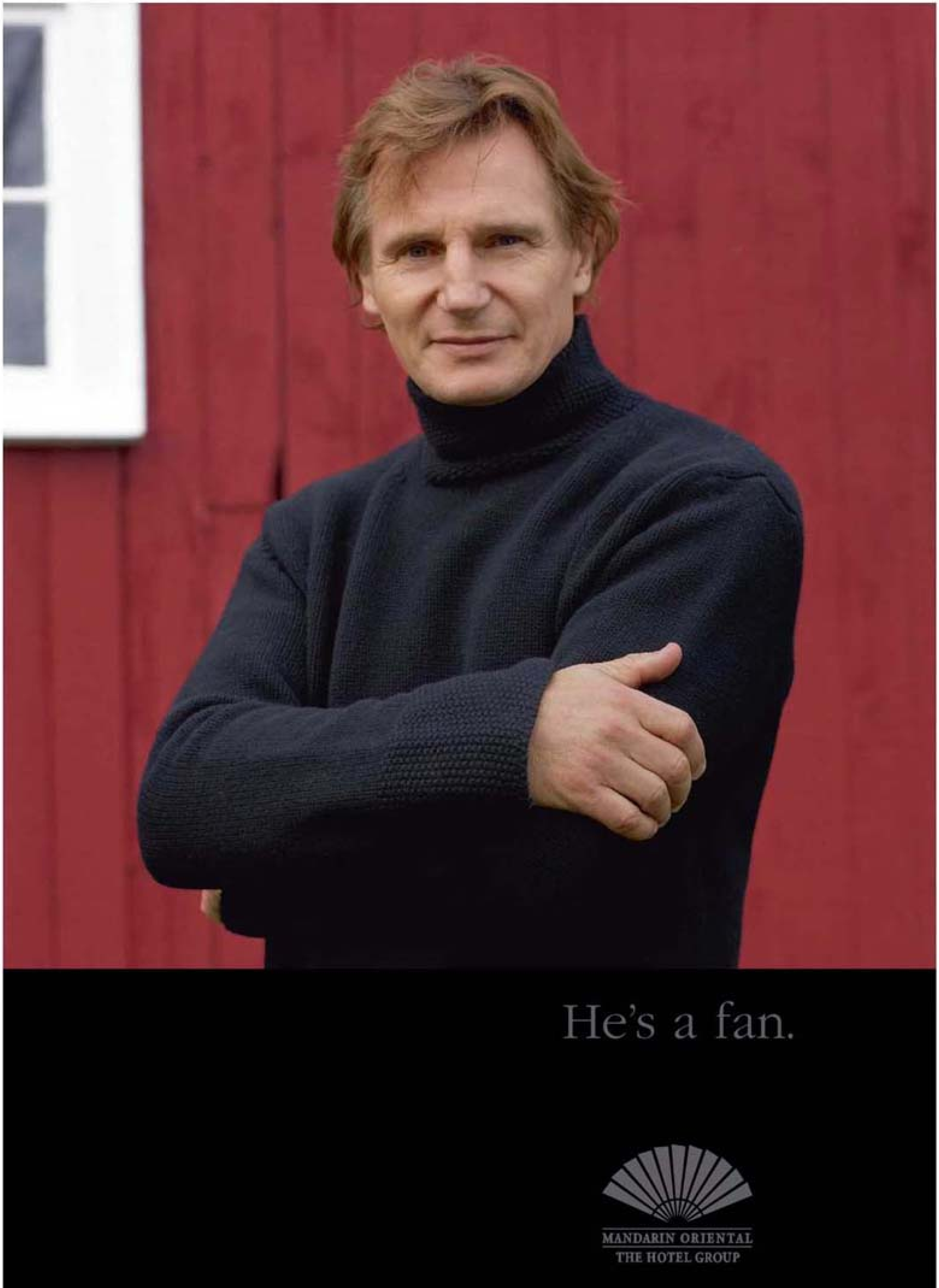
He’s a fan.
MANDARIN ORIENTAL
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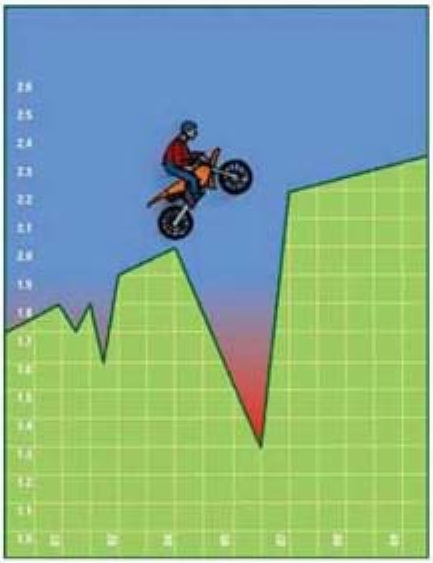
# Staying on Top



WHEN BOB DYLAN sang, "He not busy being born is busy dying," he offered excellent management-consulting advice. The big, important news in "When Growth Stalls," the lead article in this issue of HBR, is that a stall is not a relatively benign event, a chance for a company to catch its breath. Research by authors Matthew Olson, Derek van Bever, and Seth Verry shows that unless a company pulls out of its stall fast, it will lose, on average, 74% of its market capitalization relative to broad indices – and will usually lose its top management team, as well. Those data should make executives pay attention. As another unwitting consultant, Samuel Johnson, said: "Depend upon it, Sir, when a man knows he is to be hanged in a fortnight, it concentrates his mind wonderfully."

If you want to know where to concentrate, Olson, van Bever, and Verry list four classic causes of corporate stalls: the syndrome associated with a company's becoming captive to its own success, which includes arrogance, vulnerability to low-cost rivals, and the innovator's dilemma; a breakdown in innovation management – the evidence of which is not just occasional new-product flops but the systemic inability to innovate on a meaningful scale; neglect or unnecessary abandonment of the core business; and talent shortages – particularly in new, growing parts of a business where a company might not have a deep bench of talent.

It's striking that every article in this issue illuminates one or more of these four dangers. In "Transforming Strategy One Customer at a Time," you'll read an inside account of how the Thomson Corporation recharged its core and built a platform for companywide innovation, told by the CEO who led it, Richard Harrington, and his close adviser Anthony Tjan. From the Boston Consulting Group, Arindam Bhattacharya and David Michael look intently at one of the fiercest battlegrounds between established and emerging companies, where a globalizing Goliath may find itself up against a well-armed and very smart local David.

A company stops growing if it stops dreaming. A telltale sign: a research portfolio that favors commercialization over discovery. In "A More Rational Approach to New-Product Development," Eric Bonabeau, Neil Bodick, and Robert Armstrong describe a fascinating experiment at Eli Lilly designed to fix that problem. Innovation also stalls when social and technical systems choke new ideas. Harvard Business School's David Upton and Bradley Staats tell a compelling story about an unlikely group – enterprise IT in a bank in Japan – whose radically simple ideas helped the company release the growth potential of its retail business.

Ultimately, growth comes from carbon, not silicon: That is, no company can grow without enough of the right people learning and doing the right things. Some of the most important lessons in leadership are timeless, as biographer-historian David McCullough reminds us in his eloquent article. But even timeless problems need timely tools. Though there is no hotter topic in business today than talent management, all the associated processes now in use were developed 50 years ago; the Wharton School's Peter Cappelli argues that companies today require new instruments and processes. We happen to have one from HBS's David Garvin, Amy Edmondson, and Francesca Gino, whose title explains exactly what their elegant, useful tool assesses: "Is Yours a Learning Organization?" It had better be. That's the lesson of this entire issue. A thoughtful executive, worried about a calamitous stall, should do four things: learn how stalls happen; examine the business to discover its weaknesses; search deeply for solutions that really work; then apply them. As Bob Dylan might have said, "He not busy learning is busy dying, too."

Thomas A. Stewart

Robert Meganck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# Harvard Business Review




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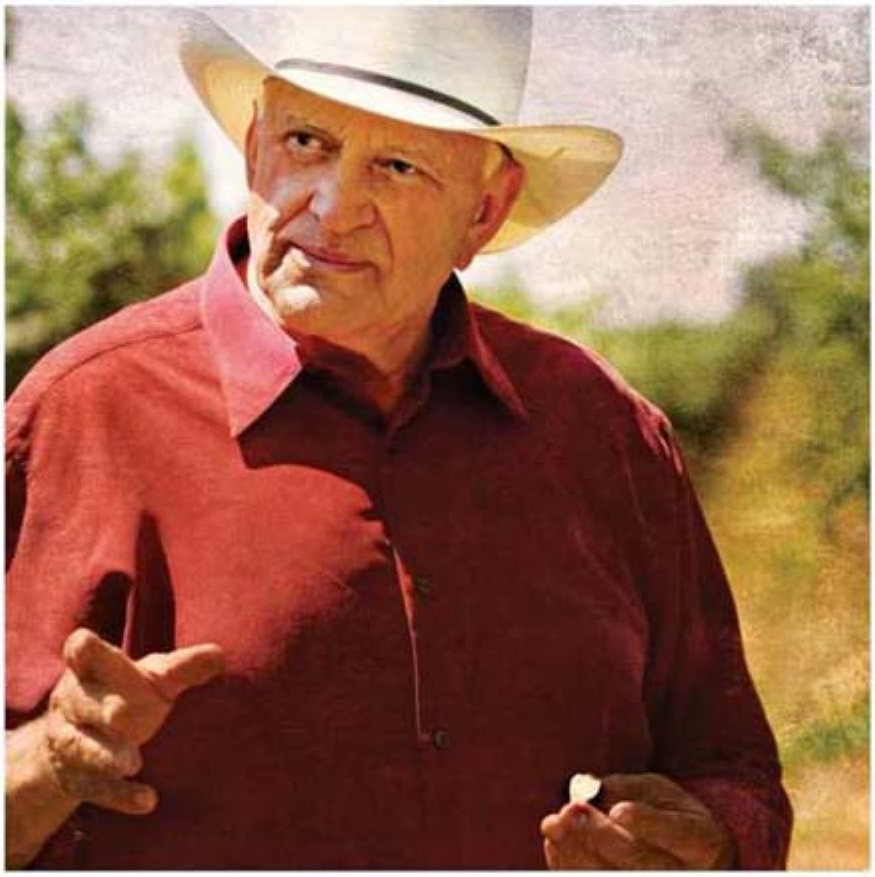

*Jess Jackson, Taylor Peak Estate, Bennett Valley*

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# forethought

*A survey of ideas, trends, people, and practices on the business horizon*

GRIST

## Megaregions: The Importance of Place

by Richard Florida

Nations have long been considered the fundamental economic units of the world, but that distinction no longer holds true. Today, the natural units – and engines – of the global economy are megaregions, cities and suburbs in powerful conurbations, at times spanning national borders, forming vast swaths of trade, transport, innovation, and talent.

The world economy is organized around a few dozen megaregions – areas like the Boston–New York–Washington corridor, or the Shanghai-Nanjing-Hangzhou triangle, or the span stretching from London through Leeds, Manchester, Liverpool, and into Birmingham – which account for the bulk of the globe's economic activity and innovation.

There is no single, comprehensive source for gauging the economic production of the world's megaregions, but a rough proxy is available. Tim Gulden, a researcher at the University of Maryland's Center for International and Security Studies, used satellite images of the world at night to identify contiguous lighted regions. (Nighttime illumination

Allan Sanders

indicates energy consumption, which corresponds to economic activity.) He then calibrated the light data against existing estimates of national and regional economic output and was able to derive dollar estimates of annual economic productivity (the total value of goods and services produced) for every megaregion. I call this measure the *light-based regional product*, or LRP.

Gulden argues that a megaregion must meet two criteria: First, it must be a contiguous lighted area that includes at least one major city center and its metropolitan region. Second, it must have an LRP of more than $100 billion. By this definition, there are 40 megaregions in the world. Home to 1.2 billion people – 18% of the global population – these regions combined produce about 66% of the world's economic activity and are the source of 86% of patented innovations.

Consider just a few of the conclusions we can draw from this analysis:

- It's misleading to conceive of the United States as a single national economy or even as 50 state economies. In reality, the U.S. economy is powered by roughly a dozen megaregions, the largest concentrated on the coasts, which stretch into Canada and in some cases Mexico. The Boston-NY-Washington corridor alone, with a population of 54 million people, has an LRP of $2.2 trillion and is bigger economically than France or the United Kingdom.
- The real economies of Europe are contained not in individual countries but rather in six or seven megaregions. Europe's largest megaregion is the enormous economic composite spanning Amsterdam and Rotterdam in the Netherlands, Ruhr and Cologne in Germany, Brussels and Antwerp in Belgium, and Lille in France. With a population of nearly 60 million people, and an LRP of $1.5 trillion, this megaregion's output is bigger than Canada's.
- Megaregions are playing an increasingly significant role in emerging economies around the world. Greater Mexico City is home to more than 45 million people and has an LRP of $290 billion, more than half of Mexico's total. The megaregion that stretches from São Paulo to Rio de Janeiro produces an LRP of $230 billion, over 40% of Brazil's LRP, and is home to 43 million people. Surrounding Delhi and Lahore is a megaregion enveloping some 122 million people – making it the world's single largest concentration of population – which generates a $110 billion LRP. And an extraordinary amount of economic activity flows from just three megaregions along China's eastern coast. The largest in terms of population is the Shanghai-Nanjing-Hangzhou triangle, with more than 66 million people and an LRP of $130 billion. Indeed, megaregions are the growth engines of emerging economies, even as the people living outside these regions toil in poverty and preindustrial conditions.

The rise of megaregions doesn't mean that globalization isn't real: The amalgamation of technology and trade leads to the dispersal and decentralization of economic activity. At the same time, however, the economic benefits of colocation – the concentration of similar kinds of productive and innovative activities in the same area – have spurred a strong countervailing tendency toward clustering. Writers like Thomas Friedman have overemphasized the centrifugal forces of globalization, arguing that the world is flat. In so doing, they neglect the equally powerful *centripetal* forces that trigger economic concentration. As Harvard Business School Professor Michael Porter told *BusinessWeek*: "The more things are mobile, the more decisive location becomes. This point has tripped up a lot of really smart people." Amen!

The mistake is to see globalization as an either-or proposition. It's not. The key to finding competitive advantage in this new economic landscape lies in understanding that the world is both flat and spiky: Economic activity is dispersing and concentrating at the same time.

When large numbers of entrepreneurs, financiers, engineers, designers, and other smart, creative people are constantly bumping into one another, innovative business ideas are formed, sharpened, executed, and expanded. The more smart people there are and the denser and more varied the connections among them, the faster a megaregion and its businesses and markets grow. When managers locate a plant or innovation center or target a new market, which country they choose will matter less than which megaregion.

**Richard Florida** (florida@rotman.utoronto.ca) is the director of the Martin Prosperity Institute and professor of business and creativity at the University of Toronto's Joseph L. Rotman School of Management. His latest book, *Who's Your City?*, from which this article is developed, is due out this month from Basic Books.

Reprint F0803A

WEB RETAILING

# In E-Commerce, More Is More

by Andreas B. Eisingerich and Tobias Kretschmer

Many business leaders, disappointed by online sales growth, see Web consumers as disloyal and unwilling to spend. But that's because the managers are not exploiting what customers value most: engagement.

Online automobile shoppers want information about cars, yes, but they also want to learn about such other topics as travel, sports, apparel, and finance, our research shows. Online shoppers for upscale clothing might typically want information on art or even business.

Most firms limit their sites to providing narrow information about the products or services that are for sale. Indeed, the majority of managers we spoke to in our global study told us they believe that a broad array of information diverts attention from the core offerings. But we found it helps customers search for solutions, invites them to think of all the ways the core products might add value to their lives, wins their loyalty, and entices them to buy. In fact, we found that exploiting consumers' desire for engagement is the single dominant driver of superior shareholder value for e-commerce companies.

Our research involved an analysis of more than 1,700 e-commerce sites, along with interviews of 238 consumers and 112 managers in the United States, Europe, and Asia over four years. Some 57% of the managers were disappointed by their firms' online sales growth, but only 17% had a plan to change their sites to improve sales – an indication that they didn't even know how to start turning things around. Most believed that price was the only important way to attract online customers.

We scored the sites on the five practices that customers said they cared about most, and we found that a higher overall ranking on those practices is associated with greater company value, as measured by Tobin's Q, the ratio of market value to asset replacement value. In addition, the shares of the 25 companies with the highest-ranking sites outperformed the S&P 500 by two percentage points, on an annual basis, from 2003 through 2006.

Four of the practices are increasingly common and expected by consumers – without them, sites can't hope to keep buyers around long. They are: personalized shopping, clear categorization, order tracking, and in-depth product- or service-related information. It's the fifth practice – customer engagement through the provision of information on related products and services – that represents the most significant opportunity. A high ranking on this practice is a stronger predictor of the company's Tobin's Q than the rankings of any of the other four. The top 25 companies for customer engagement outperformed the S&P 500 by more than 12 percentage points, on an annual basis, throughout the period. Only about 23% of the sites in our sample made use of customer engagement practices.

Ralph Lauren's e-commerce site is a good example of how to engage users. Through the online "luxury lifestyle" *RL Magazine,* consumers are invited to regularly revisit the site to learn about fashion, art, sports, healthy diets, and business – facilitating brand attachments and associations that go beyond the core product. Corporate performance reflects the success of the e-commerce site: The firm's Tobin's Q increased from 1.6 in 2003 to 2.6 in 2006, and its stock price more than tripled from 2003 to 2007.

One very effective way for a company to start learning what its customers are interested in is to offer Web visitors a wide list of topics and ask them to vote on which they like. The firm can use those responses to help it decide which attributes – wealth, attractiveness, exclusivity, for instance – it wants customers


**What Engages Online Shoppers Most**

**Of the five e-commerce practices that our research indicates customers care about most, only one – providing information on products and services related to the site's core offerings – strongly engages online shoppers and gets them to revisit a site.**


Results are based on interviews with online customers, who were asked to rate their engagement on a seven-step scale. Higher engagement means customers are more "involved" and "connected" with – and feel a stronger "overall attraction" to – the company's core offerings. Likelihood to revisit is self-reported.

to associate with its brand. The next step is to provide supplementary information that will help customers make those associations. Porsche, for example, uses the Web to offer adventure tours and travel information, reinforcing the brand's image of passion and high performance.

Andreas B. Eisingerich (a.eisingerich@imperial.ac.uk) is an assistant professor at Imperial College's Tanaka Business School in London and a research fellow at the Center for Global Innovation at the University of Southern California's Marshall School of Business in Los Angeles. **Tobias Kretschmer** (t.kretschmer@lmu.de) is the Deutsche Telekom Professor in Management and the director of the Institute for Communication Economics at Ludwig-Maximilians-University's Munich School of Management in Germany. Reprint F0803B

**MARKET RESEARCH**

## Mining Unconscious Wisdom

by Ian Ayres

Polling crowds to gain insight about the future has become commonplace. The collective guess beats the informed individual almost every time – witness the Hollywood futures market and others like it. The true power of the crowd, however, isn't in individuals' consciously espoused knowledge and opinions. The essence is actually buried somewhere deep inside your company's database.

Tools for slicing and dicing customer stats are better these days because of innovative applications of research methods such as regression analysis and randomization. In addition, the technologies for storing, accessing, and distributing customer data are becoming cheaper and easier to use. This convergence of improvements has allowed some forward-thinking companies to finally take full advantage of the huge stores of information at their disposal. They're no longer letting their tapes collect dust; instead they are digging for dollars and "sense" in their databases. And they are finding compelling stories about customer segmentation and service – "unconscious wisdom" that the crowd itself may never have thought to share.

The dating service eHarmony, for instance, doesn't solicit your or others' opinions about your ideal mate; it tells you whom you will like based on your responses to a 436-question survey. The questions are geared toward figuring out your personality – are you an unconventional thinker, for instance, or a people pleaser? Using research data on successful marriages, eHarmony then suggests potential matches – sometimes pairing personality types that might, at first blush, seem incompatible.

Similarly, sites like Pandora and Rhapsody can make fairly accurate inferences about the music a customer will buy based on her historical purchase data and on a computerized parsing of song attributes: You're a fan of Arcade Fire? Here are some artists whose songs have the same characteristics as those in Arcade Fire's catalog – the use of orchestral arrangements in rock music, for instance.

The travel site Farecast mines terabytes of data not only to tell end users whether the time is right to buy a ticket for that flight to San Francisco – based on historical data about how fares behave – but also to gauge the precision of that advice. The site assesses the data and then offers its recommendations with, say, 85% confidence if the historical record is strong and, say, 60% confidence if the record is weaker. A 2007 external audit concluded that Farecast's overall rate of accuracy in predicting price trends was 75%. Asking

**CORPORATE CULTURE**

## *Rudeness and Its Noxious Effects*

Grumpy managers who have a tendency to lash out are sometimes tolerated in businesses if their direct reports are thick-skinned types who don't complain about anything. But beware of more distant effects: It's likely that other employees are harmed by these incidents, even if they only hear about them secondhand.

The mere thought of being on the receiving end of verbal abuse hurts people's ability to perform complex tasks requiring creativity, flexibility, and memory recall, according to Christine Porath of the University of Southern California's Marshall School of Business and Amir Erez of the Warrington College of Business Administration at the University of Florida.

In studies involving separate groups of university students, the authors tested the effects of three forms of exposure to rudeness: In one study, the harsh words were directed at participants by a researcher ("What is it with you undergrads here?...[you] leave a lot to be desired as participants"). In another, the cutting remarks came from someone ostensibly outside the study – a professor whom the participants had to interrupt ("You preferred to disturb me...when you can clearly see that I am busy. I am not a secretary!"). In the third, the participants were asked to imagine that those incidents had happened to them.

In all three cases, participants' ability to perform tasks such as solving anagrams and suggesting uses for a brick was impaired. As for why this happened, the researchers say their studies indicate that after exposure to rudeness, people think hard about the incident – whether just ruminating or trying to formulate a response – and those thought processes take cognitive resources away from other tasks. As the authors put it in their recent *Academy of Management Journal* article, verbal abuse affects more than just those who experience it directly; it apparently "can harm innocent bystanders."

Reprint F0803D

the crowd whether it thinks the price will go up or down wouldn't be nearly as efficient or effective.

There's no doubting the critical role that crowd power has played in the evolution of markets. Still, we're just skimming the surface. By trolling for the unconscious wisdom in consumer data, companies are able not only to uncover useful patterns, segments, and influences, but also to peek into consumers' psyches.

Ian Ayres (ian.ayres@yale.edu) is the William K. Townsend Professor at Yale Law School in New Haven, Connecticut, and a cofounder of StickK.com. Also an econometrician, he is the author of *Super Crunchers: Why Thinking-by-Numbers Is the New Way to Be Smart* (Bantam, 2007).

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**STORE OPERATIONS**

## The Hidden Risk in Cutting Retail Payroll

by Zeynep Ton

Managers of big retail stores have an opportunity to boost profits by maintaining or increasing staffing levels even when sales are slipping.

That idea will probably sound strange to store managers, who tend to cut staff hours if there's a dip in sales. Such cuts make perfect sense to the companies' executives, given that big retailers place great weight on hitting prescribed targets for payroll as a percentage of sales. Moreover, reducing payroll often has no immediate discernible effect on other major factors in managers' evaluations – typically, things like whether the store's appearance is attractive and the bathrooms are clean. So managers get very used to the idea that if sales drop, payroll must drop too.

But my research shows that increased staffing levels are associated with better execution behind the scenes in places like the back room and that stores with better execution in some of those out-of-the-way areas have higher profits.

I analyzed four years' worth of data from more than 250 stores of a large U.S. specialty retailer and interviewed more than 50 of the chain's employees, from frontline workers to the CEO. My findings at this company dovetailed with my previous extensive research on executing tasks in retail stores. I discovered that staffing levels tend to have the most pronounced effect on tasks that don't count for much in managers' evaluations. At the retailer, I looked at data relating to two such tasks: the percentage of items that were supposed to be on display but lingered in the back room and the percentage of poorly selling or obsolete goods that were supposed to be returned to the distribution center but remained in the stores.

I found that increasing levels of staffing improves performance of both. Furthermore, a one-standard-deviation performance improvement in the tasks was associated with increases in store profit margins – approximately 4% for replenishment and about 3% for returns to the distribution center.

By contrast, increasing labor had no effect on overall maintenance of the store environment – stores continued to look good and bathrooms continued to be cleaned, no matter what the staffing level. The implication is that managers who cut staff in proportion to sales run the risk of hurting execution and thus financial performance.

How is a store manager to know how many hours of labor are needed to run the place well? Employee tardiness and absenteeism, variations in workers' speed and skill, and the vagaries of customer demand add up to a dizzying level of uncertainty for managers trying to staff their stores. But one approach managers can use is to track the performance of the tasks that are most likely to suffer from insufficient labor. For example, the company I researched could use the percentage of products not returned to the distribution center as a canary-in-the-mine early warning of understaffing. Another approach is to match the size of the staff to the estimated total workload. Forward-looking retail chains are beginning to use computerized scheduling systems to do just that. Such systems offer a promising alternative to corporate policies that place too great an emphasis on payroll as a fraction of sales.

Zeynep Ton (zton@hbs.edu) is an assistant professor at Harvard Business School in Boston. Reprint F0803E


PRODUCT RECALLS

# Avoid Hazardous Design Flaws

by Hari Bapuji and Paul W. Beamish

Although Chinese manufacturing sites produced many of the toys that have been recalled in recent years for safety flaws, the vast majority of those flaws came not from China but from companies in the United States and other developed nations. Problems with lead paint (which is a manufacturing flaw) aside, most errors that lead to recalls – not just of toys but of all kinds of consumer goods – are design mistakes. As such, they are the responsibility of the companies that dream up the products in the first place. And these mistakes are highly preventable: Our study of U.S. toy recalls indicates that companies can do a much better job of learning to avoid them.

The trick is to treat potential errors just as seriously as the ones that have already been made and to learn from both types. Even companies that have never been responsible for harmful product flaws should be diligent about prevention because recalls can happen to any consumer-product maker.

It's understandable that China has figured prominently in the recent public discussion of toy recalls. After all, about 80% of the toys recalled in the United States in 2006 were manufactured there. But 68% of those 25 recalls were due to design flaws. The U.S. Consumer Product Safety Commission maintains a public list of the top consumer hazards and reasons for recalls. Flawed design – sharp edges, long strings, and small detachable parts, for example – has been the cause of three-quarters of all U.S. toy recalls since 1988. What's more, the same causes repeat year after year, even as the number of toys that have been taken off the market because of safety concerns has steadily increased.

Our research, which entailed a systematic study of some 600 U.S. toy recalls from 1988 through 2007, along with interviews of design engineers, manufacturing executives, and consumer advocates, suggests several steps companies can take to reduce design flaws.

First, firms should establish a learning culture in which employees feel safe reporting their concerns about design flaws and in which mistakes are not ignored. Such a culture begins with managers simply being receptive to employees' ideas and criticisms. Companies should also engage in *reactive* learning: Once a product flaw is discovered, the firm should examine and improve the systems and processes that contributed to it. In addition, companies should engage in the four major types of *proactive* learning:

**Study** competitors' recalls, overall recall trends, issues leading to recalls, regulators' comments, and even medical journals, which sometimes report health problems resulting from product use or misuse. A decade before the first recall in 2006 involving small magnets in toys, for instance, medical studies reported children rupturing their intestines after swallowing such items. Even after that recall, other companies, presumably unaware of the problem, continued to produce toys containing magnets.

**Listen** to design and test engineers, whose concerns are often downplayed or overlooked in the excitement of taking a new product to market. Graco, for example, produced a cradle in 1989 with nothing to prevent babies from sliding into a corner and suffocating, despite engineers' warnings, according to Marla Felcher's *It's No Accident*. After several infant deaths, Graco recalled all 160,000 of the units sold.

**Test** effectively for safety issues. Too many toy companies rely on live humans to test product appeal but not safety features. While dummies are clearly appropriate in crash-testing car seats and the like, companies can spot potential dangers by having people use many products in realistic settings. At the least,

continued on page 26

# Conversation

## Partners Community Healthcare's **Jennifer Daley, MD**, on getting CEO support for difficult tasks

When Jennifer Daley was asked to join the Dallas-based hospital chain Tenet Healthcare, she could see that she would face enormous obstacles. The company was under investigation for allegedly overbilling Medicare, making illegal payments to doctors, and performing unnecessary operations. Her job as senior vice president, for which she would commute from Boston, would be to lead a dramatic overhaul of quality and service, including removal of long-established doctors from Tenet hospitals. Daley has since become chief medical officer for Partners Community Healthcare back in Boston, to be closer to her adolescent children. She was recently honored with a Leadership Excellence Award, sponsored by the Vice Admiral James B. Stockdale Center for Ethical Leadership at the U.S. Naval Academy in Annapolis, Maryland, and *Harvard Business Review*. HBR asked her how she was able to make the difficult choices the Tenet job entailed.

**At first, you didn't exactly jump at the opportunity to take on an overhaul of Tenet's clinical quality. Why not?**

When CEO Trevor Fetter offered me the job, I felt strongly that I needed some reassurance about his and the company's commitment to promoting clinical quality and making the hard decisions that needed to be made. I told him there were two conditions for my taking the job. The first was that although I would report to him, I would work for the patients. The second was that I would think of every day at Tenet as my last. He was very shocked. He said, "What do you mean?" I told him I couldn't stay if the company or the hospitals compromised patient care or continued to perpetuate the kind of substandard care that had been found in a few places. I said, "If I find out about a problem like that and we don't remedy it, that's the day I will quit. There will be no discussion about it."

**Were you concerned that such a statement might signal to the organization that you weren't committed to seeing through the changes you hoped to implement?**

I would never have stood up in public and told people about my terms. My agreement with Trevor was private. He knew I was serious, and his support showed me he was serious about improving quality and safety and restoring confidence in the corporate and hospital boards – that he intended to make real changes in structure, process, and outcome. Once we understood each other, I could feel comfortable and empowered to make real changes and take on internal resistance to altering the status quo, with his support.

**Having laid down the law, you did take the job. Can you describe the resistance you met?**

Some people didn't believe that we needed to move aggressively to remove doctors from the hospital medical staffs who either provided substandard care, as measured by objective clinical standards, or were disruptive to the process of patient care. There were groups of people in the company who felt that I was overly zealous or had clinical standards that were too high. I later learned that a faction in the company referred to me as the "witch doctor."

Fortunately, the CEO completely supported me. I think that because I was clear about every day being my last, I was able to be more effective. I was beholden only to my strong personal and professional set of core values about patient care. Any job that I have in the future, that's the attitude I'm going to take toward it, because it gives me an incredible sense of personal freedom and integrity. The only thing you have in this world is your personal integrity – if you compromise it, you've lost everything.

**How does a big company convey integrity all the way to the end user – in Tenet's or Partners' case, the patient?**

A big health-care company typically has thousands of employees, from nurses to technicians to physicians to people who work in environmental services. The company's executives have to be models for them by leading with integrity, and we have to educate every single one of our employees and provide them with the resources – so that they can do the right thing every time.

–Andrew O'Connell

Reprint F0803G

such tests would guide companies in providing clearer instructions and warnings.

**Track** customer feedback to look for patterns that might reveal product flaws. In September 2007, one million Simplicity cribs were recalled because their drop rails detached and created a gap in which children could get stuck and asphyxiated. More than three years before that, however, several customers had alerted the company to the issue, but to no effect, according to a *Chicago Tribune* investigation.

Doing all this properly requires that companies buck the trend of downsizing design and testing departments. It also requires that teams be set up to monitor the vast amount of useful information out there, from recall data to customer complaints. And it requires that these teams be coordinated at the highest organizational level – by the executives with responsibility for looking, unflinchingly, at the big picture.

**Hari Bapuji** (bapuji@cc.umanitoba.ca) is an assistant professor at the University of Manitoba's I.H. Asper School of Business in Winnipeg. **Paul W. Beamish** (pbeamish@ivey.uwo.ca) holds the Canada Research Chair in International Management at the Richard Ivey School of Business of the University of Western Ontario in London.

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**DATA EXCHANGE**

# Fledgling Firms Offer Hope on Health Costs

**by Julia Adler-Milstein and Ashish Jha, MD**

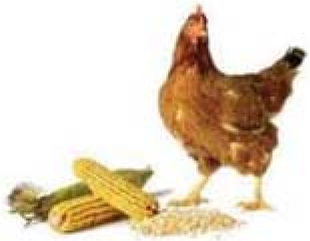
A promising new type of health care organization is following a path that, less than a decade ago, doomed an equally promising type of business-to-business firm. Despite that precedent, can these new entities, known as "regional health information organizations," survive? It's a question that is likely to have important consequences for the cost and quality of care in the United States.

There are a handful of well-established RHIOs – pronounced "REE-ohs" – in the U.S. and some 100 to 200 more in development. They meet a vital need: for patient-health information systems that talk to one another electronically. If patients go to a new medical office or wind up in an emergency room that's not part of their health network, typically the staff can get their records only via fax, phone, or postal mail – and only during regular business hours. This limitation can lead to deadly medical errors, unnecessary tests, and a layer of costs that the entire health industry could do without. A 2005 Rand Corporation study estimated that efficient exchange of medical records among doctors and hospitals in the U.S. would save $81 billion annually.

RHIOs provide physician practices, hospitals, labs, and radiology centers with a secure means of accessing and, sometimes, even updating patient data electronically. Approximately half of mature RHIOs got started with government seed grants or contracts, and their business models vary from prepaid membership to pay-per-click to no pay at all.

For the past four years, we've been looking into whether RHIOs are viable businesses, either as profit-making companies or as dot-orgs that can sustain themselves without grants or government funding. An ominous factor is the similarity of RHIOs to e-marketplaces, also known as B2B Web exchanges – intraindustry forums that were set up in the 1990s to connect businesses with new trading partners and provide venues for online transactions. These exchanges offered the promise of low transaction costs and a virtual market in which supply could be efficiently matched to demand. But few of the 700 exchanges ever hosted a single transaction, and fewer still survive today. Many of those consist of a single big company and its suppliers.

RHIOs face a number of the same obstacles that B2B exchanges were unable to overcome: Implementing an electronic information exchange requires a substantial up-front capital investment; it's often difficult, for a number of reasons, to persuade other organizations to sign on as members; it's tricky to make sure that confidential information goes only to the right recipients; and a lack of industry-wide technical standards impedes communication across information systems. In fact, data integration among disparate computer systems is often so difficult that most RHIOs settle for "system-to-eyeball" technologies, which merely present images of patient data rather than



They live across the ocean from each other, but we help them conduct business like they live across the road. In Japan, a producer of premium eggs for food cooperatives needed corn for chicken feed grown to very precise standards. Cargill's *Signature Growers*™ program brought the egg producer together with a farmer in Illinois—who grows the corn to the customer's exact specifications. Cargill works to assure that the crop follows identity preservation protocol all the way from planting to delivery. The result is a mutually beneficial business relationship that has grown into a friendship. This is how Cargill works with customers.

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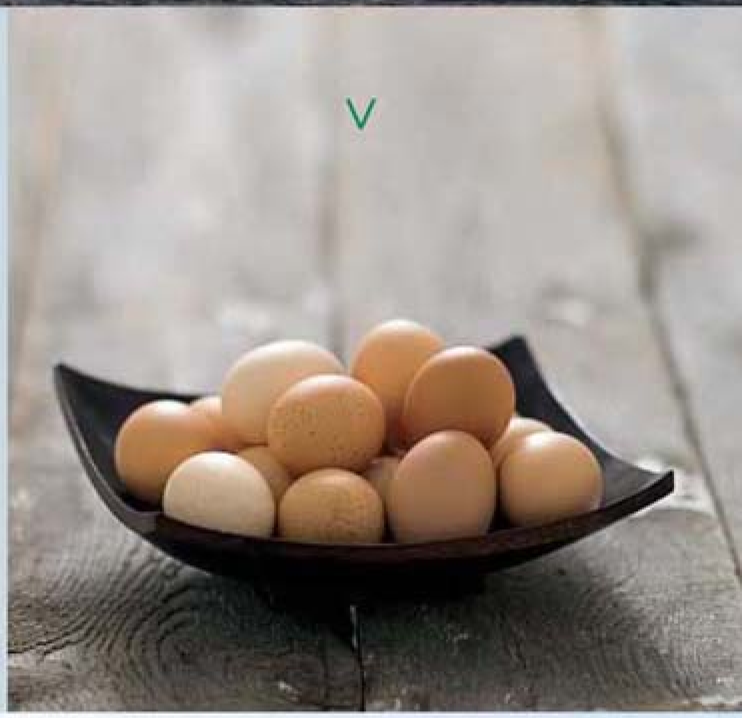

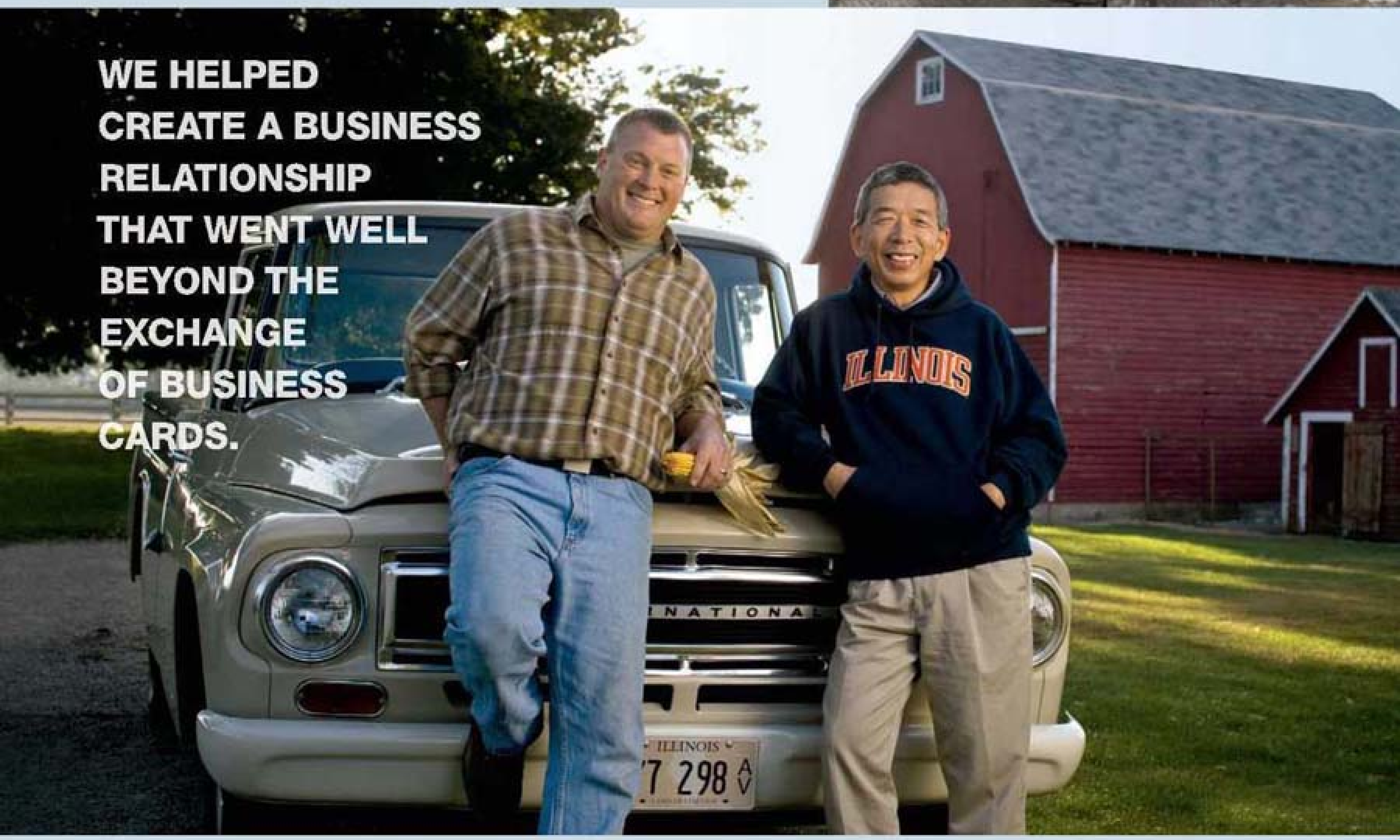


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fully incorporating the data into electronic records on the receiving end.

But health care delivery is much better suited to electronic interchange than many of the industries in which e-marketplaces failed, mainly owing to the large volume of very expensive manual transactions that would be replaced. Printing and mailing a radiological film can cost more than $150, and once it is received, routing it to its proper location in a patient's record can cost more than $50. Those costs essentially vanish when the transaction is handled electronically. And the savings from avoiding unnecessary tests can be significant. Thus, we believe there are viable business models for RHIOs focused on exchanging diagnostic results.

HealthBridge in Cincinnati is a good example of a self-sustaining nonprofit RHIO. Founded in 1997 with loans from hospitals and insurers, it electronically delivers lab results, radiology reports, and associated images to providers. Five health systems, comprising 17 hospitals, cover three-quarters of the budget through dues, with the rest of the money coming from fees for premium services. Physicians pay for their own internet connections and PCs, but their access to HealthBridge is free.

RHIOs are a peculiarly American creation. In the UK, the Netherlands, and other industrialized nations, governments implement, and pay for, electronic health information exchange. It's only in the United States that the dream of an interoperable medical-record system depends on fledgling organizations that may or may not become self-sustaining. But if they can capture even a small fraction of the estimated savings, RHIOs have the potential to attract significant capital and rapidly spread electronic exchange across the country, ultimately enabling critical health information to be shared nationwide.

**Julia Adler-Milstein** (jadlermilstein@hbs.edu) is a doctoral student at Harvard Business School in Boston. **Ashish Jha, MD,** (ajha@hsph.harvard.edu) is an assistant professor of health policy and management at Harvard School of Public Health in Boston.

Reprint F0803H

## The Best Advice I Ever Got

Kris Gopalakrishnan
*Cofounder and CEO, Infosys Technologies*

As a child, I had loved science, to the point of performing my own experiments. While I wanted to study engineering, my parents – keen to see me join the professional ranks – convinced me that I should become a doctor, so after high school I started a two-year premed track. With little interest in biology and amidst the sudden freedom of university life, I began to slack off – and I didn't win a place to continue toward the full degree. In the Indian system, it was very difficult to change subjects midstream, and I had no idea what to do. Embarrassed, adrift, my confidence shaken, and with two years already sunk, I took what was available: I started an undergrad course in physics with a vague notion of becoming a researcher.

One of my physics teachers was a real character: a tough, hard-bitten, chain-smoking guy, clearly passionate about his subject, who had been terrifying students at our gigantic state university for years. Because of (rather than despite) his reputation, I went to him for tutoring. Between problem sets one day he stopped and said, "You don't need to worry. You're good at this, you enjoy it, and you're going to land on your own two feet. For now, just concentrate on your studies." Immediately after that, my grades shot up, and I ultimately became one of the best students at our college. I earned a place in India's top-ranked physics master's program and continued on for a computer science degree. After graduation, I went into the IT field, and a few years later cofounded Infosys, where I've been working ever since.

At one level, my professor's meaning was simple: Do what you love, work hard at it, and all will go well. But the specifics of his message, and the way he delivered it, go to the heart of every leader's toughest challenge – motivating people. I use his actions and his words as a model for spurring people on to superior performance. And I focus, just as he did, on three important things. First, I constantly seek ways to get my love for this business across. When I display enthusiasm, employees are more likely to listen to what I say and draw extra energy from mine. Second, in talking with employees, I seldom focus on numbers but instead on big ideas and their role. The prospect of earning a doctor's salary or achieving a certain grade point average didn't excite me, and I don't think that talking about revenue targets or market share projections will get people inspired. Instead, I try, just as my professor did, to help people imagine a future in which their unique contribution has an impact. Finally, I get people to focus on the future impact of how they manage the task at hand.

For example, a considerable part of our business comes from maintaining our clients' legacy business systems. Often employees say to me, "Kris, this is boring. The software was written 25 years ago. All I do is patch it." For me, this presents an opportunity to encourage employees to experiment and be creative. I try to get them to think beyond addressing the immediate task to how we may help this client be more competitive in a globalized world. They see I love thinking about the issue, they start thinking creatively, they imagine their work having a big impact – and they see the link between this future and what's right in front of them.

Today, Infosys is a $3.1 billion public company with over 80,000 employees. But my job remains the same as in 1981: to motivate one individual at a time.

– **Interviewed by Daisy Wademan Dowling**

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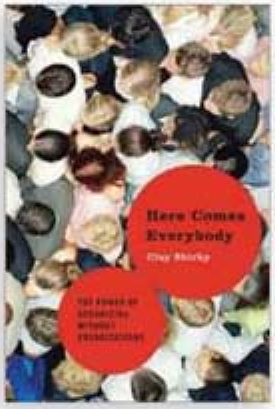
# Reviews

## Here Comes Everybody
### The Power of Organizing Without Organizations

Clay Shirky
*(Penguin Press, 2008)*

Peer production and user-generated content. Social software, social media, social networks. Wikipedia. Linux. Facebook and MySpace. If you're looking for a thought-provoking introduction to this dizzying constellation of phenomena, *Here Comes Everybody* wouldn't be a bad choice.

Clay Shirky, a consultant and writer on the social and economic effects of internet technologies, describes how the ease with which people can organize into informal groups using online tools is weakening the power of managed organizations. Consider the fate of Encyclopaedia Britannica in a world of Wikipedia users or the threat facing Microsoft from open source software such as Linux.




This is occurring partly because informal networks can do things that formal organizations can't. For one thing, online tools allow like-minded individuals to find one another where they couldn't before. This "self-synchronization of otherwise latent groups," to use Shirky's phrase, can aggregate previously dispersed interests or expertise to create powerful political forces, product development engines, or troubleshooting networks. Even the largest of institutions can't draw on such a broad pool of resources. In addition, informal groups, unencumbered by the significant managerial cost of running a large organization, are able to create products and services that wouldn't be economically feasible for a profit-conscious company – a website devoted to photos of Brooklyn's annual Mermaid Parade, for example.

One of Shirky's central arguments is that informal networks like the open source software movement present a serious threat to business because of members' freedom to experiment, which spawns a dazzling array of innovation. While even the most failure-tolerant organizations ultimately try to reduce the likelihood of failure, informal groups can accept limitless failure because the cost of trial and error – in salaries and management time – is nonexistent. But this failure doesn't, as Shirky asserts, in fact come for free. The costs are simply borne by those countless individual software developers whose contributions end up going nowhere.

This raises fundamental questions about the motivations of those who form and participate in collaborative groups. Yes, it can be heady stuff for consumers to become producers through contributions to a product like Wikipedia. Yes, the peer recognition that comes from devising a useful Linux enhancement can be greater compensation than ownership of the software code. And yes, much of the value of collaborative online projects comes from the relatively effortless incremental contributions of countless casual or even onetime users.

But will the nonfinancial incentives and the ease of participation be sufficient to make self-organized online groups truly competitive with the disciplined modern corporation? Could the dynamics of such groups, many of which are fueled by members' shared passion for a topic or activity, somehow be incorporated into the workaday environment of a formal organization? Those questions are still waiting to be resolved.

– Paul Hemp

### Myths and Realities of Executive Pay

Ira T. Kay and Steven Van Putten
*(Cambridge University Press, 2007)*

Compensation consultants are often criticized for biased analysis, but here are two who make a solid contribution to the American debate on executive pay. Kay and Van Putten argue persuasively that gargantuan salaries are due more to executives' bargaining power than to any conspiracy to cheat investors. They also provide reasonable circumstantial evidence indicating that most current plans do not harm the economy, while conceding that some specific compensation practices need improvement. Yet their emphasis on bargaining power leaves a major puzzle: We all talk about decentralized companies empowering knowledge workers to make big decisions and innovate, but actual pay packages imply that success depends on executive leadership now more than ever. With even well-educated employees seeing only small raises in income, it's clear that the knowledge economy has not boosted their bargaining power relative to executives'.

### Strategy and the Fat Smoker: Doing What's Obvious but Not Easy

David Maister
*(Spangle Press, 2008)*

For many companies, improving their prospects depends more on carrying out what they already know they're supposed to do – the business equivalent of stopping smoking and getting exercise – than on adopting a dazzling new strategy. Maister, a prominent consultant to professional services firms (and, until he developed a heart condition, a longtime overweight smoker), ranges widely in this uneven collection of essays. Throughout, he emphasizes the gap between knowledge of what to do – easily obtained nowadays – and the skill to do it, which comes from habits developed over time. He calls for abandoning most training programs, rethinking strategic planning to focus on shaping organizational resolve, and promoting managers according to their ability to coach subordinates without criticizing.

– John T. Landry

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# Authenticity: Is It Real or Is It Marketing?

Companies that boast of their authenticity confront challenges that more faceless firms don't even have to consider.

by David Weinberger

GORDON McMASTER, the CEO of Hunsk Engines, introduced his new head of marketing to the company's top managers over bagels and coffee.

"I want to make something clear," Gordon told the group. "I know we've gone through a number of marketing VPs and campaigns. But Marty is the guy we've been waiting for. I know what he stands for, what he wants to push the company to do, and he has my unqualified support."

Gordon knew Marty Echt had the chops for the position. The new hire had spent his early post-MBA years at a large packaged-goods company learning the consumer-marketing ropes, but he'd earned his reputation as a focused miracle worker elsewhere: He'd transformed a bottled-water manufacturer into an

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

Daniel Vasconcellos

innovator in the energy-drinks space and then built a distributor of specialty sports equipment into a cult brand.

On his first day at Hunsk, Marty was dressed to impress. He wore his best work suit, his cream dress shirt, and a tie with a soft brown and green pattern that pulled it all together. But Paula Marchesi, director of promotions, was most interested in the unpolished, black, heavy-soled boots under Marty's trouser cuffs. "Trouble," she thought.

Marty thanked his boss and then took the floor. Hunsk Engines had, he explained to his new colleagues, systematically devalued its considerable pedigree. There had been a time when Hunsk was considered a rival to Harley-Davidson. Harley made the wild brute machines with their characteristic growl, but Hunsk appealed to those who wanted a bike that ticked like a clock even as it moved like a rocket. The paradigmatic Hunsk rider wasn't someone who was just trying to look like an outlaw. He (men dominated the company's demographic) was a *real* rebel. Fiercely independent. Confident and edgy. More a Dennis Hopper than a James Dean.

The company had made the classic mistake of trying to expand its reach at the expense of its existing market. Twenty years ago, Hunsk had tried to move into light motorcycles, touting the quietness of its engines with a tagline that asked, "Was it the wind or a Hunsk?" – as if people rode Hunsks because they didn't want to be noticed. Then there was the attempt to appeal to the youth market. Marty liked the way the tagline "Before you have to get a car, ride your Hunsk" repositioned cars as a drag, but Hunsk bikes were no adolescent playthings. They were serious machines. Currently, the company was using an eco-friendly marketing pitch: "More freedom per gallon." Marty had known all this before he arrived. Keeping up with the motorcycle industry was a passion for him. He bet he was the only one in that room – including, he suspected, the CEO – who could rattle off the model and year Hunsk last used real leather for seats.

The next day, Marty gathered the entire marketing group. "What happened to the Italian suit?" Paula asked.

Marty laughed. He was now in a tired sports coat, black slacks, and his motorcycle boots. "I didn't want to frighten anyone right away with the real me," he said with a smile.

After the others had introduced themselves, Marty began: "Obviously there are going to be changes, but this is something we can succeed at only if we work together."

The direction Marty wanted to go was simple and seemed blindingly obvious to him. "This is a real company," he said. "It's not some internet start-up that switches from making video games one day to saving whales the next. We're not making cheap knockoffs of designer dresses. Hunsk is the real deal. We make the best damn motorcycles in the world. We don't have 'customers' – we have believers. Well, we used to, before we got away from our roots."

"So," said Paula, "we're going to do a back-to-our-roots marketing campaign."

Marty noted the touch of cynicism in her voice. "No. It's not just a marketing campaign. We're really going back to our roots. Hunsk has always been about authenticity. We are going to become the authentic company we once were. If it were just more marketing bull, our customers – our believers – would sense it."

"We're going to eat our own dog food?" suggested Carla Meyer, head of marketing communications.

Marty crossed his arms and smiled. "We're going to *be* our dog food."

**When you walk into our booth, you should feel as if you've just walked into a garage where people have grease – our grease – under their fingernails.**

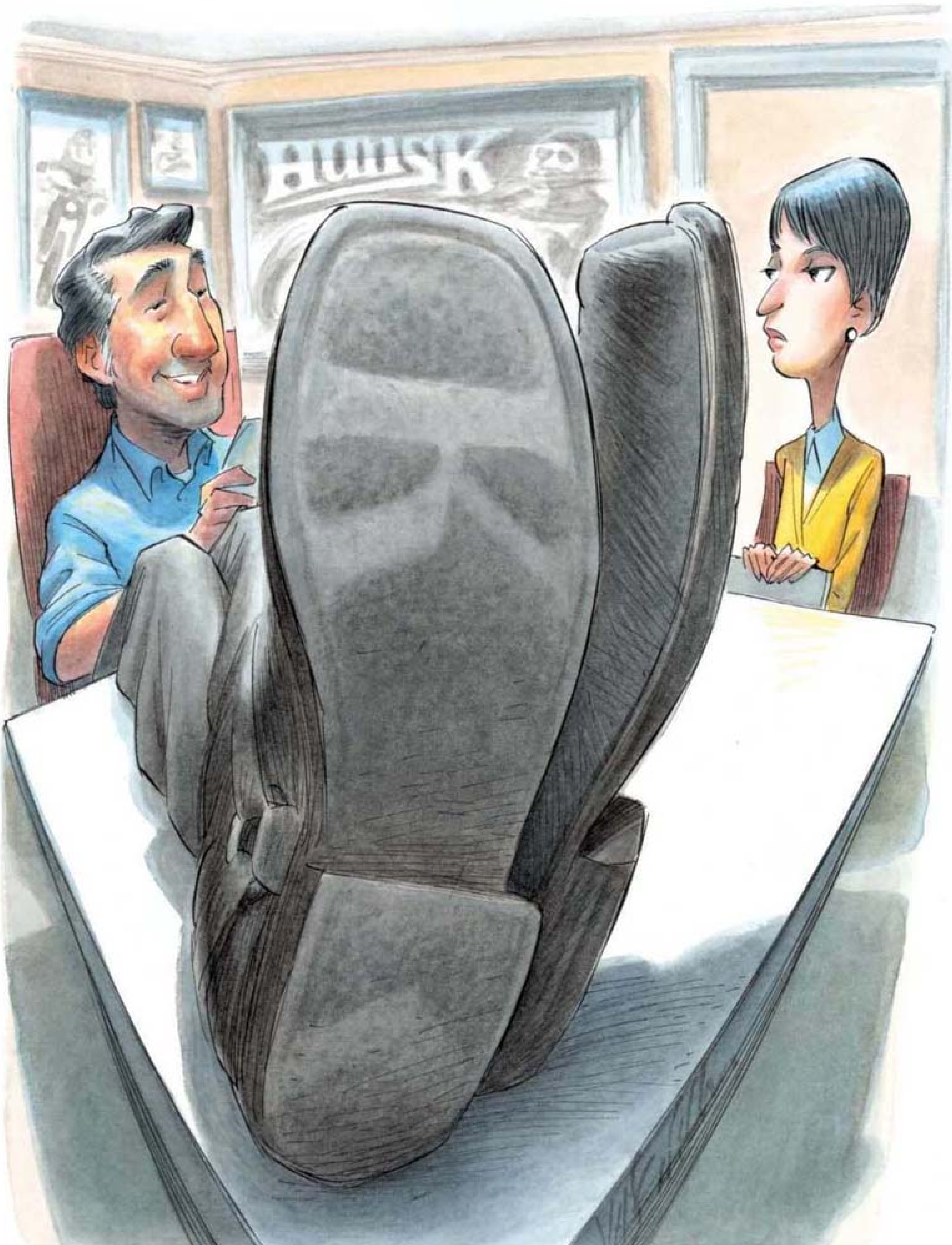
### Bugs in Your Teeth

Marty stood among the hundreds of motorcycles being showcased at the Cycle Thunder World Expo. He hadn't ridden one since a bad spill his senior year in college. But as he surveyed the bikes around him, he remembered how much he'd loved forcing his way through the wind, challenging the laws of motion.

After he made his way through the display area, he stopped at the Hunsk booth and was appalled by what he saw. Granted, it had been too early to roll out the new marketing campaign. Nevertheless, he cringed at Hunsk's efforts. The booth was pitifully conventional – some bikes on display, racks full of same-old-same-old brochures, and a contest to win luggage containers for the bike many attendees probably didn't even own. Marty made a mental note that at the next exhibit they ought to show bikes that were dirty and maybe a little dinged. The pristine, glistening machines out on the floor were too far removed from customers' experience.

Shortly before he had to leave for his plane, he grabbed Paula and pulled her far back into the Hunsk booth. "It's not your fault," he told her, "but I have to say I'm pretty disappointed. The marketing materials are all fine" – intentionally weak praise – "and obviously we're not ready for the new launch, but all that's fixable."

David Weinberger (self@evident.com) is a fellow at Harvard Law School's Berkman Center for Internet & Society in Cambridge, Massachusetts. He is a coauthor of *The Cluetrain Manifesto* (Perseus, 2000). His latest book is *Everything Is Miscellaneous: The Power of the New Digital Disorder* (Times Books, 2007).



Paula clenched her teeth, waiting for what was next. "I happened to spend a fair bit of time with Connie March, watching her interact with prospects," Marty said. "She's a very nice woman, and she seems to know the product line. But do you think she's ever been on a motorcycle?"

"Marty, customers love her."

"Yes, I'm sure she's a great employee and a great person, and there's definitely a spot at Hunsk Engines for her. But we've got to get her off the front lines. And not just her. We have a team of top-notch demo-ers and salespeople, but when you walk into our booth, you should feel as if you've just walked into a garage where people have grease – our grease – under their fingernails. Nobody's going to believe that about Connie or the rest of the crew. This booth just yells 'Poseur!'"

Paula sighed. Connie would be devastated to hear the feedback.

A few days later, Marty addressed the marketing team at a commercial racetrack, where he'd brought the group for a field trip. It struck him how very little anyone there looked like the typical Hunsk customer. "How many of you had ever been on a motorcycle before today?" he asked. That was the real point of the afternoon: Every member of Marty's team had been taken for a spin by someone from the track's service crew.

About half the hands went up.

"Keep 'em up. Now, how many of you had ever been on a Hunsk?" About a third of the hands went down. "Not too bad. And how many of you have ever owned a motorcycle?" Only three hands stayed in the air.

"So, what did you think of your Hunsk moment?" Marty asked. A couple of people said, "Cool" or "Fun." He continued, "More specifically, what did being on the back of the Hunsk 2000 JetEdge make you think of? What did it remind you of?"

The group could now tell that it was time for some Marketing 101. Faces got serious.

"Like riding a bull," said a woman from design.

"This was a great idea," a man from the exhibition staff added. "I think I really get it now."

"I was terrified," said Zack Inchon from investor relations. "I felt like I was going to fall off the entire time." Zack had tried to beg off, but Marty had insisted: "How can we be an authentic company if we have marketing people who refuse to even be a passenger on one of our bikes?"

"I felt manly," said Paula.

Marty ignored the sarcasm, but he did think he saw a few smirks.

Back at the office later that week, Marty was stopped in the hallway by Pete Ricard, who headed the PR group.

**"Because I'm not a white man of a certain age and mind-set, you won't consider me for leadership development?"**

"I'm a little confused by your notes on my budget proposal," Pete said. "I know a lot of people consider cause marketing to be a frill, and its results can be hard to measure – "

"I have no problem with cause marketing," Marty explained as he steered Pete toward the snack machine. "It's just this cause."

"You're against motorcycle safety?"

Marty laughed. "I'm totally in favor of it. And motherhood, too. Hunsk makes the safest bikes on the road. But your cause isn't exactly safety. It's advocacy for helmet laws."

"Helmets save lives."

"Sure they do, but the Hunsk rider doesn't want to *have* to wear a helmet. He doesn't want to be reminded to stay alive – he wants to feel alive. And the brand is about freedom. Not just the freedom of the open road, but the freedom to make your own choices. So aligning ourselves with eminently sensible helmets and laws that are imposed by society makes zero sense if we're going to stay true to the Hunsk experience."

"But aren't we being irresponsible then?" Pete asked.

"The owner's manual tells people to wear their helmets – but there's a difference between marketing and manuals. I do support the idea of cause marketing, though," Marty continued, putting his quarters into the machine and selecting the trail mix. "I want us to lead the charge against those god-awful motorcycles without mufflers. That would get us goodwill but also remind customers that our machines don't have to make a lot of noise to be powerful. *That's* an authentic cause for Hunsk."

### Right Skills, Wrong DNA

At first, Marty couldn't figure out what was so odd about the e-mail he'd received:

Dear Marty,

It's come to the attention of the Digital Marketing Group that our recent experiment with user-generated content tagging on the Hunsk site is having an unfortunate result. The tag cloud we've created, at your suggestion, is showing that the two tags customers apply most frequently are "problem" and "rattle."

We would therefore like to suggest that either: (1) those words be removed from the tag cloud or (2) we reduce them in size so that the tag cloud doesn't make it look as if Hunsk Engines' customers are dissatisfied, especially since – as you know – our customer satisfaction rates are among the very best in the industry.

Thank you for your attention.

Sincerely,

Matthew Wyck

Ah. Matt wrote e-mails that sounded like memos. The tag cloud actually gave Marty a little thrill. It was as close to customers as he could get on a daily basis. It showed what they thought were the most important issues. He banged out a reply:

Matt,

Don't sweat it. Our customers love us, and they'll love us more for being honest. Leave the tag cloud as is. It's part of how we're building an authentic company.

And please send the link to those two tags to Quality Assurance ASAP. Apparently there's a problem with a rattle in our bikes.

Keep up the excellent digital work.

–Marty

As he sent the message, Fiona Napoli, a young and promising writer in the communications group, entered his office resolutely. "What can I do you for?" he asked, hoisting his boot-clad feet onto his desk.

"I was disappointed not to make it into the LTP." The Leadership Training Program identified up-and-comers within the organization.

"I can understand that," Marty said, "but you shouldn't take it as a criticism."

"How can I not? Getting in is a sign that management has confidence in you, sees a future for you with the company." She sat straight up.

"And we do. Definitely. You do great work for us. But look, you came to us right out of school – if I remember correctly, Columbia Journalism. Doesn't get better than that."

"And that's a problem because…?"

"It's not a problem. But we're building a specific type of management team now. You write well, you're a hard worker, you're helpful to your coworkers – "

"So, what's missing?"

"We need a management team that's got the same DNA as our customers."

"Not sure I follow," Fiona said. "Because I'm not a white man of a certain age and mind-set, you won't consider me for leadership development?"

"It has nothing to do with gender or age – but mind-set, yes. We are looking for people who truly, deeply understand what this company stands for and what it means to our customers."

"How do you know I don't?" Fiona challenged.

"Based on what I've seen, you'd be just as happy writing about food processors or politics or health. You're smart. You're interested in a lot of things. Me, I'm interested in just one thing right now: Hunsk motorcycles. I think about them in the shower. I think about them when I'm playing with my son. I wake up in the middle of the night with ideas."

Fiona paused. He had pegged her correctly, but she thought it was a stupid reason to limit her growth potential. She did her work exceptionally and was adaptable enough to tailor it to the culture, even if she was not of that culture. As she turned on her heel, Marty knew she'd be going back to her cubicle to search her laptop for her old résumé.

## Getting *Too* Real?

Marty had been given free rein, more or less, his first few months. But he knew that the CEO thought highly of Fiona, and he started to wonder how committed Gordon was to total authenticity.

Gordon wondered that himself as he waited for his turn at the golf tee.

He liked Marty personally and loved his engagement with the product. And Marty's marketing campaign was beginning to show results. The new tagline, the new ads, the new look – everything reminded Gordon of his early years at Hunsk. He could practically smell the sweat and gasoline that used to waft up from the basement engineering shops and permeate the entire office. Gordon had ridden one of the original Hunsk PowerRevs back when he had more time for leisure rides. But he couldn't remember the last time he'd actually been on a Hunsk just for his own sheer pleasure. Long time ago. Too long. Marty's campaign brought all that back to him, and it was apparently having the same effect on the market. Even beyond the numbers, Gordon could sense it.

**The fundamental question was more about the value of *being* an authentic company than about the value of the campaign.**

Still, there were complaints. A lot of them. Some very good people in the marketing department felt out of place. Employees throughout the company who had done terrific work for years were feeling dismissed, censored, marginalized. There had even been complaints about Marty's use of salty language in the office, as if he were out with some biker buddies. And Marty's rejection of helmet safety as a Hunsk-worthy cause seemed off the mark. It might even hurt the brand. Overall, though, Marty's marketing campaign portraying Hunsk as an authentic company, one that's held on to its values, was definitely promising. The fundamental question, Gordon realized, was more about the value of *being* an authentic company than about the value of the campaign.

Maybe he should tell Marty just to stick to marketing and not to worry about the company's authenticity. Yet, could a marketing campaign succeed in the long run if it portrayed the company as filled with bike enthusiasts when in fact the employees would just as soon commute in minivans? Hunsk was the "real deal," as Marty liked to put it, and it seemed foolish not to turn that into a business advantage–but was the price too high? Was authenticity even possible for a corporation?

Gordon stepped up to the tee and eyed the ball.

**Should Gordon continue to back Marty's no-holds-barred authenticity approach?** Five expert commentators offer their advice, beginning on page 40.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THE POWER TO KNOW

**Bruce Weindruch** is the founder and CEO of the History Factory, a Chantilly, Virginia–based heritage management firm that, among other services, helps companies capitalize on their past in their marketing campaigns. He can be reached at bweindruch@historyfactory.com.

MARTY ECHT is a really smart, well-intentioned marketing executive who's mistaking his perception of Hunsk for inherent attributes that make the brand "authentic." I typically recommend that marketers like Marty invite a group of company engineers down to the archives to spend a couple of hours exploring old engineering drawings, ads, and product photographs. Here they can identify exactly how things have changed. More often than not, they are remembering the past in a golden haze. It's not uncommon for purportedly authentic marketing campaigns to be based on a history that never really existed.

Connections with the past provide reference points for meaningful authenticity-based marketing campaigns. Saab, for instance, was an aircraft manufacturer at its founding. Aerodynamic lines, efficiency, and functionality serve as the automobile company's links between yesterday and today – and they resonate with customers and employees alike.

Just as important, companies can use connections with their past as part of a repenting and reforming process when they've strayed from their original vision. As a key element of its successful turnaround, my client Brooks Brothers instructs its salespeople first to thank customers who acknowledge that they are giving the retailer a second chance and then to concede that the company compromised its standards of quality in the 1970s and the 1980s while trying to be too many things to too many people.

**Unless Hunsk swaps its notion of authenticity for a better understanding of its real past, the only place you'll be able to find its machines will be on eBay.**

Marketing tactics designed to project authenticity do not an authentic company make. As a historian, I'll be the first to admit that such campaigns worked surprisingly well in the era of one-way communication (print, radio, and television). However, "candid" customer feedback posted on a company-authorized website looks fake compared with blog postings that praise or slam a company and its products. In today's wired world, the most authentic marketing tactic is to actually do something about customer feedback.

That said, authentic companies don't chase down every single idea or request lobbed their way; they know who they are and know their mission well enough to figure out which opportunities to pursue. For instance, they wouldn't spend much time debating which causes its customers are interested in before deciding where to put their corporate social responsibility dollars. Customers should feel empowered to connect with causes whether the company endorses them or not. All the hunches or marketing data in the world may never have connected BMW with Susan G. Komen for the Cure. But since 1997, BMW owners have raised tens of millions of dollars annually for breast cancer research. Komen's hyper-grassroots approach to fund-raising and BMW's dealer profile and owner demographics aligned to create a powerfully genuine connection.

A company needs to know where it's going before it can claim the authenticity of where it came from. Its success in this regard hinges on involving customers and employees alike in a vision for the company's future. The folks at Harley-Davidson know that they determine what's original and authentic in motorcycles. Their competitors can copy where Harley has been, but they have no idea where Harley is going. It's the future that motivates and unifies the workforce at Harley-Davidson, not the fact that employees drive Harleys rather than minivans or hybrids.

The annals of business history are filled with companies like Pan Am, Polaroid, and RCA, whose "authenticity" didn't save them from the bruising realities of the rough-and-tumble global marketplace. I'd be willing to bet that unless the folks at Hunsk swap their notion of authenticity for a closer look at the company's past to understand what customers and employees really believed in, the only place you'll be able to find a Hunsk machine in a few years will be on eBay.

Wendy Wray

HUNSK'S PROBLEM is not a swashbuckling marketing VP with tough new ideas but rather the CEO's lack of leadership. Gordon McMaster, when he stopped biking, lost sight of the characteristics that made Hunsk a successful competitor of Harley-Davidson – and this, in time, affected his choice and management of staff.

Fundamentally, Marty is right. I believe that people in key marketing posts should be passionate about their products and know them inside and out. If you haven't been on a Hunsk, even as a passenger, how do you know how it feels?

and what could be done to turn the situation around. It was fairly easy to work out. Instead of hiring a CEO who had come from a superbrand, like Chanel, the parent company had hired one from a moderate sportswear house – a different culture altogether. Because of his background, he led the company in the wrong direction. What should have been luxurious designer clothing manufactured in Italy and France was in reality moderate fashion manufactured in Hong Kong and China. This CEO didn't understand how to romance the Saks Fifth Avenues and Neiman Marcuses of this world.

**Gillian Arnold** (gillian.arnold@galuxuryconsulting.com) is a Rome-based strategic consultant to luxury fashion and fine jewelry brands. She was previously the CEO of Karl Lagerfeld, based in New York. She also founded and managed a diamond jewelry business carrying her name as the brand, with distribution in 117 fine jewelry stores in the United States.

**Gordon doesn't have sufficient insight into the people who work for him, and he needs to address the significant disconnect between his staff and the brand.**

In luxury fashion, all key executives get dress allowances from their companies' new collections as part of their remuneration package. There is the implicit understanding that no one should even consider wearing another designer. Support staff get to purchase clothes at giveaway prices in sample sales. It's the only way they can really live the brand.

Every company should be driven by the CEO's vision. In this case the real question is, Will Gordon do what it takes to change Hunsk's internal culture to match the company's external image? Is he up to the challenge?

While verbally backing Marty's vision of authenticity, Gordon doesn't seem wholly committed to Hunsk's transformation. His role should be promoting the new vision within Hunsk and, where necessary, reinforcing it. He doesn't have sufficient insight into the people who work for him, and he needs to address the significant disconnect between his staff and the brand.

I was the CEO of a luxury fashion brand. When I joined the company as an executive VP, my mandate was to understand why this famous designer had lost millions of dollars

When I came on board, I worked very closely with the designer, explaining the characteristics of the target luxury consumer – and he designed accordingly, because he shared my vision. I moved production back to Italy and France, back to the roots of luxury fashion. After changing the internal culture and the way we marketed the now luxurious designer brand (by sending clearer signals), we soon became very successful. During the transition, I was offered the CEO job. I had simply repositioned the brand to reflect authentic luxury in every way.

Nowadays, as a consultant to luxury brands, I often find myself telling clients that the CEO needs to engender a shared vision of corporate strategy and values, map clear objectives, and introduce new ways to measure success. The chief executive must also know how to recognize and manage talent and be willing to reassess employees under the new conditions, even if she had hired them in the first place. That may include, ultimately, letting go of those people who no longer fit in with the vision. Corporate culture needs to reflect the authenticity of the branding message it sends out.

**James H. Gilmore** and **B. Joseph Pine II** are the cofounders of Strategic Horizons in Aurora, Ohio, and the coauthors of *Authenticity: What Consumers Really Want* (Harvard Business School Press, 2007). They can be reached at jimgilmore@aol.com and bjp2@aol.com, respectively.

MARTY PROVIDES a perfect illustration of why so many heads of marketing last such a short time. (Spencer Stuart famously publicized the tenuous tenure of CMOs: Their average time on the job in the "top 100 branded companies" is less than 24 months; more than 50% of those still in place have held their positions for less than one year.) Marty arrives with all the answers, repackages old marketing methods as some newfangled approach, imposes his personal view of what customers want, and dismisses any malcontents who fail to embrace the new vision.

Dirty bikes at trade shows won't successfully frame a new "authenticity" campaign that sustains demand for Hunsk motorcycles. While introducing new taglines, new ads, and a new look may often be necessary actions, they may represent a marketing facade rather than real thinking about how best to generate the increased sales needed to build a brand.

**Marty's efforts simply perpetuate the phony marketing that has led to Hunsk's predicament. The only difference is that the hollow promises are couched in the language of authenticity.**

Marty seems to want to stay true to the Hunsk experience. What Hunsk experience? No amount of talk about being a real company can substitute for offering actual experiences that personally engage customers. Marty's efforts simply perpetuate the phony marketing that has led to Hunsk's predicament in the first place; the only difference is that the hollow promises are now couched in the language of authenticity.

We sincerely doubt that the new campaign will continue to show results for very long. The case writer could have just as easily suggested that despite all Marty's efforts, sales were still languishing; that would have better fit the facts for most has-been brands.

Rather than trying to be a "real company" or forming a management team whose personal interests match the brand, Hunsk needs to manage customers' perceptions. People today purchase on the basis of whether a product conforms to their self-image; that alone determines the authenticity of the brand.

First, the company must fix its quality problems in manufacturing so it can move toward offering mass-customized bikes. The motorcycle business awaits some brand to provide mass customization, as Mini Cooper and Scion have in the automobile industry. Motorcycle customization primarily occurs in the aftermarket, so giving people the ability to personally design their own bikes from the outset would position Hunsk as the superior provider of self-expression.

Second, management needs to abandon the self-fulfilling view of the paradigmatic Hunsk rider as a "he." The greatest opportunity to grow sales resides in getting more women to ride. In this regard, the nonriding Fiona Napoli may be more qualified than her enthusiast boss. Let her and other up-and-comers launch a campaign for real safety aimed at attracting more female riders. Juxtapose Hunsk's male-dominated past with its female-driven future. The real deal is often defined by unlikely polarities – like Bob Dylan hawking Victoria's Secret lingerie.

Finally, Hunsk should replace its fake marketing with real placemaking: Start by reinventing the experiences customers have at dealerships. Draw inspiration from the success of Viking Range in transforming stores into cooking schools. Invest in "pop-up" events that attract new customers, as Red Bull leverages Flugtag competitions, downhill ice skating, and soapbox derbies.

Such actions may not restore Hunsk Engines as the authentic company Marty thinks it once was, but they will help render its motorcycles authentic to an ever-expanding customer base.

THE BUYING public craves authenticity, but this fact seems to elude many CEOs. I believe that the perfect company is one where everyone is happy, from owners to employees. This business model eliminates greed and emphasizes sharing – which means acknowledging employees as the most essential aspect of the organization. A company that adopts this strategy will attract folks with a passion for what it produces or sells. Otherwise, it may hire a bunch of competent people who lack the heart and soul that can really make a company click. That seems to be what Marty is facing at Hunsk.

Marty is not the problem – the employees who lack real passion for their product are. And the CEO has allowed the problem to fester. He's not even passionate himself anymore. Whether Marty can be successful as one man with a mission is hard to tell. It remains to be seen whether he can train personnel to be passionate or superimpose authenticity on a company that no longer has it in its DNA. The secret is not to lose it to begin with.

R.L. Winston Rod Company, the fly-fishing rod maker that two partners and I used to own, became a virtual clinic on how to kill the spirit of a company. We sold Winston in 1991, agreeing to stay on after the sale. But we quickly realized that passion and common ambitions do not always go hand in hand.

In our opinion, Winston veered away from what had made it special. For example, there was talk of having an old craftsman working in a room out front just for image, while drones made "handcrafted" items on an assembly line in a back room – pure smoke and mirrors. It presumed a total ignorance of the customers. In the end, three coworkers and I decided to leave Winston, which we had lovingly helped develop into a business with a world-class reputation, because we thought it lacked the soul of its customers.

Then my current partners and I set up Sweetgrass Rods, a much smaller company. For us, the authenticity of the product – which was critical to our mission – was more important than personal profit. I had grown up watching the people who originally made Winston rods. In those days, Winston was an open-door shop. Sometimes you wouldn't even find the craftsmen there at all, because they'd just gone fishing. We have an open-door policy now at Sweetgrass, and we look for a genuine passion for the craft and the sport in all our employees. That's what connects us to the product and to our customers. We spend a lot of time writing to and talking with our customers – we like to think of them as family. Their happiness, their enjoyment from our rods – those are the kinds of readouts we focus on. It is possible to be authentic as a company, but it's so much more than a marketing strategy.

If I were running Hunsk, I would embrace Marty's insights like gold. Marty seems to be one of the few people who understand Hunsk motorcycles. Once authenticity is eradicated and years go by without it, the public and employees alike don't know what they are missing. It's a shame that Gordon didn't have the passion to prevent that problem at Hunsk in the first place. If employees bring blood, sweat, heart, and soul to the product, it will manifest that spirit, and folks will be willing to stand in line for it.

**Marty is not the problem – the people who lack real passion are. If employees bring blood, sweat, heart, and soul to the product, it will manifest that spirit.**

**Glenn Brackett** (booboys@sweetgrassrods.com) is a co-owner of Sweetgrass Rods, a maker of bamboo fly-fishing rods in Twin Bridges, Montana.

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# Timeless Leadership

## The great leadership lessons don't change.

A Conversation with **David McCullough**

William B. McCullough

"We need leaders," insists the American historian David McCullough, "and not just political leaders. We need leaders in every field, in every institution, in all kinds of situations. We need to be educating our young people to be leaders. And unfortunately, that's fallen out of fashion."

McCullough, a two-time Pulitzer Prize winner and well-known public television host, has been thinking for decades about the role played by American leaders. His books – including *The Great Bridge, The Path Between the Seas, Truman, John Adams,* and *1776* – offer vivid, painstakingly detailed pictures of the American past, reminding readers that although the United States was once a very different country, the struggles, visions, and ideals of its founders and best leaders remain a constant source of inspiration. His work underscores his deep belief that even in the nation's darkest moments, solid, old-fashioned values – optimism, hard work, and strength of character – endure.

In this edited interview with HBR senior editor Bronwyn Fryer, McCullough describes the fundamental qualities of what might be called timeless leadership, using both past and present American leaders as examples. These qualities are familiar as well as ageless – and taken together, they offer us a clear sense of the ethical stance that model leaders share.

**You are passionate about the necessity for history education. Why do you think it's so important for a leader to have what you call a sense of history?**

I like to remind people of something General George C. Marshall said. Asked once whether he had had a good education at the Virginia Military Institute, Marshall said no, "because we had no training in history." He knew that a sense of history is essential to anyone who wants to be a leader, because history is both about people and about cause and effect. The American historian Samuel Eliot Morison liked to say that history teaches us how to behave – that is, what to do and what not to do in a variety of situations. History is the human story. Jefferson made that point in the very first line of the Declaration of Independence: "When in the course of human events..." The accent should be on "human."

History also shows how the demands of leadership change from one era to another, from one culture to another. The leaders of the past experienced their present differently from the way we experience ours. And remember, they had no more idea how things were going to turn out than we do in our time. Nothing was ever on a track, nothing preordained. The more you study the year 1776 and the course of the American Revolutionary War, the more you have to conclude that it's a miracle things turned out as they did. Had the wind in New York City been coming from a different direction on August 29, 1776, Americans would probably be sipping tea and singing "God Save the Queen."

Leadership, then, partly has to do with luck. And luck, chance, the hand of God – call it what you will – is a real force in human affairs; it's part of life. Washington might have been killed; he might have gotten sick; he might have been captured; he might have given up. Besides being fortunate, he knew how to take advantage of a lucky moment, because he was blessed with very good judgment. Luck provided the opportunity, but Washington's night escape across the East River – made possible by the direction of the wind – after an overwhelming defeat in the Battle of Brooklyn would never have succeeded had it not been for his leadership and the abilities of Colonel John Glover. Glover was a Massachusetts merchant and fisherman who, with his Marblehead Mariners, knew how to do the job.

**So part of harnessing luck – or the lucky historical moment – is knowing talent when you see it?**

Yes. Spotting talent is one of the essential elements of great leadership. Washington had it to a remarkable degree. Washington was not an intellectual. He wasn't a spellbinding speaker. He wasn't a military genius. He was a natural born leader and a man of absolute integrity. And he could spot ability when it wasn't necessarily obvious. Washington didn't much like New Englanders, but his two best men were bred-in-the-bone New Englanders. Henry Knox was a big, fat, young, and totally inexperienced Boston bookseller who had a brilliant, brave idea – to go to Ticonderoga, get the big guns there, haul them back to Boston, and thereby drive the British out of the city. And this in the dead of winter. There were all kinds of reasons why it wouldn't work, but Washington not only saw at once that it was a very good idea, he saw that Knox was the man to do it.

He did the same with Nathanael Greene, a Quaker with a severe limp and absolutely no military experience. Washington looked at Greene and thought, This could be the best man I have. Lo and behold, Greene turned out to be an even better strategist and tactician than Washington. Having spotted their talent, Washington knew just what to do with these two exceptional men who didn't fit the standard mold. He gave them their chance, loosed the reins, let them do their jobs.

Harry Truman, too, knew how much more there can be to people than meets the eye. Consider his choice of Dean Acheson as secretary of state. Acheson looked like a tailor's dummy, even a fop, with his fancy mustache, his elegant suits – and there was his aristocratic way of talking. It would have been easy for someone of Truman's background to write Acheson off, but Truman could see how much more there was to him.

And Acheson, who might well have looked down on Truman, also saw beyond surface appearances. To Acheson it was Truman's "priceless gift of vitality, the lifeforce itself" that was his strongest, most inspiriting quality. Describing Truman, Acheson liked to quote from Shakespeare's *Henry V* the lines about the night before the Battle of Agincourt:

> ...every wretch, pining and pale before,
> Beholding him, plucks comfort from his looks...
> His liberal eye doth give to every one...
> A little touch of Harry in the night.

Good leaders also judge people by how they handle failure. I'm told that young people new to the business world today suffer because they're used to constant recognition. The truth is, not everybody gets a star on his or her forehead. Good leaders don't tolerate self-pity in themselves or others. The star performer who has never failed, never fallen flat on his face or been humiliated publicly, may not have what it takes when the going gets rough.

**You like to quote the military historian Douglas Southall Freeman, who once said that his work had led him to believe that leadership came down to three qualities: "Know your stuff, be a man, look after your men." What exactly does that mean?**

Put in present-day terms, "knowing your stuff" means having expertise and experience and knowing what you're talking about. I believe there are three essential ingredients to education: the teacher, the book, and the midnight oil. So do the hard work necessary to know your subject. But knowing your stuff isn't just about accruing information, which has little to do with knowledge. You have to learn how to analyze problems, learn to do things by doing them. You don't learn to play the piano by reading a book about it; you learn to play the piano by playing the piano. You learn to write by writing. You learn to be a leader by leading people.

Regardless of gender, "being a man" means having the attributes of courage – backbone – resilience, and strength of character. Are you so filled up with your own ambitions and your sense of being terrific that you can't see the strengths in others? Are you someone who can be counted on when the chips are down?

When I started out on the Truman biography, I tried to interview as many people as I could who had known Truman before Roosevelt died. I asked them all the same question: "How did you feel when you heard that Harry Truman was president?" Without exception they said the same thing in so many words: "I felt good, because I knew the man." Truman was no great charmer, but he was admirable and effective in many ways. He understood human nature. He had great common sense, and one of the lessons of history surely is that common sense isn't common. He wasn't afraid to have people around him who were more accomplished than he, and that's one reason why he had the best cabinet of any president since George Washington. This so-called little man from Missouri surrounded himself with people who were better educated, taller, handsomer, more cultivated, and accustomed to high-powered company, but that didn't bother him. He knew who he was. He was grounded, as the Quakers would say.

"Look after your men" means take care of your employees. Take a genuine interest in them. Be empathetic. Treat them well. I'm appalled when I'm taken to see a factory and it's clear that the people running it have seldom if ever

**Truman wasn't afraid to have people around him who were more accomplished than he. That's one reason why he had the best cabinet of any president since George Washington.**

walked among the men and women who work there.

By contrast, consider Washington Roebling, the builder of the Brooklyn Bridge, who led the biggest, most ambitious engineering project in our history until then. He was only in his early thirties, and not by appearance or manner an obvious leader. He was not the charismatic figure his famous father, John A. Roebling, had been – not at all. But he never asked any of his people to do anything he wouldn't do himself. And much that he called on them to do was extremely dangerous. He led by example and by trying always to solve problems in the most expedient and effective manner. After he was stricken by the bends, Roebling was confined to his home on Brooklyn Heights, where he directed the whole project from an upstairs window with the help of his wife, Emily Warren Roebling. She had to learn a lot rapidly and turned out to be a superb assistant engineer in her own right.

But I would add another quality to Douglas Southall Freeman's list. That's the power of persuasion – what Franklin Roosevelt, for one, had in such grand abundance. Truman called it the ability to get people to do what they ought to know to do without being told.

**How does one learn to become this Trumanesque kind of leader?**

Start by listening. If I were teaching a course at Harvard Business School, I'd put a lot of emphasis on listening. Listening means asking good questions and taking in what people have to say. Listening also means hearing what people are not saying. What's bugging them? I worked for Edward R. Murrow at the U.S. Information Agency during the Kennedy administration. "Find out what's bugging people," he liked to say – the Arabs, the Koreans, whomever. What was bothering them about life, about their country, about us? And if we listened attentively to what they said, what would we learn, and how would we act differently?

In teaching a course for future leaders I'd also warn against the insidious disease of greed. We read again and again of business leaders caught grossly feathering their own nests. It makes one wonder how they were raised. What were they taught at home and at school?

With a knowledge of history comes the understanding that one day you, too, will be judged by later generations. How will you measure up? How will you and your generation be judged by history?

There are a lot of moments in the lives of those I've written about when I would dearly love to have been a fly on the wall. One of them was when old John Adams sat down to talk with young Ralph Waldo Emerson. "I would to God there were more ambition in the country," Adams said. Then he paused and added, "Ambition of that laudable kind, to excel." That's what we need far more of – ambition to *excel.*

I would also tell a young MBA, "Conduct yourself in a way that lives up to your own high standards." That is, have a sense that your work matters, that your efforts contribute to something bigger than you and your salary. If eventually you do rise in the system, your good conduct will become a standard for others. If you find that your standards clash with those of the people running the company, then get out and start your own. From the beginning this country has been built on risk. That, too, is a lesson of history.

**Can you think of some executives who exemplify the qualities of leadership you've described?**

I think of three. The first would be my father. He ran an electrical supply business in Pittsburgh, the McCullough Electric Company. He worked hard and knew his stuff, and he was up against very stiff competition from big conglomerates. One thing he always said was "Don't knock the competition. It only reflects badly on you." At the dinner table some nights, the conversation would go like this: My mother would ask, "Well, dear, did you get the order from U.S. Steel?" My father would say, "No, I didn't." She'd say, "That's too bad, dear." And he'd reply, "Well, the other fellow has to make a living, too." He never spoke of his competition as an enemy. And he took care of his people. His company was strong and successful. In fact, it's still in business, after more than a hundred years.

The other examples are leaders of nonprofit organizations. Rebecca Rimel, head of the Pew Charitable Trusts in Philadelphia, began her career as a nurse. She is a visionary who is able to generate a great sense of mission. Her enthusiasm is infectious, and she's willing to take risks. She personifies the old adages "Nothing ventured, nothing gained," "Any job worth doing is worth doing well," and "Handsome is as handsome does." Those are all the kinds of things your grandmother used to say, and they probably can't be said too often. Samuel Johnson once observed that we "more frequently require to be reminded than informed."

Dan Jordan, who runs the Thomas Jefferson Foundation at Monticello, is a terrific leader who has made Monticello a historic site like no other – superbly staffed, innovative, exciting. When DNA evidence suggested that Jefferson had had a relationship with his slave Sally Hemings and fathered children with her, Dan told his staff, quoting Jefferson, that they would "follow truth wherever it may lead." He said that the foundation would rely on scholarship, and not to worry about politics or Monticello's image. He put together a team of experts who performed a meticulous study and issued an objective report of their findings. And in doing this he was, of course, showing his own high professional ethic as a scholar.

Dan has a list of rules of leadership that I've written down. First, he has no organizational chart. He believes, as Thomas Jefferson did, that people are more important than paper. Second, he tells his staff to give him the bad news first – he insists on full disclosure at all times. Third, he makes sure his door is always open and that anyone can talk to him about anything. Fourth, he tells his people they must always take responsibility for their actions. Fifth, he says that you can never have too many friends. Sixth, make other people's success your success. Seventh, hire only A-plus players. And finally, he believes that in the last analysis, character counts above all.

**As an American historian, you have a long-term view of the United States. Given the problems facing the country, including its diminished reputation overseas, do you think that America is in very serious trouble?**
I tend to be a short-term pessimist but a long-range optimist. Certainly we are in a time of great stress, danger, and concern, but there's never been a time when America didn't have problems. And this is by no means the darkest, most dangerous time we've been through. Anyone who says or thinks that has little sense of history. I remain optimistic about this country. I still believe the United States has the most productive workers in the world, and I think what we offer primarily is opportunity – opportunity of all kinds and as never before. And along with our freedoms of speech and religion, our insistence on a government of laws and not of men, we have that all-important freedom to think for ourselves. You can become an American regardless of where you're from, and you have a greater chance to make the most of your abilities here than anywhere else.

I sense a great desire among people everywhere I go to get the country back on track, to improve education, improve performance in all fields, and recover the old commitment to the common good. The world has a vested interest in how well we succeed in that, and make no mistake: It will take a lot of strong, enlightened leadership.

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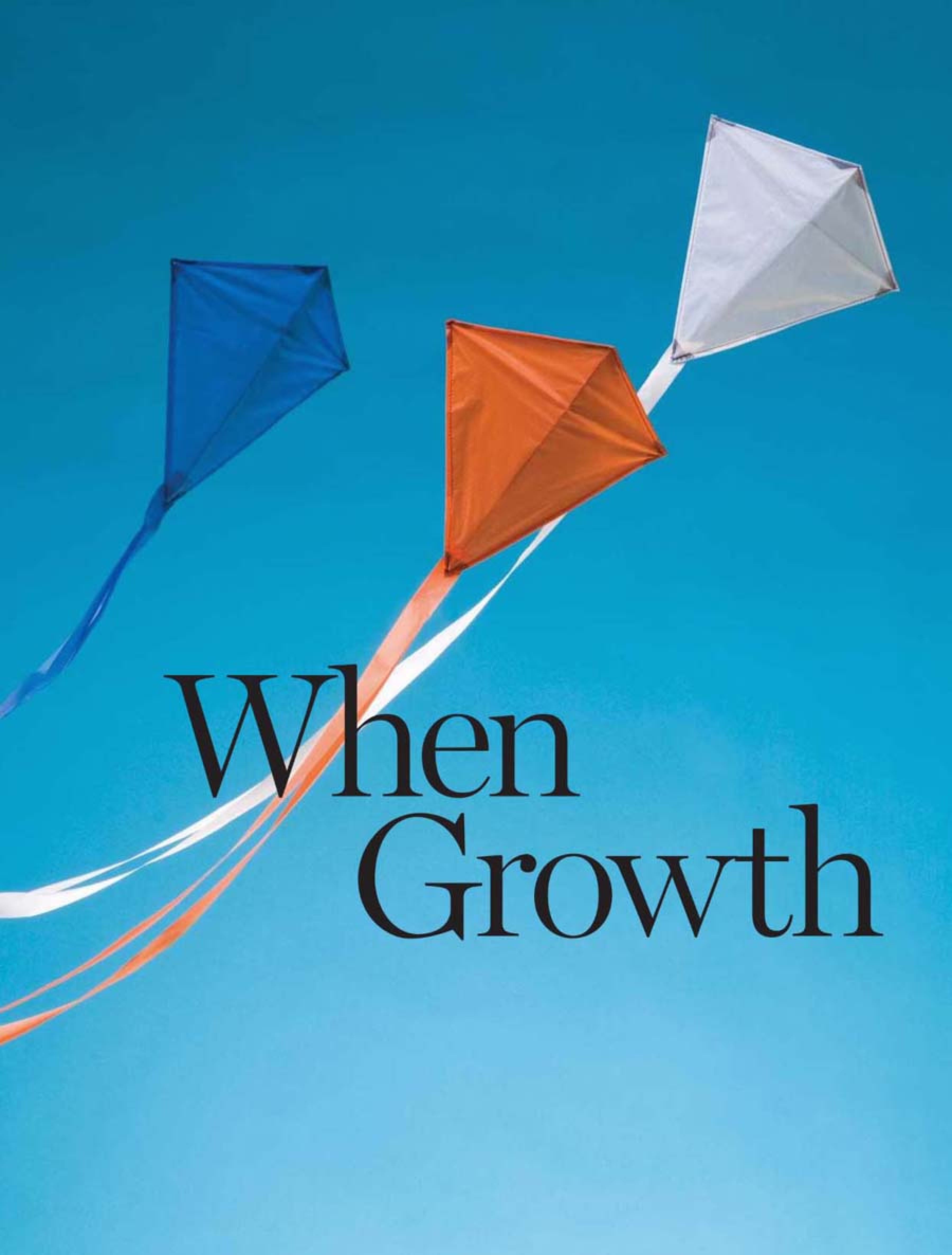
To order, see page 135.



# When Growth

Christopher Harting

# Stalls

Successful companies lose momentum for four main reasons. All are within management's control if spotted in time.

by Matthew S. Olson, Derek van Bever, and Seth Verry

SENIOR MANAGEMENT AT LEVI STRAUSS & COMPANY could be forgiven for not seeing it coming. The year was 1996. The company had just achieved a personal best, with sales cresting $7 billion for the first time in its history. This performance extended a run of growth in which overall revenue had more than doubled within a decade. Since taking the company private in 1985, management had relaunched the flagship 501 brand, introduced the

Dockers line of khaki pants, and increased international sales from 23% to 38% of revenue and more than 50% of profits. Growth in 1995 was the strongest it had been in recent years.

And then came the stall. From that high-water mark of 1996, company sales went into free fall. Year-end revenue results for 2000 were $4.6 billion – a 35% decline from four years prior. Market value declined even more precipitously: Analysts estimate that it went from $14 billion to $8 billion in those four years. The company's share of its core U.S. jeans market dropped by half over the 1990s, falling from 31% in 1990 to 14% by decade's end. Today, with a new management team in place, Levi Strauss has undergone a companywide transformation. It may be regaining its footing, but it has yet to return to growth.

While more dramatic than many, this is the story of a revenue growth stall – a crisis that can hit even the most exemplary organizations. It shares many elements with other stalls, at companies as varied as 3M, Apple, Banc One, Caterpillar, Daimler-Benz, Toys "R" Us, and Volvo. What these companies would surely recognize in the story is the stall's suddenness. Like Levi Strauss, most organizations actually accelerate into a stall, experiencing unprecedented progress along key measures just before growth rates tumble. When the momentum is lost, it's as if the props have been knocked out from under their corporate strategy. (See the exhibit "No Soft Landings.") Typically, few on the senior team see the stall coming; core performance metrics often fail to register trouble on the horizon.

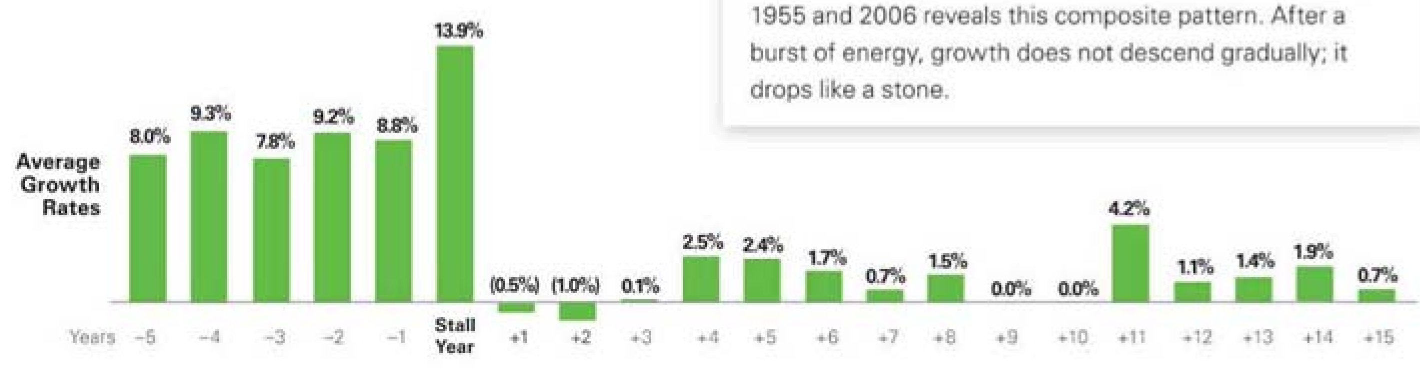
As part of our ongoing research into growth, the Corporate Executive Board recently completed a comprehensive analysis of the growth experiences of some 500 leading corporations in the past half century, focusing particularly on "stall points" – our term for the start of secular reversals in company growth fortunes, as opposed to quarterly stumbles or temporary corrections. The companies in our study included more than 400 that have appeared on the *Fortune* 100 since that index was created, some 50 years ago, along with about 90 non-U.S. companies of a similar size. The study revealed patterns in the incidence, costs, and root causes of growth stalls. (Our research approach is described briefly in the sidebar "The Search for Stall Points.")

On the quantitative record alone, we can attest that Levi Strauss is in good company: 87% of the companies in this group have suffered one or more stall points. We can also appreciate the consequences of such events. On average, companies lose 74% of their market capitalization, as measured against the S&P 500 index, in the decade surrounding a growth stall. More often than not, the CEO and senior team are replaced in its aftermath. And unless management is able to diagnose the causes of a stall and get the company back on track quickly – turning it around in a matter of several years – the odds are against its ever returning to healthy top-line growth.

Deeper analysis sheds light on the most common causes of growth stalls, which turn out to be preventable for the most part. There is a common assumption that when the fortunes of great companies plunge, it must be owing to big, external

## No Soft Landings

An analysis of the growth histories of *Fortune* 100 and Global 100 companies that experienced stalls between 1955 and 2006 reveals this composite pattern. After a burst of energy, growth does not descend gradually; it drops like a stone.




**Matthew S. Olson** (olsonm@executiveboard.com) is an executive director, **Derek van Bever** (vanbeverd@executiveboard.com) is the chief research officer, and **Seth Verry** (verrys@executiveboard.com) is a senior director at the Corporate Executive Board, an advisory and performance improvement network of leaders of the world's largest public and private organizations, based in Washington, DC. This article is adapted from the book *Stall Points* (Yale University Press), forthcoming in 2008.

# The Search for Stall Points

To understand the prevalence of serious growth crises in large companies, as well as their costs and causes, we analyzed the experiences of more than 400 companies that have been listed on the *Fortune* 100 since its inception, in 1955, and of about 90 comparable non-U.S. companies. Some 500 companies over 50 years gave us 25,000 years' worth of historical data and information to mine for insights. A pattern that emerged from these histories yielded the useful construct of the stall point – that moment when a company's growth rate slips into what proves to be a prolonged decline.

We began by analyzing the revenue growth records of every company in our study to identify which companies had experienced stall points and when. Specifically, we calculated the compound annual growth rate (CAGR) of each company's revenue for 10 years before and 10 years after every year in the past half-century for which data were available. To qualify as having stalled in a given year, a company must have enjoyed compound annual growth of at least 2% in real dollars for the 10-year period prior to the potential stall point; the difference in CAGR for the 10 years preceding and the 10 years following must have been at least four percentage points; and the CAGR of the subsequent 10 years must have fallen below 6% in real dollars. One stall point identified in this manner is shown below.

We then turned our attention to *why* companies stall. Out of the 500 companies, we selected for in-depth case research 50 that were representative of the whole in terms of industry mix and age. We assembled comprehensive dossiers on all of them, drawing on the public record of financial reports and published materials, on case studies, and on personal interviews. This enabled us to identify the top three factors contributing to each company's growth stall. After all these analyses we were able to identify the root causes of stalls and the major categories they fell into. We arrived at our framework purely inductively, from the bottom up. (See "The Root Causes of Revenue Stalls.")

Readers may be wondering why we chose revenue rather than profit, value, or some other measure on which to focus our analysis. That is a fair question, and we considered our choice at length. It rests on two premises. The first is that revenue growth, more than any other metric, is the primary driver of long-term company performance. This is not to say that revenue growth without profits is desirable, but high growth through margin management alone is unsustainable. The second premise is more mundane: It's hard to manipulate the top line over time, and market value and profit measures are much more variable. Revenue growth guided us to the most meaningful turning points in corporate growth history.

We would be pleased to discuss any aspect of this methodology or detail of our findings with analysts wishing to learn more or to replicate our approach. We maintain an updated list of FAQs about this initiative on our website, at www.stallpoints.executiveboard.com.

## One Company's Stall Point

Tracking the growth of the BF Goodrich Corporation over a 20-year period, we can clearly see its stall point. Annual growth rates are shown for a decade before and a decade after what proved to be the stall year. The turning point in Goodrich's fortunes came in 1979, after which the company's growth fell into secular decline.


| Year | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CAGR 10 Years Prior | 3.7% | 1.4% | 1.0% | 2.1% | 2.2% | 2.5% | 2.7% | 2.3% | (0.4%) | (0.6%) | (1.1%) |
| CAGR 10 Years After | (1.1%) | (0.9%) | (3.2%) | (5.5%) | (5.6%) | (6.5%) | (6.2%) | (5.9%) | (4.8%) | (8.3%) | (7.1%) |
| Difference | 4.8% | 2.3% | 4.2% | 7.6% | 7.8% | 9.0% | 8.9% | 8.2% | 4.4% | 7.7% | 6.0% |

forces – economic meltdowns, acts of God, or government rulings – for which management cannot be held accountable. In fact most stalls occur for reasons that are both knowable and addressable at the time. The exhibit "The Root Causes of Revenue Stalls" reveals the factors that lay behind the stalls of 50 companies we went on to study in depth; clearly, a company can falter in many ways. One might almost think that sustaining growth in a very large company depends on doing absolutely everything right. But the root causes of stalls are not so varied or complex that we can't see patterns.

What the exhibit demonstrates is that the vast majority of stall factors result from a choice about strategy or organizational design. They are, in other words, controllable by management. Further, even within this broad realm, nearly half of all root causes fall into one of four categories: premium-position captivity, innovation management breakdown, premature core abandonment, and talent bench shortfall.

In this article we'll offer advice for avoiding these hazards, drawing from practices currently in use at large, high-growth companies to foresee possible stalls and head them off. More generally we will explore why management is so often blindsided by these events. As we will show, a large number of global companies may at this moment be perilously close to their own stall points. Knowing how to avoid growth stalls begins with understanding their causes. Let's look at each of the four categories.

## When a Premium Position Backfires

By far the largest category of factors responsible for serious revenue stalls is what we have labeled premium-position captivity: the inability of a firm to respond effectively to new, low-cost competitive challenges or to a significant shift in customer valuation of product features.

We use the term "captivity" because it suggests how management teams can be hemmed in by a long history of success. A company that solidly occupies a premium market position remains insulated longer than its competitors against evolution in the external environment. It has less reason to doubt its business model, which has historically provided a competitive advantage, and once it perceives the crisis, it changes too little too late. When the towering strengths of a firm are transformed into towering weaknesses, it's a cruel reversal.

Readers will recognize the intellectual kinship between our notion of premium-position captivity and the patterns of technology disruption described by Clayton M. Christensen in his landmark book *The Innovator's Dilemma* (Harvard Business School Press, 1997). As we scan the broad data set of the *Fortune* 100 over the past half century, we are struck by Christensen's acumen. In documenting premium-position captivity in leading enterprises, we saw a cycle of disdain, denial, and rationalization that kept many management teams from responding meaningfully to market changes.

Price and quality leaders such as Eastman Kodak and Caterpillar, for example, have found themselves unable (or unwilling) to formulate a timely, effective response to the threat posed by foreign entrants. The owners of iconic brands, such as American Express, Heinz, and Procter & Gamble, may assume that the decades-long investments they have made in their brands will protect their premium prices against lower-cost entrants. Both Compaq and Philip Morris (now part of Altria) failed to respond to signs of trouble in the early 1990s because they relied on performance metrics designed around generous margins.

We saw premium-position captivity at work in the Levi Strauss stall when the company failed to spot a strategic inflection in customer demand. In cases like this one, organizations and their multiple sophisticated market-sensing activities simply don't recognize the importance of an emerging behavior or customer preference in their core markets. They continue to place their bets on product or service attributes that are in decline, while disruptive entrants emphasizing different, underrecognized features gain ground.

In the early 1990s Levi Strauss enjoyed surging revenues even as its relationships with the Gap and other distributors faltered and as designers and retailers introduced jeans products at the high and low ends of the market. The rise of house brands and superpremium designer jeans looked manageable – or ignorable – as long as healthy revenue growth continued. By the time the growth stall had become evident, the company found itself with an expensive retailing strategy and a product line that was out of step with both ends of the denim jeans market.

The market data relating to this growth stall were not hidden from Levi Strauss executives; the challenge was to separate the signal from the noise. The company's years of success warped its interpretation of what it was seeing. Its story illustrates how difficult it is to respond to a threat in the absence of a burning platform: If your sales are continuing to rise, how do you focus concern? In 1999 Gordon Shank, then the company's chief marketing officer, admitted ruefully, "We didn't read the signs that all was not well. Or we were in denial."

Although the onset of premium-position captivity is gradual, there are often clues that trouble is afoot, both in the external market and in executive attitudes and behaviors. (See the sidebar "When Does a Premium Position Become a Trap?") Easiest to spot in marketing data are pockets of rapid market share loss, particularly in narrow customer segments, and increasing resistance among key customers to solutions wrappers and other bundling of services. It can also be revealing to focus on metrics different from those you ordinarily emphasize. If you normally track profit per customer, for example, you are content when it rises. But

# The Root Causes of Revenue Stalls

A careful analysis of 50 representative companies that experienced growth stalls revealed nearly as many root causes for them: 42 external, strategic, and organizational factors, which can be grouped into categories as shown here. We identified the top three factors contributing to each company's stall and considered those results as a whole in determining how large a role (indicated by percentage) each category played. The clustering that is at the heart of our findings is clear: Four categories account for more than half the occurrences of root causes we cataloged – premium-position captivity, innovation management breakdown, premature core abandonment, and talent bench shortfall.

**Within Management's Control 87%**

**STRATEGIC FACTORS 70%**

- Premium-position captivity 23%
  - Disruptive competitor price or value shift
  - Overestimation of brand protection
  - Gross margin captivity
  - Innovation captivity
  - Missed strategic inflection in demand
- Innovation management breakdown 13%
  - Curtailed or inconsistent R&D funding
  - Overdecentralized R&D
  - Slow product development
  - Inability to set new standard
  - Conflict with core company technology
  - Overinnovation
- Premature core abandonment 10%
  - Financial diversification
  - Misperceived market saturation
  - Misperceived operational impediments
  - Core problems masked by international growth
  - Earnings growth over core reinvestment
- Failed acquisition 7%
  - Misconceived economics
  - Unsustainable financial acquisition model
  - Unrealized synergies
- Key customer dependency 6%
  - Distribution channel shift
  - Customer strategy dependence
  - Monopsony buyer
- Strategic diffusion or conglomeration 5%
- Adjacency failures 4%
  - Overextension of the formula
  - Inability to manage new model
  - Incorrect new business siting or stewardship
- Voluntary growth slowdown 2%

**ORGANIZATIONAL FACTORS 17%**

- Talent bench shortfall 9%
  - Internal skill gap
  - Narrow experience base
  - Loss of key talent
  - Key person dependence
- Board inaction 4%
- Organization design 2%
  - Overdecentralization
  - Weak decision-making structure
  - No strategic planning
- Incorrect performance metrics 2%
  - Incorrect competitive metrics
  - Inflexible financial goals

**Outside Management's Control 13%**

**EXTERNAL FACTORS 13%**

- Regulatory actions 7%
  - Antitrust actions
  - Government-subsidized overcapacity
- Economic downturn 4%
- Geopolitical changes 1%
- National labor market inflexibility 1%

would you notice if customer acquisition costs increased even more rapidly? When it comes to management attitudes, your ears may pick up the strongest clues: Listen closely to the tone in the executive suite when conversation turns to upstart competitors or to successful rivals that are viewed as less capable. Is it acceptable, or routine, to dismiss them as unworthy? Do your processes for gathering intelligence about your competitors ignore some of these market participants because of their size or perceived lack of quality? Indulging in such behavior is common, but it's a luxury that no market leader can afford.

### When Innovation Management Breaks Down

The second most frequent cause of growth stalls is what we call innovation management breakdown: some chronic problem in managing the internal business processes for updating existing products and services and creating new ones. We saw manifestations of this at every major stage along the activity chain of product innovation, from basic research and development to product commercialization.

Where revenue growth stalls could be attributed to innovation breakdown, the problems emphatically did not center on individual product launch failures; a New Coke may occasionally belly flop, but the result is typically a temporary growth stumble rather than a fateful turning point in a company's growth history. By contrast, the secular growth stalls we identified were attributable to systemic inefficiencies or dysfunctions. Given that most large corporations rely on business models that have evolved to generate sequential product innovations, when things go wrong here – at the heart of these organizations' most important business process – extremely serious, multiyear problems result.

For firms shifting the bulk of their R&D activities out to their business units, our case studies provide a strong cautionary tale. The logic behind such shifts is clear: The closer R&D is to markets and individual unit strategies, the higher its return on investment should be. But problems seem to arise when decentralization is combined with an explicit (or implicit) metric that demands a high share of revenue growth from new-product introductions. The result can be an overallocation of resources to ever smaller incremental product opportunities, at the expense of sustained R&D investment in larger, future product platforms.

A stark example of this occurred at 3M in the 1970s, when the company experienced a revenue stall after decades of robust top-line growth. Since its founding, in 1902, 3M had followed a clear formula for success, developing innovative products with industrial applications that supported a premium position and then leapfrogging to the next opportunity as the market matured. This strategy, which has been characterized as "the corporate millipede" ("Make a little, sell a little, make a little more"), had by the early 1970s produced a portfolio of more than 60,000 products (the majority of them with sales under $100 million), while more than 25% of total corporate sales came from products less than five years old.

The growth potential inherent in this niche-jumping strategy began to dwindle in the late 1970s, as the firm approached $5 billion in revenue. With the recession of the early 1980s looming, 3M management decided to hold R&D expenditures below historical averages of just over 6% of annual sales and to push most of the R&D budget down to the company's 42 divisions (usually organized around individual product lines).

Total growth slowed as divisions focused on ever narrower niche-segment opportunities. From 1979 to 1982 the company saw its annual growth rate fall from 17% to just over 1%, with sales per employee creeping downward simultaneously. Because the bulk of R&D was controlled by product-centric business units, major new-product development activity was replaced by incremental product line extensions. The former CEO Allen F. Jacobson observed of that era, "Historically, our drive for profit and our preference for developing premium-priced products aimed at market niches meant that we were not comfortable competing only on price. As a result, we never fully developed our manufacturing competencies. And when competitors followed us, we would refuse to confront them – it was always easier to innovate our way into a new niche."

As we looked at the variety of ways in which problems in the innovation management process can eventually produce major revenue stalls, we were struck by the fragility of this chain of activities, and by how vulnerable the whole process is to management decisions made to achieve perfectly valid corporate goals. There are some powerful clues, however, when a company is at serious risk. Most significant is probably not the overall level of R&D spending but how those dollars are being spent. Is the senior team able to look into funding decisions at the business unit level to monitor the balance between incremental and next-generation investments? Are R&D and other innovation resources at the corporate level budgeted separately from incremental innovation? Is some portion of innovation funding allocated to creating lower-cost versions of existing products and services? Given the long lead times characteristic of the innovation process, flaws are slow to surface – and time-consuming to remedy.

### When a Core Business Is Abandoned

The third major cause of revenue stalls is premature core abandonment: the failure to fully exploit growth opportunities in the existing core business. Its telltale markers are acquisitions or growth initiatives in areas relatively distant from existing customers, products, and channels.

This category has received significant attention in the recent business literature. Perhaps as a result, stalls attributed to premature core abandonment cluster in the period before 1990. We are tempted to credit the management consulting industry for having hammered home the need for attention to core businesses. In particular, Chris Zook, of Bain & Company, has stayed on this issue with ferocity.

That is not to say that *Fortune* 100–size firms have mastered the art of generating continuous growth in their core businesses. Quite the contrary: The recent wave of private equity takeovers suggests that many public companies still struggle in their efforts to grow established businesses. Almost without exception, these takeovers are based on strategies for growing the core – strategies that public-company executive teams are either unable or unwilling to pursue.

The two most common mistakes we saw in this category were believing that one's core markets are saturated and viewing operational impediments in the core business model as a signal to move on to new, presumably easier competitive terrain. Either situation invariably ended badly, with some competitor moving in to displace the incumbent.

In the late 1960s Robert Sarnoff, the CEO of RCA and son of David Sarnoff, the legendary force behind the company, came to the mistaken belief that "the age of the big breakthroughs in consumer electronics – the age in which [his father] had built RCA – had passed." James Hillier, the head of the company's labs, asserted, "The physicists have discovered about all they are going to for consumer application in the near future."

One can hardly blame Sarnoff when even the physicists were advocating moving on – and move on he did. He pursued initiatives in three new, presumably higher-growth directions. First, mainframe computers seemed a logical choice, given that technology-driven big bets had powered RCA's growth since the 1920s. Second, he decided that marketing was the future and deployed huge resources to acquire companies in the consumer products sector. Third, the company redirected internal resources from consumer electronics research into marketing and brand management

## When Does a Premium Position Become a Trap?

At the top of every industry are companies that have built premium positions for themselves, dominating the market among the most demanding customer segments and providing products or services that lead the field in performance, thus commanding higher prices. The organizational strengths in product development, brand management, and marketing that created these top positions are sources of great pride to the firms that cultivated them.

But attack from new competitors with significantly lower cost structures, or changes in customer preferences that start slowly and then reach tipping points, can actually transform these dependable sources of competitive advantage into weaknesses. Product innovation loses its ability to protect pricing premiums, and presumed brand and marketing strengths no longer dependably protect market share. All the firm's business processes and activities, developed and honed for the top end of the market, become impediments to refreshing strategy.

It is possible to spot the onset of premium-position captivity. The six yes-or-no questions below probe awareness of threatening market dynamics, an executive team's blind spots regarding competitive threats, and intelligence capabilities for recognizing an impending encroachment on premium turf.

**Clues in Market Dynamics**

- Are we losing market share to nonpremium rivals in subsegments of our markets?
- Are key customers increasingly resistant to paying price premiums for product enhancements?

**Clues in Executive Team Attitudes**

- Does the senior executive team resist the proposition that nonpremium players operate in the same business or product category that we do?
- Do we commonly dismiss the possibility that nonpremium rivals and low-end entrants will penetrate the upper ends of our markets?

**Clues in Market and Competitor Research**

- Do we fail to track shifts in secondary and tertiary customer-group behavior with the same rigor we use for our higher-end segments?
- Do we exclude nonpremium players and low-end entrants from our tracking of competitive threats?

A "yes" to two or more of these questions suggests the need to refocus research into markets and competitors. The goal should be to map premium features and low-end competitor performance. A "yes" to four or more suggests an immediate need for contingency planning: How might the firm modify its current business model (including its margin requirements and cost basis) to respond to a low-cost entrant within 18 months?

projects. Meanwhile, Steve Jobs and Bill Gates were on the road to starting companies that would launch a revolution in RCA's former core markets.

Just as interesting as getting it wrong on core business growth prospects is the tendency of executive teams to simply give up on apparently intractable problems in their core businesses. The most intriguing example of this occurred at Kmart. A highly successful challenger to Sears as a general-merchandise big-box retailer, Kmart relentlessly stole its formerly indomitable competitor's market share through the 1960s and 1970s.

In 1976 Kmart reached a peak in new store openings, adding 271 facilities to its countrywide network. That would prove to be its limit. Over the next decade the company reined in expansion in its core business, convinced that the U.S. market was saturated. Its chairman, Robert Dewar, created a special strategy group whose purpose was to study new growth avenues and, in the parlance of the time, far-out ideas. He also established a performance goal for the company: 25% of sales should come from new ventures by 1990.

What's most disturbing about Kmart's choices is not that management was tempted to diversify in search of growth – however misguided this appears in hindsight, given Wal-Mart's concurrent gathering of strength. Rather, it is that the executive team failed to monitor and match the distribution and inventory management capabilities that its rival was pioneering in Bentonville, Arkansas. In the early 1980s, while Wal-Mart was installing its first point-of-service system with a satellite link for automatic reorders, Kmart was acquiring Furr's Cafeterias of Texas, the Bishop's Buffet chain, and pizza-video parlors as outlets for its retained earnings. Throughout the next decade Wal-Mart continued to invest in its cross-docking distribution system, while Kmart pursued a range of disparate businesses, including PayLess Drug Stores, the Sports Authority, and OfficeMax. By the end of the 1980s Kmart was at least 10 years behind Wal-Mart in its logistical capabilities, handing Wal-Mart a "gimme" advantage of more than 1% of sales in inbound logistics costs. As Kmart lagged ever further behind, its imagined need for outside-the-core growth platforms became real.

Of all the red flags signaling stall risk, one of the most obvious is management's use of the term "mature" to refer to any of its product lines, business units, or divisions. (The disinvestment in the core implied by the "cash cow" cell of the growth-share matrix does modern managers no favor.) Established businesses should be managed against significant revenue and earnings goals, and business leaders should actively explore the potential of new business models to rejuvenate even the most "mature" businesses.

## When Talent Comes Up Short

Our fourth major category is talent bench shortfall: a lack of leaders and staff with the skills and capabilities required for strategy execution.

Talent bench shortfall merits careful definition, because it has become a fact of daily life in many industries and functions. Indeed, at this writing, shortages of critical talent are the primary concern of human resources departments globally, not just in high-growth markets but in a range of specialty skill categories, and they are expected to get worse. What stops growth dead in its tracks, however, is not merely a shortage of talent but the absence of required capabilities – such as solutions-selling skills or consumer-marketing expertise – in key areas of a company, most visibly at the executive level.

Internal skill gaps are often self-inflicted wounds, the unintended consequence of promote-from-within policies that have been too strictly applied. Such policies, often most fervent in organizations with strong cultures, can accelerate growth in the heady early days of executing a successful business model. But when the external environment presents novel challenges, or competition intensifies, these policies may be a severe drag on progress.

**What stops growth dead in its tracks is not merely a shortage of talent but the absence of required capabilities, most visibly at the executive level.**

One important element in this category is a narrow experience base at the senior executive level that prevents a timely response to emerging strategic issues. The most common marker of this lack of experience is managers' tendency to follow a well-worn internal path from a dominant business, market, or function to the executive suite. Hitachi, which went into a growth stall in 1994, illustrates this problem. At the time, Hitachi accounted for 2% of Japan's GNP and 6% of its corporate R&D spending. The downward slide in the company's revenue was devastating. Executive management has consistently come up from the energy and industrial side of the company, but Hitachi's growth prospects lie elsewhere. This narrowness extends to functional pedigree: The firm has historically had an engineering culture, with none of its top executives holding an MBA or other business degree. As Hitachi looks toward its centennial in 2010, however, change may be in the offing: Kazuo Furukawa, who was named president and chief operating officer in 2006,

## Red Flags for Growth Stalls

Are you about to hit a stall point? A diagnostic survey of 50 red flags can help signal the danger in time. Below is a sampling of red flags relating to premium-position captivity; other parts of the survey highlight other hazards. To the extent that your senior team and high-potential managers see these as areas for concern, you may be headed for a free fall.

- Our core assumptions about the marketplace and about the capabilities that are critical to support our strategy are not written down.
- We haven't revisited our market definition boundaries, and therefore our list of current and emerging competitors, in several years.
- We haven't refreshed our working definition of our core market, and therefore our understanding of our market share, in several years.
- We test only infrequently for shifts in key customer groups' valuation of our product/service attributes.
- We are less effective than our competitors at translating customer insights into new product and service categories.
- Core customers are increasingly unwilling to pay a premium for our brand reputation or superior performance.

*To watch the authors discuss their complete list of red flags and how to use them to diagnose impending growth stalls, go to stallpoints.multimedia.hbr.org. There you can link to the full diagnostic survey, at www.stallpoints.executiveboard.com.*

came up through the telecom and information systems sectors. He is the company's first president with no exposure to its heavy electrical machinery business.

Few companies formally monitor the balance in the executive team between company lifers and newer hires who offer fresh perspectives and approaches. Furthermore, large companies have a fairly poor track record on incorporating new voices into senior management. Most studies agree that 35% to 40% of senior hires wash out within their first 18 months – a statistic that is improving glacially as we adopt new practices in talent management. And management development programs all too often focus on replicating the skill sets of the current leadership, rather than on developing the novel skills and perspectives that tomorrow's leaders will need to overcome evolving challenges.

We have identified a simple way to ensure balance in the senior executive ranks – what we call mix management. Our analysis of company growth rates and senior leaders' backgrounds suggests that the sweet spot for external talent is somewhere between 10% and 30% of senior management. That is a good target for the CEO and the board to use with the firm's executive committee and for human resources to use with the top 5% of the workforce.

### When What You Know Is No Longer So

As noted, the four categories we have outlined account for nearly half of all the root causes we cataloged. A host of other, less common causes that came up in our analysis crossed a broad terrain, including failed acquisitions, key customer dependency, strategic diffusion, adjacency failures, and voluntary growth slowdowns. A powerful observation can be distilled from this array: One culprit in all our case studies was management's failure to bring the underlying assumptions that drive company strategy into line with changes in the external environment – whether because of a lack of awareness that the gap existed or was widening, or because of faulty prioritization.

The lack of awareness is particularly vexing, because it is so insidious. Strategic assumptions begin life as observations about customers, competitors, or technologies that arise from direct experience. They are then enshrined in the strategic plan and translated into operational guidance. Eventually they harden into orthodoxy. This explains why, when we examine individual case studies, we so often find that those assumptions the team has held the longest or the most deeply are the likeliest to be its undoing. Some beliefs have come to appear so obvious that it is no longer politic to debate them.

Part of the reason that few top teams question assumptions is that doing so goes against the nature of the senior executive mandate: The CEO and his or her executive team are paid to develop a vision and execute it – with resolve. Another part is human nature: Introspection and self-doubt don't often appear in the personality profiles of top executives at large enterprises. A third part is process: CEOs have very few opportunities to safely express their midnight anxieties. And the one opportunity for stock taking that is built into the annual calendar of most firms – the review of the strategic plan for the coming year – all too often fails to stimulate deep, searching conversation. Indeed, the "assumptions and risks" section of virtually all strategic plan templates is generally treated as a pro forma exercise rather than an occasion to go deep.

### Articulating and Testing Strategic Assumptions

To assist executives in spotting signs of vulnerability to growth stalls in their own organizations, we offer two kinds of tools. The first is a diagnostic self-test we developed at the conclusion of our research. Hoping to determine how companies might foresee a stall, our team spent considerable time looking at various financial metrics, from margin erosion to patterns in R&D spending. This effort was fruitless: Financial metrics – at least those available to the public – are as likely to lag behind as lead an organization's change in strategic vitality.

What we did find helpful was asking, What could the company's senior managers have seen in their markets, in their competitors' behavior, in their own internal practices, that might have alerted them to an impending stall? We looked at our detailed case histories for warning signs before the stall point that perhaps hadn't received the scrutiny they deserved, and uncovered 50 red flags, all rooted in the real experience of the companies we studied. Our 20/20 hindsight may enable you to spot signs faster in your own organization. (See "Red Flags for Growth Stalls.")

Also included in our tool kit are four practices drawn from those we've seen management teams use. The first two are effective in making strategic assumptions explicit, and the latter two are designed to test those assumptions for ongoing relevance and accuracy. A hallmark of these practices is that they are embedded in the work flow of the firm – the job of some individual or team – or otherwise built into core operating systems.

**Commission a core-belief identification squad.** This practice is simple to execute and involves calling on a diverse, cross-functional working group to go hunting for the firm's most deeply held assumptions about itself and the industry in which it operates. (Gary Hamel and his colleagues at Strategos have led the way on this practice.) The best-functioning squads include a significant share of younger, newer employees, who are less likely to be invested in current orthodoxies. Their efforts are most fruitful when the team is prepared to raise thorny issues and challenge entrenched beliefs, using methods ranging from reality checks – What industry are we in? Who are our customers? – to more provocative explorations: What 10 things would you never hear customers say about our business? Which firms have succeeded by breaking the established "rules" of the industry? What conventions did they overturn?

One leading consumer-goods company told us that it had used this practice to kick off an inquiry into long-term growth pathways and to challenge conventions that had taken hold through the years. We like the practice for two reasons. First, it seems to strike the right balance between traditional, closed-door strategy discussions and all-company "jams," which tend to lose credibility and edge in direct proportion to the number of participants involved. Second, it manages to simultaneously address areas of universal agreement and issues that are in play.

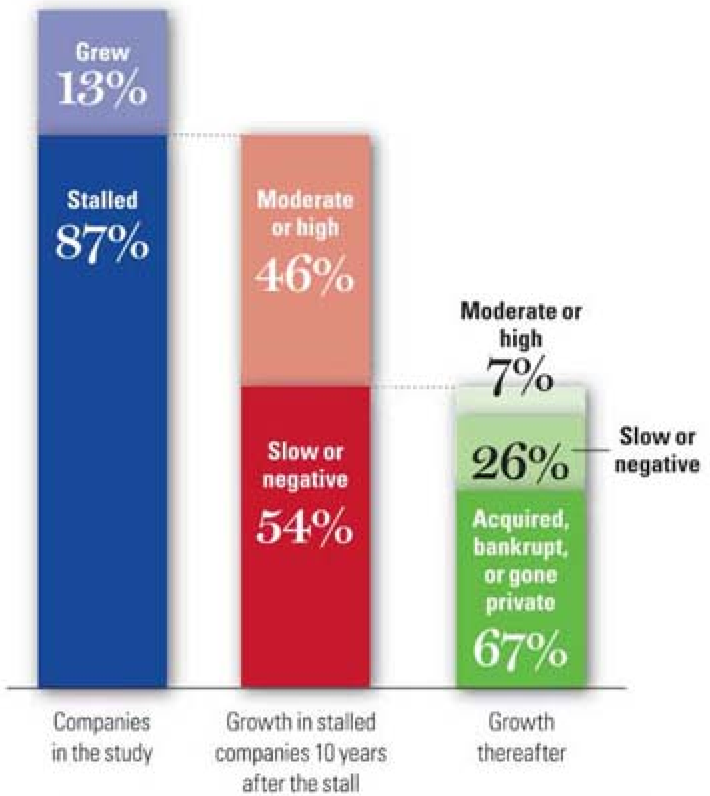
**Conduct a premortem strategic analysis.** Many leaders have found it useful to charge teams with developing competing visions of the future success – or failure – of the company as it would be reported in a business periodical five years hence. (See Gary Klein, "Performing a Project *Pre*mortem," Forethought, HBR September 2007.) The process typically takes place over one or two days at regularly scheduled offsite management gatherings, and teams senior executives with high-potential staffers from around the world. By seeing which issues the scenarios have in common, leadership teams can identify the subset of core beliefs that should be most closely examined and monitored.

**Appoint a shadow cabinet.** Pioneered by a *Fortune* 250 manufacturing company, the shadow cabinet is a standing group of high-potential employees who tend to be in midcareer and are often in line for promotion to the director level. They usually meet the day before an executive committee meeting, and their agenda matches as

## The Long-Term Effects of Stalls

*Fortune* 100 and Global 100 Companies, 1955–2006

The overwhelming majority (87%) of companies in our study had experienced a stall. Fewer than half of those (46%) were able to return to moderate or high growth within the decade. When slow growth was allowed to persist for more than 10 years, the delay was most often fatal: Only 7% of the companies in that category ever returned to moderate or high growth.



closely as possible the agenda for the following day, with presenters delivering dry runs of their material to the group and then providing whatever follow-up is needed to support the group's deliberations and decision making. The members of the shadow cabinet are invited to executive committee meetings on a rotating basis.

After a stall sets in, the odds against recovery rise dramatically with the passage of time.

The benefits of this practice are manifold. Because it provides such powerful seasoning for the employees who participate, it becomes a mainstay of the leadership development curriculum. And because senior executives are usually most attached to the assumptions underlying current strategy (it is *their* strategy, after all), they find the fresh perspectives offered by this creditable, well-informed constituency extremely valuable. That said, most executives to whom we've presented this idea respond that it would never work in their organizations. "The executive agenda is too confidential," they say, or "Our executive team is too impatient," or "It looks like too much work." We agree that this practice is not for everyone; in fact, we have visited boardrooms where speaking candidly about shortcomings in company strategy would be a truly career-limiting move. Organizations where this is the case should pass on the idea. Not only will it fail to achieve the desired effect but it may cause more harm than good to the morale of staff members involved in the initiative.

**Invite a venture capitalist to your strategy review.** An effective way to bring an external perspective to bear on strategy assumptions is to ask a qualified venture capitalist to sit in on business unit strategy and investment reviews and probe for potential weaknesses. The benefits for business unit managers come primarily from specific challenges but more generally from the practical, payback-focused lens that the VC brings to the review. What's more, the impact of the venture capitalist approach can live on well after the exercise. (Recording all the questions and methods the VC uses to gather information will preserve the essentials of the approach for later reuse.)

The obvious difficulty in implementing this practice is identifying an external party who is knowledgeable enough to add value to the conversation but "safe" enough to be allowed in the room. (In the current climate, representatives from the private equity community might easily meet the first requirement but miserably fail the second.) The organization that brought this idea to our attention was coventuring with a VC and so had begun to build some operating trust.

Unlike corporate investors, VCs are accustomed to serving on the boards of portfolio companies; acting in a similar capacity for a corporate partner isn't much of a stretch. For the corporate partner, however, the experience can be nothing short of eye-opening. The VC's perspective provides an in-the-moment test of assumptions about markets, customers, and competitors and brings an urgency to corporate processes that often feel routine. Deliberation around investment proposals takes on a very different tone. For a venture capitalist, each decision to fund is optional; the usual approach is to release additional funding only when meaningful milestones have been achieved. Freedom to operate for a quarter – not a year – is the norm.

### Renewing Competence in Strategy

The practices we recommend in this article compete for space on an already overcrowded executive agenda. What gives force to our advocacy is that growth stalls can have dire consequences: They bring down even the most admired companies; they exact a sizable financial and human toll; and their impact may be permanent. After a stall sets in, the odds against recovery rise dramatically with the passage of time. (See the exhibit "The Long-Term Effects of Stalls.")

Compounding this urgency, all signs point to an increasing risk of stalls in the near future. Of particular concern today is the shrinking half-life of established business models. The importance of spotting change early enough to react in time is rising exponentially. The practices we outline here create that early-warning capability. As critical, they make the strategy conversation ongoing, rather than once a quarter or once a year, and charge line managers at all levels of the firm with leading that conversation. Clay Christensen argued in these pages a decade ago that competent strategic thinking was atrophying in the executive suite because it occurred so infrequently relative to other regular activities. (See "Making Strategy: Learning by Doing," HBR November–December 1997.) As students of strategy-making in large corporations since then, we have found that the problem has only worsened.

Whatever other concerns are on the strategy agenda, guarding against growth stalls should be at the top. The tools we offer will enable the executive team to continually test the accuracy of its worldview and to flag any flawed assumptions that might trigger a stall if they go uncorrected. We know of no more powerful investment for managing controllable risk.

Reprint R0803C
To order, see page 135.

# Transforming Strategy One Customer at a Time

by Richard J. Harrington and Anthony K. Tjan

How B2B giant Thomson Corporation reinvented itself by embracing a P&G mind-set.

HOW DOES A business-to-business company find out exactly what end users do with its products? That was the question we wrestled with at the Thomson Corporation, because the people who buy from us are not the same people who actually use our products in their daily work. For Thomson, the answer has been to combine multiple methods of deep customer inquiry, from market surveys to observing users directly in their workplace. Those efforts have been part of a front-end customer strategy that has become the cornerstone of the company's transformation. This strategy has included

Asaf Hanuka

asking lawyers, accountants, financial analysts, investment managers, scientific researchers, and other professionals who use our products and services what they do on a minute-by-minute basis. Then we've systematically sought to deliver solutions that meet their needs during each of those hours. By doing so, we've learned how to help end users with their work in ways that might otherwise never have occurred to us.

Such scrutiny of the end user wouldn't be unusual if we were a consumer products company. P&G is known for following consumers around stores and observing them in their kitchens. But like most other B2B companies, Thomson historically had a much better understanding of its buyers than of its end users. We knew a fair amount about, say, financial services information managers, who were responsible for making purchasing decisions for an entire department, but little about the individual brokers or investment bankers who used our data, research, and other resources daily to make investment decisions for their clients.

The transformation of Thomson began a little over a decade ago. At the time, Thomson was a nearly 70-year-old holding company with $8.7 billion in revenue. We published more than 200 newspapers, along with textbooks, law books, and professional journals, and operated the largest leisure travel business in the United Kingdom. Thomson was a prosperous leader in its markets, but we were concerned about the long-term viability of our business portfolio. First, our markets were not equal in terms of growth potential. Leisure travel, for example, was becoming increasingly competitive and turning into a commodity. To realize Thomson's full potential, we needed to become less diversified and more focused on the business model with the best prospects for the future.

Second, as we looked around the corner we could see the beginnings of a radical change in market dynamics. In particular, it appeared that the rise of the internet would change the newspaper and publishing markets forever. The worth of our considerable paper assets was in jeopardy.

Today Thomson is squarely focused as a global information services company, selling to businesses and professionals in the financial, legal, tax and accounting, scientific, and health care sectors. When its proposed acquisition of Reuters obtains regulatory approval and closes, Thomson will become the largest information company in the world. While the company has had approximately the same amount of revenue as it did 10 years ago (before accounting for the sale of its learning division, which closed in the summer of 2007), the makeup and productivity of that revenue are very different. A dollar of revenue now yields approximately twice the operating profit it did back then. Thomson today has an operating profit level of approximately 20%, and free cash flow is approximately four times what it was in 1997. The company's revenue is also more stable. Eighty-three percent of it is subscription based, and renewal rates often exceed 90%. In a market that is changing by the day, this revenue is unusually repeatable, predictable, and profitable.

**Richard J. Harrington** is CEO of the Thomson Corporation in Stamford, Connecticut. **Anthony K. Tjan**, who is based in Boston, is CEO of Cue Ball and vice chairman of the Parthenon Group, which has advised Thomson on its strategy.

Over the past decade, the company has seen its market capitalization triple. The sources of Thomson's revenue have shifted dramatically as well – from print to digital. The company's electronic information products, software, and services now account for 80% of its revenue, completely the reverse of its model a decade ago.

The transformation began with the divestiture of businesses that didn't fit our strategic focus on information publishing services – and with the acquisition of professional information publishing assets that did, along with investments in the technology needed to build and deliver products and services online. The real breakthroughs, however, came a few years into the transformation process, in 2001, when we realized we needed to focus more closely on customers than ever before. These advances were driven by the changing needs of our end users and, by extension, our buyers. In this article, we'll describe Thomson's customer strategy, which combined traditional and nontraditional research methods to produce a more intimate understanding of the front-end user. Shifting gears in this way was not as premeditated or as neat as the framework we'll describe suggests. We had to learn along the way. But in the end, seeing the world through the eyes of the ultimate user led Thomson – initially at Thomson Financial and later throughout the organization – to change market definitions, evolve product development strategy, significantly modify pricing models, and even redefine who was considered the real customer.

## STEP 1 Map Out Your Real Market

Our first step in devising a front-end customer strategy was getting a clear picture of the real, addressable market for a given business – not the entire universe of potential customers but those whose needs we could realistically serve, given the capabilities and products we had on hand.

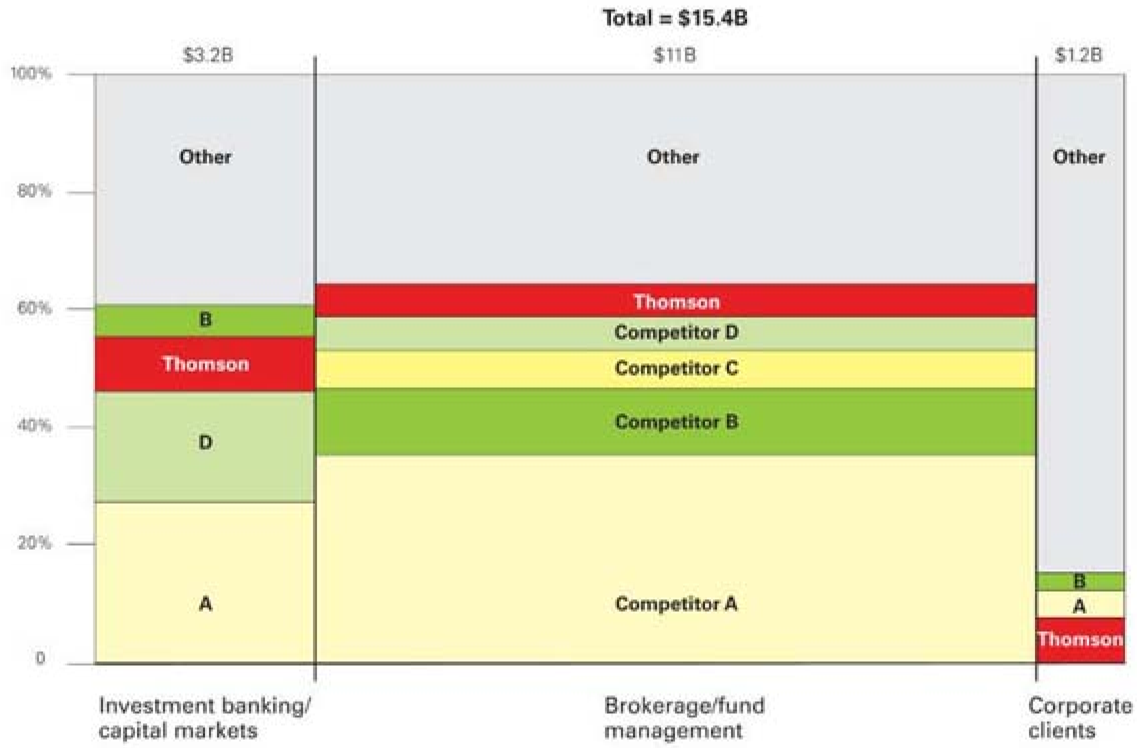
When we began the analysis at Thomson Financial, in 2001, we used third-party reports to build estimates of our market size, as most firms do. The traditional, or at least readily available, data split an approximately $15 billion financial-information market into three broad categories: firms on the buy side (those investing in company stock), firms on the sell side (those selling company stock), and corporate clients (those issuing stock). Those market segments were so general that they were not all that useful.

# A Better Way to Map the Market

When Thomson Financial reframed its market, breaking it down by end users rather than purchasers, it saw segments where it had market penetration and opportunities for growth.

**Before**

Market Using Typical Segmentation

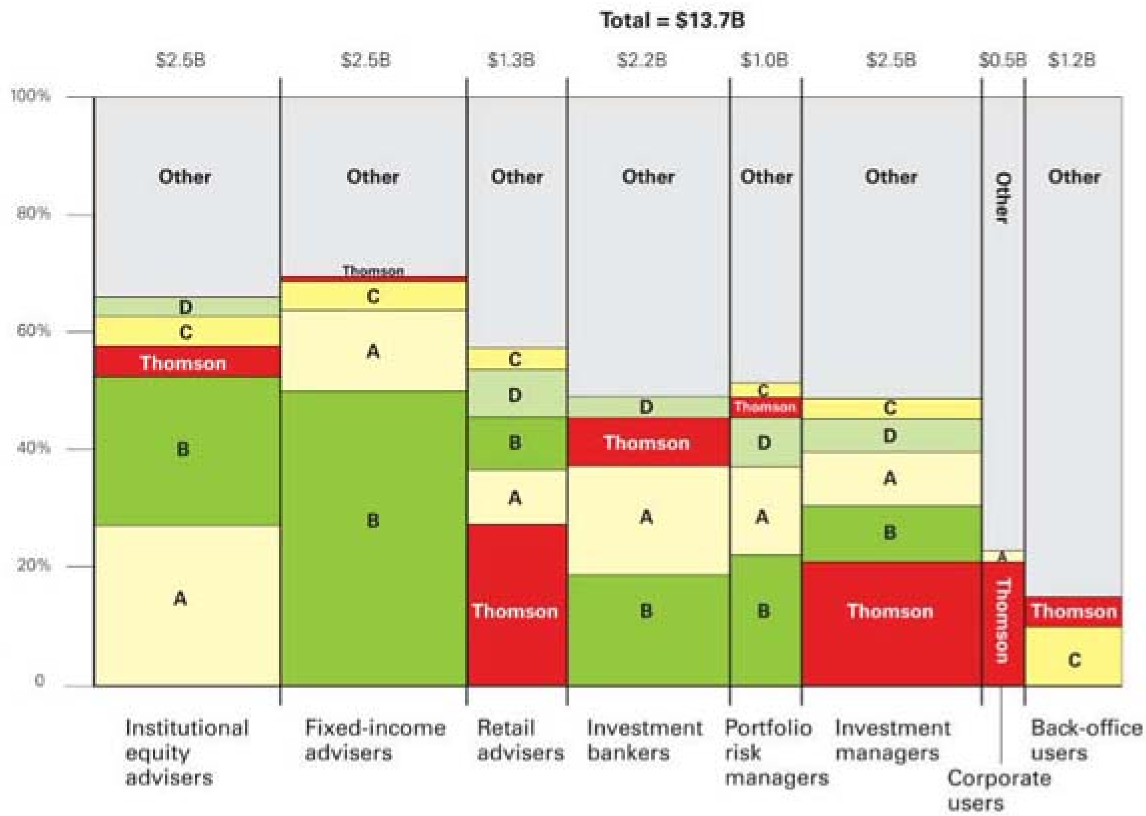



Note: Estimated market size in 2001

Source: Thomson Financial

**After**

Market Segmented by End Users




Note: Estimated market size in 2002

Source: Thomson Financial

They didn't help us understand where we were strongest or where we had the most opportunity to grow.

To get a clearer view, Thomson Financial recast the market by breaking it down into new segments we believed more closely reflected the ultimate users of our financial products – groups such as institutional equity advisers, fixed-income advisers, and investment bankers. We began by hypothesizing which people used our products and services most frequently. While that sounds a little basic, customer segmentations were frequently categorized more by sales channel or geography and much less so by end user. Further, where end-user information existed, it often was not granular enough to be meaningful. We had hypothesized that there were as few as four segments and as many as 12, but we felt that there were consistently well-defined differences between eight segments. (See the exhibit "A Better Way to Map the Market.")

Once we'd identified these eight segments, Thomson Financial worked with an external firm, the Parthenon Group, to conduct interviews with users, consult industry analysts, and probe public reports to develop estimates of our relative market share and growth potential with each group. We also tried to estimate what percentage of our individual competitors' revenue came from each segment. Eventually, we vetted these market share estimates with several industry sources. Though this exercise was time-consuming, it helped us see more practically where we had strengths and where we needed to reassess activities and resource allocations.

The figures surprised us: The near-term addressable market for our existing products and services was slightly smaller than we had previously imagined – about $13.7 billion. But when we went further and mapped our share in each segment relative to our competitors', along with the currently unaddressed opportunity, we discovered just where the untapped potential lay. Once we understood segment-specific needs, we uncovered opportunities in fast-growing areas where we had high market penetration and strong capabilities, and areas where our competition was somewhat fragmented. We also saw that in the long term, the addressable market could actually be bigger than anyone had anticipated. If we leveraged our skills and assets the right way, we could be a player in a much larger market and enjoy significant growth.

We realized we could completely redefine our target market – in much the same way that Apple Computer reframed its market. Apple originally saw itself as a computer company serving primarily users in the designer, educational, and media segments. But once Apple understood just how strong its appeal in the media segment could be, it redefined itself as a consumer- and media-centric company. Indeed, Apple recently dropped "Computer" from its name, and iPod and iTunes have had staggering success. Reframing its addressable market to a broader media definition not only expanded Apple's long-term potential but also helped strengthen its traditional computer business (estimates are its U.S. market share increased from about 6% to more than 8% in 2007). In Thomson's case, we confirmed that while the fixed-income adviser and investment manager market segments were approximately the same size, we had a far greater presence in the latter. We also discovered that we had a relatively healthy share in the corporate user segment, but we could dramatically increase our leadership position with the purchase of investor communications provider CCBN, a business with complementary strengths within this market segment.

## STEP 2 Understand the Customers' Objectives and Work Flow

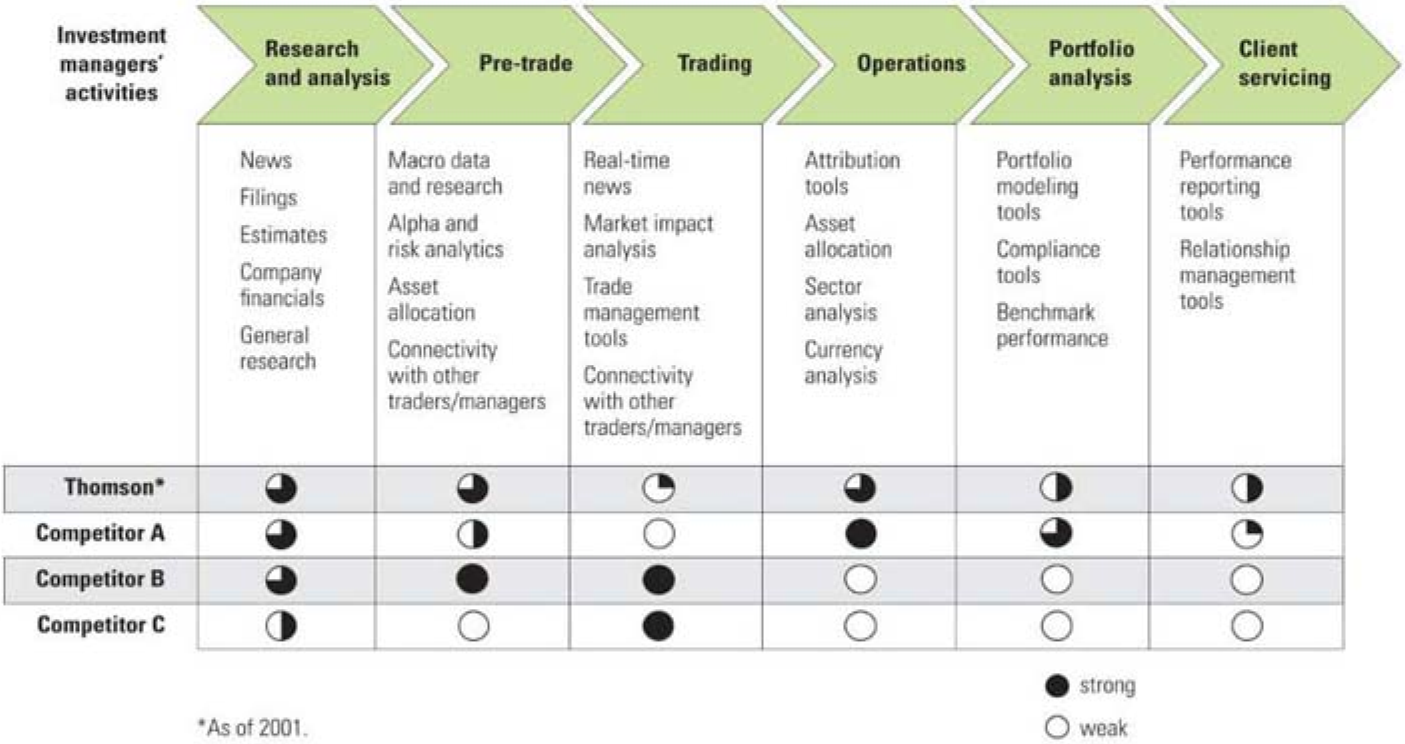
After estimating the size of market segments from the bottom up, we explored the needs of each segment using quantitative survey methods combined with "day in the life" ethnographic research on how end users did their jobs. In this phase, we focused on acquiring a detailed


**We follow an approach called "three minutes."**

We combine observation with detailed interviews to learn what end users are doing three minutes before they use a product and three minutes after.

## Studying the Customers' Work Flow

By tracking the activities of users in its investment manager segment, Thomson Financial was able to develop a clear picture of their work flow and their information needs at each stage. Thomson then examined how well it met those needs, relative to competitors.




*As of 2001.

understanding of the activities of the people who relied on Thomson's products every day. For instance, our Westlaw online database is purchased by law firms' central research departments, but the users are associates at those firms. What do they do with it? To find out, Thomson interviewed the associates in depth and followed them around at their jobs. In some instances, we went as far as hiring film crews to tape associates going about their work. On occasion we even visited with the users' own customers, law firm clients, because they were the ultimate beneficiaries of the Westlaw data.

When tracing end users' activities, we follow an approach called "three minutes." We combine on-the-job observation with 25 to 50 detailed interviews to learn what end users are doing three minutes before they use a product or service and three minutes after. (In areas where we have less ability to drill down deep, we might go with an hour or a longer time interval.) We then look at what they do during the next three minutes out in both directions, determining the share of mind and the share of time that Thomson has within those intervals and gradually coming to understand the entire work flow. A small but not insignificant finding: We learned that highly paid analysts were spending valuable time manually inputting Thomson Financial data into spreadsheets. So we built in a capability that allowed them to seamlessly export information to Excel. Such a change seems obvious, but if we hadn't been watching users, we wouldn't have discovered that straightforward way to add value.

The exhibit "Studying the Customers' Work Flow" shows an example of delving deeper into the daily activities of one of the segments – in this case investment managers. We developed a high-level map to describe the activities of a typical investment manager, or buy-side analyst, who would be an end user of Thomson Financial information products. (The circles at the bottom show how well Thomson and its competitors could meet the investment managers' needs at any point in the cycle.) Thomson could then identify new opportunities for these users to interact with the company over the course of their jobs.

## STEP 3 Develop Products That Provide What Users Value Most

Once we had taken the company through the first two steps, we saw that the market was not as simple as we had thought. The next item on our agenda was to create products to fill gaps. We needed to reexamine the company's development priorities based on what people would be willing to pay for, which is not always what people say they want.

At this stage, it was critical to determine where there were pain points in the work flow that customers would pay to ease. This step required us to employ statistical techniques like cluster and conjoint analysis and hone our ability to interpret the results.

We set out to identify and test new product attributes that might be of value to each division's end users. Thomson Financial, for instance, needed to deeply examine the work flow of buy-side investment managers and researchers to hypothesize which critical product attributes were missing or could be improved. We asked cross-functional teams – representing product development, customer service, sales, and strategy – to come up with seven to 10 attributes to test, based on the findings from steps one and two and their own experience. The list of attributes that evolved included real-time data, exporting data to spreadsheets, and portfolio analytics.

Because the team members interacted with customers in different ways, they had complementary perspectives that gave the group a fully rounded view of which attributes were the most promising. For example, customer service personnel had heard time and time again of customers' wish for seamless integration with Excel, while some of the product development team felt that portfolio analytics were more important. We assessed the relative importance of the attributes through a quantitative survey of investment managers and another set of qualitative interviews.

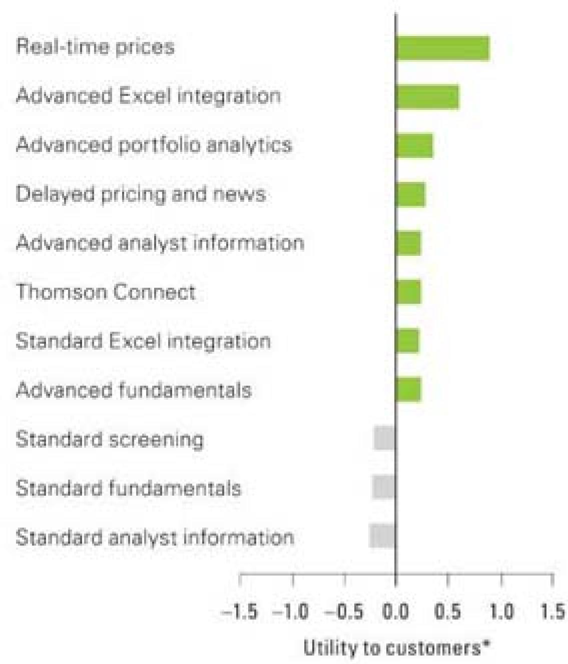
The aggregate response from more than 1,200 surveys is represented in disguised form in the exhibit "Two Views of Product Development Priorities" under the heading "Overall Preferences for Product Features." Most would stop their analysis here, assuming that the attributes in green represent the most critical elements to build and sell. However, there is rarely such a thing as the aggregate average customer. Think about it: Say you are surveying people about what

## Two Views of Product Development Priorities

When Thomson Financial surveyed its investment manager customers about the product features that mattered most to them, eight attributes – including real-time prices, Excel integration, and portfolio analytics – scored relatively high. Then Thomson Financial looked more closely to see what was driving each attribute's score and discovered three patterns of behavior among the investment managers. There were three distinct clusters: basic users, advanced users, and users who required real-time information. Each group had different needs and valued a different set of attributes (circled at right).

*Relative importance of the attribute to the end user
Source: Parthenon Investment Management Survey

### Overall Preferences for Product Features



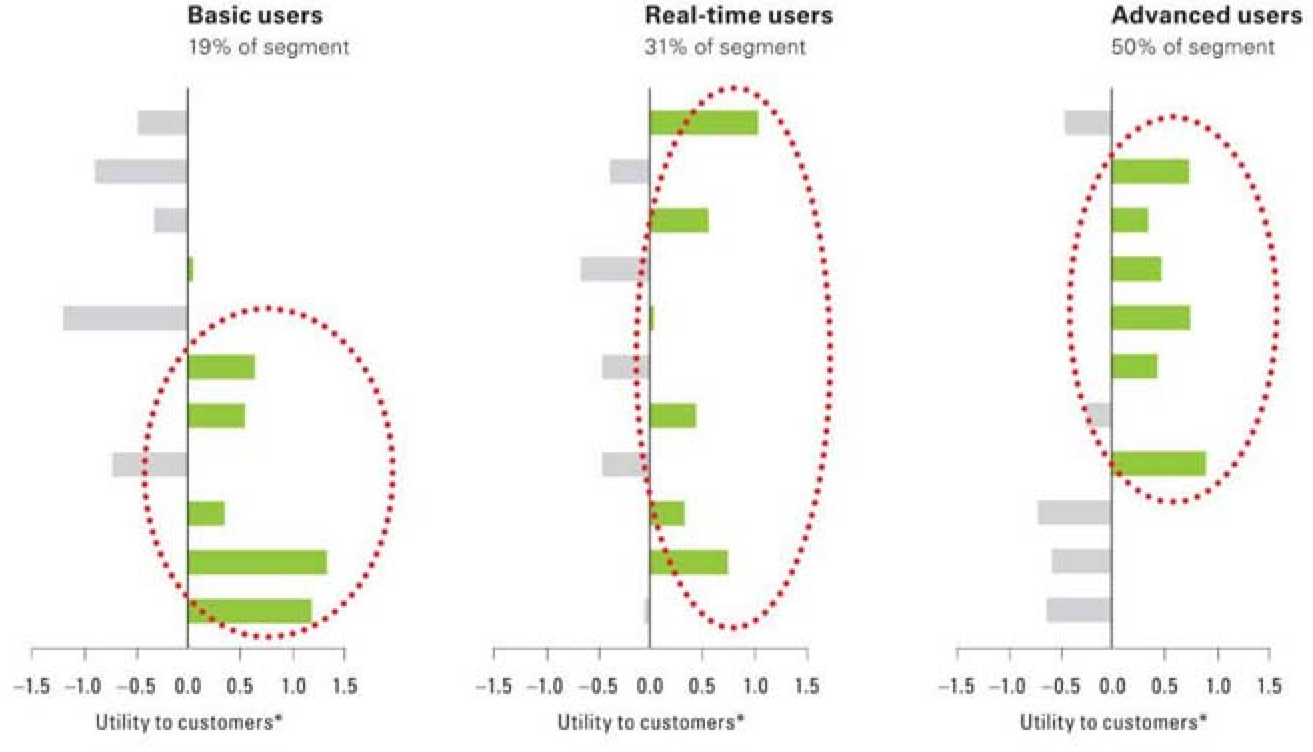
temperature they like their tea served at, and half prefer it served hot, and half iced. The average result would be lukewarm tea, which you wouldn't be able to sell to anybody.

So our goal was to understand how preferences for attributes varied among different types of users within the investment manager segment. To get a true picture of the demand and which kinds of users had the largest impact on the survey results, we conducted a conjoint analysis. In it we asked the survey participants which potential product enhancements they'd be willing to trade off for others, in order to get a clear sense of which attributes they ranked the highest. The results varied among the different types of users, who valued some but not all of the same things. For instance, the ability to export data to spreadsheets was an important attribute for all users in the segment, but the ability to get real-time data really mattered to only about a third of that group.

Within the investment management group, we identified three clusters of customers – users who had only basic needs, users who wanted advanced functionality, and high-end users who needed the best real-time information. In the exhibit below you can see how the survey results varied among these clusters. The implication was that there should be three versions of the offering that Thomson Financial was trying to develop for investment managers: one for each cluster. That insight into how preferences differed was absolutely critical to us when we reset our product development priorities. It also led us to do differential pricing – to charge more for additional highly valued features. And it made clear to us that we needed to move faster in the real-time data cluster; previously, Thomson had mostly prioritized serving the basic and advanced clusters. Ultimately, we developed value propositions for each of the three clusters.

Once we had defined our priorities, we instituted an eight-quarter plan to create and roll out the new offerings. Their development took place in parallel, but they were launched in three phases. In the first phase we went after the low-hanging fruit, a basic product that efficiently met the needs of the low-end user. In phase two we added more features and created a product bundle for the advanced user, which was priced accordingly. In the third phase, we rolled out a new real-time product, which built upon some of the elements of the other two offerings. The overall result was a modular solution, much like Microsoft Office in the compatibility of its components, that flexibly addressed the majority of the market.

## Preferences for Product Features by Cluster



## When Front-End Customer Strategy Makes Sense

**If your market is experiencing discontinuity.** Regulatory changes, new technology, or extraordinary events all can transform industries and are clear signals to reevaluate the addressable market, customer needs, and company offerings. Ask whether any macroeconomic or special events might change the way customers interact with your product.

**If you lack clear value propositions.** In its earlier days of developing front-end customer strategy, Thomson asked the employees of a key division to articulate its value proposition, and the results came back even more disparate and varied than anticipated. Ask a sample of 10 key employees or even 10 sales executives to write down your core value proposition, and look for inconsistencies.

**If you rely too heavily on channel segmentation.** There is no single right way to segment a company's revenue base, but too often companies confuse sales channel segmentation with end-user segmentation. Segmenting sales by channels like corporate and government buyers won't uncover similarities and differences in the behavior of users in companies or government agencies – telling you, say, which are basic reference users and which do heavy analytics. Ask if you have a segmentation scheme that helps you better understand users' behavior with your products.

**If you sense that you face new customer demands and competition.** Whether fact-based or gut-based, any sense that customer demand patterns are significantly changing should be a call to action. Look especially for shifts in the makeup of your total sales and in growth segments, which can often be related to new and nontraditional competition. Ask not if your growth rate is the same but if the causes of growth are the same. Ask not just if new competition is better but whether it offers a "good enough" alternative.

## Ongoing Implementation

Front-end customer strategies must be continually reevaluated and refined, because markets and competition can change so quickly. To execute an evolving strategy, we needed to have a flexible go-to-market plan and a well-considered approach for rolling the strategy out across segments and businesses. Most important, we needed to have customer feedback loops that were exceptionally effective. They played a critical role in helping us adjust course as the market has shifted.

**Sales and go-to-market plans.** Inviting sales and product development people to participate in the research turned out to be the key to a successful rollout at Thomson. We were able to develop go-to-market plans that were practical to implement as well as strategically sound. For example, Thomson Financial's pricing strategy entailed a shift from selling products to selling tailored solutions of information products and services. Putting sales leaders on the planning teams from day one allowed us to accelerate the sales training process and ensure early buy-in from the people who would eventually represent Thomson on the street. Another core tenet of our go-to-market plans has been trial first and then rollout. The offering of each new product is staged and used as an opportunity to gather yet another level of end-user feedback, which informs subsequent rounds of product refinements.

**Feedback mechanisms.** Perhaps the most important purpose of gaining feedback is to see if there are any gaps between your theory about what customers want and reality. Collecting data in real time and acting upon user feedback at each stage of trial are also vital. When Thomson Financial was launching an investment management offering called Thomson One Analytics as part of the pricing structure it implemented in 2002, it began with a trial of the product that involved 30 purchasers at investment houses, to ensure that it didn't lose touch with the gatekeepers who would eventually buy the offering. As Thomson One was officially rolled out to the market at large, the division monitored user feedback closely for the first six months. A year later Thomson Financial again collected detailed information on whether customers understood the pricing strategy, and how it affected their use of the product. The feedback gathered throughout the process confirmed that customers indeed wanted more tailored offerings and differential pricing based on the features provided, and helped the division migrate its customers to Thomson One's more customized solution.

Or consider another example: When Thomson Financial wanted to refine its newly acquired TradeWeb fixed-income trading platform, it solicited feedback not only from traders but also from the people in their back offices who supported them. The ability to integrate TradeWeb easily with back-office systems proved to be a key sales point.

## Getting to Know Users

Creating a front-end customer strategy at Thomson has been an ongoing process. Here's what it looked like at our Thomson Financial division:

STEP 1 **Map out your real market.** As recently as 2001, we were using third-party reports to estimate market size, as most firms do. The conventional wisdom split an approximately $15 billion financial-information market into three categories: firms on the buy side, firms on the sell side, and corporate clients. This framing was far too vague, so we decided to break the market down into segments of users. Identifying eight segments, we dug deeply into competitor reports, interviewed customers, and consulted analysts, and then mapped out our share in each relative to our competitors, along with the currently unaddressed opportunity, to get a clear picture of just where untapped potential lay.

STEP 2 **Understand the customers' objectives and work flow.** The next step was to find out exactly how our products were being used – which meant gathering information not on the activities of the bank's head of research, who bought the product, but on the behavior of analysts doing research for their clients. We used a combination of traditional survey methods and less traditional methods such as "day in the life" observations of customers to chart users' activities. Key to this research was an approach called "three minutes." What were end users of a product or service doing three minutes before they used it and three minutes after? What were they doing for the next three minutes? We kept asking that until we got a view of the full day. We wanted Thomson products to be a part of as much of that day as possible.

STEP 3 **Develop products that provide what users value most.** Once we had a picture of users' needs, we could start to add new features that would address those we didn't already meet. But first we had to discover the biggest pain points for end users – which aspects of their jobs were so problematic that customers would pay to make them better? When we surveyed more than 1,200 investment managers, for instance, we saw the features those users valued most in the aggregate. Then we went a step further, doing a conjoint analysis in which we asked investment managers to make trade-offs among attributes that might enhance the product. This gave us a truer picture of their preferences. We saw that within the investment manager group there were three distinct clusters of needs: basic users, advanced users, and real-time-focused users. The three clusters valued some but not all of the same things. We then concentrated our development efforts on creating three versions of our solution, each aimed at meeting the needs of one cluster.

**Keep the focus on users.** At Thomson we are continually evaluating and refining our customer strategy. Implementing it requires a flexible go-to-market plan, which we enable by including sales and product development people right up front in the research; by employing effective customer feedback loops that are built into a periodic review process; and by gradually scaling up the strategy across segments and businesses.

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The company ensures that it gets continual input into product development by giving customers incentives to fill out annual surveys and making frequent use of customer advisory groups. One side benefit of these tactics is that when customers are invited to offer feedback, their loyalty goes up – especially when they see their suggestions incorporated into product improvements.

**Scaling up the process.** Every front-end initiative begins with a targeted group of customers and is closely monitored until it's ready to be rolled out to a large customer group or across product lines and business units. Transforming a front-end customer approach from a corporate initiative into an integral part of the company culture required more than that, however. At Thomson, it involved evangelism from the top down and bottom up. A key success factor was strong personal support from the CEO, which included spending time with frontline teams to develop and implement the process. It was a learning experience for all of us.

Equally important were peer testimonials from internal advocates. When the pioneers at Thomson Financial began reporting improved performance after implementing our new front-end strategy, other Thomson businesses took note. The cross-functional nature of the implementation teams helped ensure that the word spread quickly along and across functional lines as well. As the front-end strategy started to be seen as a competitive advantage, people within the company began to compete to adopt it first and benefit from its advantage most.

Once a critical mass of staff members had been involved in the front-end initiatives, these employees became the faculty for formal training courses. Led by successful practitioners, sessions on front-end customer strategy became a core component of Thomson's executive training and other learning programs. Within 18 months, the top 200 leaders had been exposed to front-end customer strategy. By year three, the top 500 had been trained in the methodology.

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We have said that our process was initially not as thought-out as our framework here suggests. Indeed, our front-end customer strategy essentially developed organically. Thomson identified a pattern of successes in individual units that were focusing intensely on customers' work flow and segmentation by end user. Once we recognized the pattern, we began refining our research approaches and tied them together into a framework that we then replicated. We implemented the end-user strategy on a systematic basis, updating it regularly as the market and Thomson's own capabilities evolved.

Since our first front-end customer strategy exercise, in 2001, we've put every part of the organization that has any interaction with a customer through Thomson's internal university to learn the process. That includes employees in product development, sales and marketing, strategy and business development, customer service, and content and data acquisition, and the list continues to expand to other areas of the company. The goal is to have as many people as possible intimately understand the needs of Thomson's end users. Today a majority of Thomson's 32,000-plus employees have been taught the principles of front-end customer strategy. We estimate that nearly 70% of the products and services Thomson's businesses now offer are "nonlegacy" and have been developed through front-end strategies. In 2007 such offerings had the highest growth rates (in the double digits) and were powering the organic growth of the company.

Currently, the front-end customer framework is in its second or arguably even third iteration at Thomson. Markets keep changing; the maps and segments we illustrate in this article, which are from 2002, have evolved significantly through the years. Just as important, the more we learn about customer segments, the more gaps we uncover in our knowledge. We continually add new tools. Our early front-end strategies focused on incremental innovation, but we're now looking at opportunities for big, game-changing innovation. As Thomson embarks on another new phase with the acquisition of Reuters, we will inevitably find other lenses through which to view strategy and growth. Yet the need for Thomson – for any organization, especially a B2B one – to get as close as possible to customers and end users will always be essential to realizing our full growth potential.

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"Could you play badminton elsewhere?
I'm trying to run a meeting here..."

Roy Delgado


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Every talent management process in use today was developed half a century ago. It's time for a new model.

by Peter Cappelli

# Talent Management for the Twenty-First Century

FAILURES IN TALENT MANAGEMENT are an ongoing source of pain for executives in modern organizations. Over the past generation, talent management practices, especially in the United States, have by and large been dysfunctional, leading corporations to lurch from surpluses of talent to shortfalls to surpluses and back again.

At its heart, talent management is simply a matter of anticipating the need for human capital and then setting out a plan to meet it. Current responses to this challenge largely fall into two

Chris Gould

distinct – and equally ineffective – camps. The first, and by far the most common, is to do nothing: anticipate no needs at all; make no plans for addressing them (rendering the term "talent management" meaningless). This reactive approach relies overwhelmingly on outside hiring and has faltered now that the surplus of management talent has eroded. The second, common only among large, older companies, relies on complex and bureaucratic models from the 1950s for forecasting and succession planning – legacy systems that grew up in an era when business was highly predictable and that fail now because they are inaccurate and costly in a more volatile environment.

It's time for a fundamentally new approach to talent management that takes into account the great uncertainty businesses face today. Fortunately, companies already have such a model, one that has been well honed over decades to anticipate and meet demand in uncertain environments – supply chain management. By borrowing lessons from operations and supply chain research, firms can forge a new model of talent management better suited to today's realities. Before getting into the details, let's look at the context in which talent management has evolved over the past few decades and its current state.

## How We Got Here

Internal development was the norm back in the 1950s, and every management development practice that seems novel today was commonplace in those years – from executive coaching to 360-degree feedback to job rotation to high-potential programs.

Except at a few very large firms, internal talent development collapsed in the 1970s because it could not address the increasing uncertainties of the marketplace. Business forecasting had failed to predict the economic downturn in that decade, and talent pipelines continued to churn under outdated assumptions of growth. The excess supply of managers, combined with no-layoff policies for white-collar workers, fed corporate bloat. The steep recession of the early 1980s then led to white-collar layoffs and the demise of lifetime employment, as restructuring cut layers of hierarchy and eliminated many practices and staffs that developed talent. After all, if the priority was to cut positions, particularly in middle management, why maintain the programs designed to fill the ranks?

The older companies like PepsiCo and GE that still invested in development became known as "academy companies": breeding grounds for talent simply by maintaining some of the practices that nearly all corporations had followed in the past. A number of such companies managed to ride out the restructurings of the 1980s with their programs intact only to succumb to cost-cutting pressures later on.

The problems faced by Unilever's Indian operations after 2000 are a case in point. Known as a model employer and talent developer since the 1950s, the organization suddenly found itself top-heavy and stuck when business declined after the 2001 recession. Its well-oiled pipeline saddled the company with 1,400 well-trained managers in 2004, up 27% from 2000, despite the fact that the demand for managers had fallen. Unilever's implicit promise to avoid layoffs meant the company had to find places for them in its other international operations or buy them out.

The alternative to traditional development, outside hiring, worked like a charm through the early 1990s, in large measure because organizations were drawing on the big pool of laid-off talent. As the economy continued to grow, however, companies increasingly recruited talent away from their competitors, creating retention problems. Watching the fruits of their labors walk out the door, employers backed even further away from investments in development. I remember a conversation with a CEO in the medical device industry about a management development program proposed by his head of human resources. The CEO dismissed the proposal by saying, "Why should we develop people when our competitors are willing to do it for us?" By the mid-1990s, virtually every major corporation asserted the goal of getting better at recruiting talent away from competitors while also getting better at retaining its own talent – a hopeful dream at the individual level, an impossibility in the aggregate.

Outside hiring hit its inevitable limit by the end of the 1990s, after the longest economic expansion in U.S. history absorbed the supply of available talent. Companies found they were attracting experienced candidates and losing experienced employees to competitors at the same rate. Outside searches became increasingly expensive, particularly when they involved headhunters, and the newcomers blocked prospects for internal promotions, aggravating retention problems. The challenge of attracting and retaining the right people went to the very top of the list of executives' business concerns, where it remains today.

The good news is that most companies are facing the challenge with a pretty clean slate: Little in the way of talent management is actually going on in them. One recent study, for example, reports that two-thirds of U.S. employers are doing no workforce planning of any kind. The bad news is that the advice companies are getting is to return to the practices of the 1950s and create long-term succession plans that attempt to map out careers years into the future – even

**Peter Cappelli** (cappelli@wharton.upenn.edu) is the George W. Taylor Professor of Management and the director of the Center for Human Resources at the University of Pennsylvania's Wharton School in Philadelphia. He is the author of several HBR articles and the book *Talent on Demand,* forthcoming from Harvard Business School Press, which further develops the ideas presented in this article.

though the stable business environment and talent pipelines in which such practices were born no longer exist.

That simply won't work. Traditional approaches to succession planning assume a multiyear development process, yet during that period, strategies, org charts, and management teams will certainly change, and the groomed successors may well leave anyway. When an important vacancy occurs, it's not unusual for companies to conclude that the candidates identified by the succession plan no longer meet the needs of the job, and they look outside. Such an outcome is worse in several ways than having no plan. First, the candidates feel betrayed – succession plans create an implicit promise. Second, investments in developing these candidates are essentially wasted. Third, most companies now have to update their succession plans every year as jobs change and individuals leave, wasting tremendous amounts of time and energy. As a practical matter, how useful is a "plan" if it has to be changed every year?

**What I am proposing is something akin to just-in-time manufacturing for the development realm: a talent-on-demand framework.**

Talent management is not an end in itself. It is not about developing employees or creating succession plans, nor is it about achieving specific turnover rates or any other tactical outcome. It exists to support the organization's overall objectives, which in business essentially amount to making money. Making money requires an understanding of the costs as well as the benefits associated with talent management choices. The costs inherent to the organization-man development model were largely irrelevant in the 1950s because, in an era of lifetime employment and a culture in which job-hopping was considered a sign of failure, companies that did not develop talent in-house would not have any at all. Development practices, such as rotational job assignments, were so deeply embedded that their costs were rarely questioned (though internal accounting systems were so poor that it would have been difficult to assess the costs in any case).

That's no longer true. Today's rapid-fire changes in customers' demands and competitors' offerings, executive turnover that can easily run to 10%, and increased pressure to show a financial return for every set of business practices make the develop-from-within approach too slow and risky. And yet the hire-from-without models are too expensive and disruptive to the organization.

## A New Way to Think About Talent Management

Unlike talent development, models of supply chain management have improved radically since the 1950s. No longer do companies own huge warehouses where they stockpile the components needed to assemble years' worth of products they can sell with confidence because competition is muted and demand eminently predictable. Since the 1980s, companies have instituted, and continually refined, just-in-time manufacturing processes and other supply chain innovations that allow them to anticipate shifts in demand and adapt products ever more accurately and quickly. What I am proposing is something akin to just-in-time manufacturing for the development realm: a talent-on-demand framework. If you consider for a moment, you will see how suited this model might be to talent development.

Forecasting product demand is comparable to forecasting talent needs; estimating the cheapest and fastest ways to manufacture products is the equivalent of cost-effectively developing talent; outsourcing certain aspects of manufacturing processes is like hiring outside; ensuring timely delivery relates to planning for succession events. The issues and challenges in managing an internal talent pipeline – how employees advance through development jobs and experiences – are remarkably similar to how products move through a supply chain: reducing bottlenecks that block advancement, speeding up processing time, improving forecasts to avoid mismatches.

The most innovative approaches to managing talent use four particular principles drawn from operations and supply chain management. Two of them address uncertainty on the demand side: how to balance make-versus-buy decisions and how to reduce the risks in forecasting the demand for talent. The other two address uncertainty on the supply side: how to improve the return on investment in development efforts and how to protect that investment by generating internal opportunities that encourage newly trained managers to stick with the firm.

### PRINCIPLE 1 Make *and* Buy to Manage Risk

Just as a lack of parts was the major concern of midcentury manufacturers, a shortfall of talent was the greatest concern of traditional management development systems of the 1950s and 1960s, when all leaders had to be homegrown. If a company did not produce enough skilled project managers, it had to push inexperienced people into new roles or give up on projects and forgo their revenue. Though forecasting was easier than it is today, it wasn't perfect, so the only way to avoid a shortfall was to deliberately overshoot talent demand projections. If the process produced an excess of talent, it was relatively easy to park people on a bench, just as one might put spare parts in a warehouse, until opportunities became available. It may sound absurd to suggest that an organization would maintain the equivalent of a human-capital supply closet, but that was extremely common in the organization-man period.

Today, a deep bench of talent has become expensive inventory. What's more, it's inventory that can walk out the door. Ambitious executives don't want to, and don't have to, sit on the bench. Worse, studies by the consulting firm Watson Wyatt show that people who have recently received training are the most likely to decamp, as they leave for opportunities to make better use of those new skills.

It still makes sense to develop talent internally where we can because it is cheaper and less disruptive. But outside hiring can be faster and more responsive. So an optimal approach would be to use a combination of the two. The challenge is to figure out how much of each to use.

To begin, we should give up on the idea that we can predict talent demand with certainty and instead own up to the fact that our forecasts, especially the long-range ones, will almost never be perfect. With the error rate on a one-year forecast of demand for an individual product hovering around 33%, and with nonstop organizational restructurings and changes in corporate strategy, the idea that we can accurately predict talent demand for an entire company several years out is a myth. Leading corporations like Capital One and Dow Chemical have abandoned long-term talent forecasts and moved toward short-term simulations: Operating executives give talent planners their best guess as to what business demands will be over the next few years; the planners use sophisticated simulation software to tell them what that will require in terms of new talent. Then they repeat the process with different assumptions to get a sense of how robust the talent predictions are. The executives often decide to adjust their business plans if the associated talent requirements are too great.

Operations managers know that an integral part of managing demand uncertainty is understanding the costs

## Operations Principles Applied to Talent Management

A supply chain perspective on talent management relies on four principles, two that address the risks in estimating demand and two that address the uncertainty of supply.

### PRINCIPLE 1

**Make *and* Buy to Manage Risk**

A deep bench of talent is expensive, so companies should undershoot their estimates of what will be needed and plan to hire from outside to make up for any shortfall. Some positions may be easier to fill from outside than others, so firms should be thoughtful about where they put precious resources in development: Talent management is an investment, not an entitlement.

### PRINCIPLE 2

**Adapt to the Uncertainty in Talent Demand**

Uncertainty in demand is a given, and smart companies find ways to adapt to it. One approach is to break up development programs into shorter units: Rather than put management trainees through a three-year functional program, for instance, bring employees from all the functions together in an 18-month course that teaches general management skills, and then send them back to their functions to specialize. Another option is to create an organization-wide talent pool that can be allocated among business units as the need arises.

### PRINCIPLE 3

**Improve the Return on Investment in Developing Employees**

One way to improve the payoff is to get employees to share in the costs of development. That might mean asking them to take on additional stretch assignments on a volunteer basis. Another approach is to maintain relationships with former employees in the hope that they may return someday, bringing back your investment in their skills.

### PRINCIPLE 4

**Preserve the Investment by Balancing Employee-Employer Interests**

Arguably, the main reason good employees leave an organization is that they find better opportunities elsewhere. This makes talent development a perishable commodity. The key to preserving your investment in development efforts as long as possible is to balance the interests of employees and employer by having them share in advancement decisions.

involved in over- or underestimation. But what are the costs of developing too much talent versus too little? Traditionally, workforce planners have implicitly assumed that both the costs and the risks even out: that is, if we forecast we'll need 100 computer programmers in our division next year and we end up with 10 too many or 10 too few, the downsides are the same either way.

In practice, however, that's rarely the case. And, contrary to the situation in the 1950s, the risks of overshooting are greater than those of undershooting, now that workers can leave so easily. If we undershoot, we can always hire on the outside market to make up the difference. The cost per hire will be greater, and so will the uncertainty about employees' abilities, but those costs pale in comparison to retention costs. So, given that the big costs are from overshooting, we will want to develop fewer than 100 programmers and expect to fall somewhat short, hiring on the outside market to make up the difference. If we think our estimate of 100 is reasonably accurate, then perhaps we will want to develop only 90 internally, just to make sure we don't overshoot actual demand, and then plan to hire about 10. If we think our estimate is closer to a guess, we will want to develop fewer, say 60 or so, and plan on hiring the rest outside.

Assessing the trade-offs between making and buying include an educated estimation of the following:

- How long will you need the talent? The longer the talent is needed, the easier it is to make investments in internal development pay off.
- How accurate is your forecast of the length of time you will need the talent? The less certainty about the forecast, the greater the risk and cost of internal development – and the greater the appeal of outside hires.
- Is there a hierarchy of skills and jobs that can make it possible for candidates who do not have the requisite competencies to learn them on the job, without resorting to specialized development roles or other costly investments? This is particularly likely in functional areas. The more it is so, the easier it will be to develop talent internally.
- How important is it to maintain the organization's current culture? Especially at the senior level, outside hires introduce different norms and values, changing the culture. If it is important to change the culture, then outside hiring will do that, though sometimes in unpredictable ways.

The answers to these questions may very well be different for different functional areas and jobs within the same company. For instance, lower-level jobs may be easily and cheaply filled by outsiders because the required competencies are readily available, making the costs of undershooting demand relatively modest. For more highly skilled jobs, the costs of undershooting are much higher – requiring the firm to pay for an outside search, a market premium, and perhaps also the costs related to integrating the new hires and absorbing associated risks, such as misfits.

## PRINCIPLE 2 Adapt to the Uncertainty in Talent Demand

If you buy all of your components in bulk and store them away in the warehouse, you are probably buying enough material to produce years of product and therefore have to forecast demand years in advance. But if you bring in small batches of components more often, you don't have to predict demand so far out. The same principle can be applied to shortening the time horizon for talent forecasts in some interesting, and surprisingly simple, ways.

Consider the problem of bringing a new class of candidates into an organization. At companies that hire directly out of college, the entire pool of candidates comes in all at once, typically in June. Let's assume they go through an orientation, spend some time in training classes, and then move into developmental roles. If the new cohort has 100 people, then the organization has to find 100 developmental roles all at once, which can be a challenge for a company under pressure, say, to cut costs or restructure.

But in fact many college graduates don't want to go directly to work after graduation. It's not that difficult to split the new group in half, taking 50 in June and the other 50 in September. Now the program only needs to find 50 roles in June and rotate the new hires through them in three months. The June cohort steps out of those roles when the September cohort steps into them. Then the organization need find only 50 permanent assignments in September for the June hires. More important, having smaller groups of candidates coming through more frequently means that forecasts of demand for these individuals can be made over shorter periods throughout their careers. Not only will those estimates be more accurate but it will be possible to better coordinate the first developmental assignments with subsequent assignments – for instance, from test engineer to engineer to senior engineer to lead engineer.

A different way to take advantage of shorter, more responsive forecasts would be to break up a long training program into discrete parts, each with its own forecast. A good place to start would be with the functionally based internal development programs that some companies still offer. These programs often address common subjects, such as general management or interpersonal skills, along with function-specific material. There is no reason that employees in all the functions couldn't go through the general training together and then specialize. What used to be a three-year functional program could become two 18-month courses. After everyone completed the first course, the organization could reforecast the demand for each functional area and allocate the candidates accordingly. Because the functional programs would be half as long, each forecast would only have to go out half as far and would be correspondingly more accurate. An added advantage is that teaching everyone the general skills together reduces redundancy in training investments.

Another risk reduction strategy that talent managers can borrow from supply chain managers is an application of the principle of portfolios. In finance, the problem with holding only one asset is that its value can fluctuate a great deal, and one's wealth varies a lot as a result, so investment advisers remind us to hold several stocks in the same portfolio. Similarly, in supply chain management it can be risky to rely on just one supplier.

For a talent-management application, consider the situation in many large and especially decentralized organizations where each division is accountable for its own profit and loss, and each maintains its own development programs. The odds that any one division will prepare the right number of managers to meet actual demand are very poor. Some will end up with a surplus, others a shortfall. If, however, all of these separate programs were consolidated into a single program, the unanticipated demand in one part of the company and an unanticipated shortfall in another would simply cancel out, just as a stock portfolio reduces the volatility of holding individual stocks. Given this, as well as the duplication of tasks and infrastructure required in decentralized programs, it is a mystery why large organizations continue to operate decentralized development programs. Some companies are in fact creating talent pools that span divisions, developing employees with broad and general competencies that could be applied to a range of jobs. The fit may be less than perfect, but these firms are finding that a little just-in-time training and coaching can help close any gaps.

## PRINCIPLE 3 Improve the Return on Investment in Developing Employees

When internal development was the only way to produce management talent, companies might have been forgiven for paying less attention than they should have to its costs. They may even have been right to consider their expensive development programs as an unavoidable cost of doing business. But the same dynamics that are making today's talent pool less loyal are presenting opportunities for companies to lower the costs of training employees and thereby improve the return on their investment of development dollars, as they might from any R&D effort.

Perhaps the most novel approach to this challenge is to get employees to share in the costs. Since they can cash in on their experience on the open market, employees are the main beneficiaries of their development, so it's reasonable to ask them to contribute. In the United States, legislation prevents hourly workers from having to share in the costs of any training required for their current job. There are no restrictions, however, even for hourly workers, on contributing to the costs of developmental experiences that help prepare employees for future roles.

People might share the costs by taking on learning projects voluntarily, which means doing them in addition to their normal work. Assuming that the candidates are more or less contributing their usual amount to their regular job and their pay hasn't increased, they are essentially doing these development projects for free, no small investment on their part. Pittsburgh-based PNC Financial Services is one of several companies that now offer promising employees the opportunity to volunteer for projects done with the leadership team, sometimes restricting them to ones outside their current functional area. They get access to company leaders, a broadening experience, and good professional contacts, all of which will surely help them later. But they pay for it, with their valuable time.

Employers have been more inclined to experiment with ways to improve the payoff from their development investments by retaining employees longer, or at least for some predictable period. About 20% of U.S. employers ask employees who are about to receive training or development experiences to sign a contract specifying that if they leave the business before a certain time, they will have to pay back the cost. As in the market for carbon credits, this has the

**The language of the talent-on-demand framework is driven by operations-based tools better suited to the challenges of uncertainty.**

effect of putting a monetary value on a previously unaccounted for cost. This practice is especially common in countries like Singapore and Malaysia: Employees often leave anyway, but typically the new employer pays off the old one.

A more interesting practice is to attempt to hang on to employees even after they leave, making relatively small investments in maintaining ties. Deloitte, for example, informs qualified former employees of important developments in the firm and pays the cost of keeping their accounting credentials up-to-date. Should these individuals want to switch jobs again, they may well look to the place where they still have ties: Deloitte. And because their skills and company knowledge are current, they will be ready to contribute right away.

## PRINCIPLE 4 Preserve the Investment by Balancing Employee-Employer Interests

The downside of talent portability, of course, is that it makes the fruits of management development perishable in a way they never were in the heyday of the internal development model. It used to be that managers and executives made career decisions for employees, mating individuals and jobs. In the organization-man period, the company would decide which candidates were ready for which experience, in order to meet the longer-term talent needs of the organization. Employees had little or no choice: Refusing to take a new position was a career-ending move.

Today, of course, employees can pick up and leave if they don't get the jobs they want inside – and the most talented among them have the most freedom to do so. In an effort to improve retention, most companies – 80% in a recent survey by applicant-tracking company Taleo – have moved away from the chess-master model to internal job boards that make it easy for employees to apply for openings and so change jobs within the organization. Dow Chemical, for example, cut its turnover rate in half when it moved its vacancies to such internal boards.

These arrangements have effectively turned the problem of career management over to employees. As a result, employers have much less control over their internal talent. Employees' choices may not align with the interests of the employer, and internal conflicts are increasing because half of the employers in the U.S. no longer require that employees seek permission from their supervisors to move to new positions.

So it has become imperative for companies to find more effective ways to preserve their management development investment. The key is to negotiate solutions that balance the interests of all parties. McKinsey's arrangement for associates relies not only on how they rank their preferences for projects posted online but also on how the principals running the projects rank the associates. The final decision allocating resources is made by a senior partner who tries to honor the preferences of both sides while choosing the assignment that will best develop the skill set of each associate. Bear, Stearns established an office of mediation, which negotiates internal disputes between managers when an employee wants to move from one job to another in the firm.

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The talent problems of employers, employees, and the broader society are intertwined. Employers want the skills they need when they need them, delivered in a manner they can afford. Employees want prospects for advancement and control over their careers. The societies in which they operate and the economy as a whole need higher levels of skills – particularly deeper competencies in management – which are best developed inside companies.

Those often-conflicting desires aren't addressed by existing development practices. The language and the frameworks of the organization-man model persist despite the fact that few companies actually employ it; there simply aren't any alternatives. The language comes from engineering and is rooted in the idea that we can achieve certainty through planning – an outdated notion. But before an old paradigm can be overthrown there must be an alternative, one that describes new challenges better than the old one can. If the language of the old paradigm was dominated by engineering and planning, the language of the new, talent-on-demand framework is driven by markets and operations-based tools better suited to the challenges of uncertainty. Talent on demand gives employers a way to manage their talent needs and recoup investments in development, a way to balance the interests of employees and employers, and a way to increase the level of skills in society.

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# The Perks of the Job

> "If what we are doing for employees is really new and is a worth-while advantage to them, then we ought to ballyhoo it on its merits rather than as an evidence of our generosity."

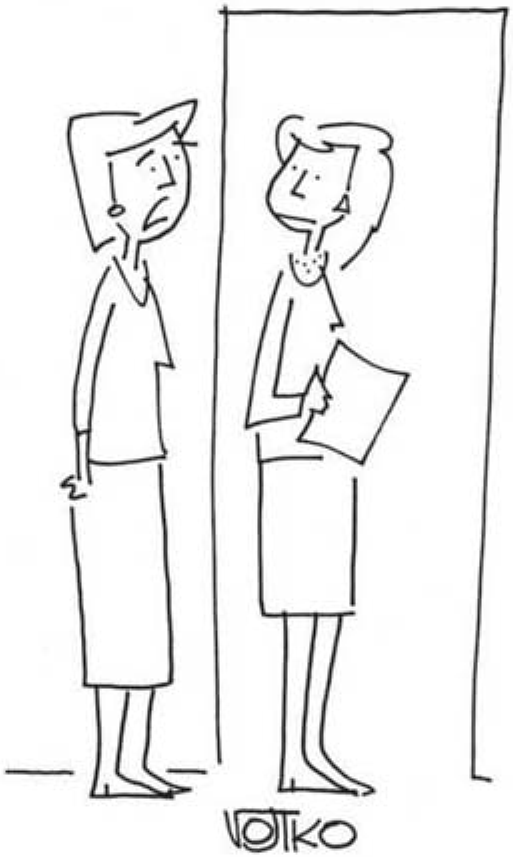
"Explaining the Facts to Employees"
**Keith Powlison**
*Harvard Business Review*
Winter 1947

"Certainly we have an employee incentive program. We call it payday."

"We don't have medical or a 401(k) but there *are* treats."

Leo Cullum, Patrick Hardin, Susan Camilleri Konar, Bill and Bob Thomas, and Bob Vojtko


"How's this for a severance package?
Five minutes to grab all you can get."




"I'd quit, but the company can only
afford a wooden parachute."


"They pay him four mil a year –
but most of that is because
he's an endangered species."

To win in the world's fastest-growing markets, transnational giants have to compete with increasingly sophisticated homegrown champions. It isn't easy.

# How Local Companies Keep Multinationals AT BAY

SINCE THE LATE 1970s, governments on every continent have allowed the winds of global competition to blow through their economies. As policy makers have lowered tariff barriers and permitted foreign investments, multinational companies have rushed into those countries. U.S., European, and Japanese giants, it initially appeared, would quickly overrun local rivals and grab the market for almost every product or service. After all, they possessed state-of-the-art technologies and products, enormous financial resources, powerful brands, and the world's best management talent and systems.

Shonagh Rae

**by Arindam K. Bhattacharya and David C. Michael**

Poor nations such as Brazil, China, India, and Mexico, often under pressure from developed countries, let in transnational companies, but they did so slowly, almost reluctantly. They were convinced that global Goliaths would wipe out local enterprises in one fell swoop.

That hasn't happened, according to our research. Over the past three years, we have been studying companies in 10 rapidly developing economies: Brazil, China, India, Indonesia, Malaysia, Mexico, Poland, Russia, Slovakia, and Thailand. In those countries, smart domestic enterprises are more than holding their own in the face of foreign competition. They have staved off challenges from multinational corporations in their core businesses, have become market leaders or are catching up with them, and have often seized new opportunities before foreign players could. Many of them dominate the market today not because of protectionist economic policies, but because of their strategies and execution. When we drew up a list of 50 homegrown champions, we found that 21 had revenues exceeding US$1 billion in 2006 and that the entire group's sales had risen by about 50% between 2005 and 2006 (see the exhibit "Fifty Homegrown Champions"). The skeptics should have remembered that David slew Goliath – not the other way around.

Consider a few local companies that have fended off foreign competition during the past five years or more:

- In Brazil, Grupo Positivo has a larger share of the PC market than either Dell or Hewlett-Packard, and Totvs is the enterprise resource planning (ERP) software leader in the small- and midsize-company market, ahead of the world's largest business software provider, SAP.
- In China, daily use of the search engine Baidu exceeds that of Google China by fourfold; QQ, from instant-message leader Tencent, is ahead of MSN Messenger; and online travel service Ctrip has held off Travelsky, Expedia's eLong .com, and Travelocity's Zuji.com.
- In India, Bharti Airtel has taken on Hutchison Telecom, which sold its Indian operations to Vodafone in 2007, and emerged as the leader in the cellular telephone market.
- In Mexico, Grupo Elektra, which has created one of the country's biggest retail networks, has taken the battle to Wal-Mart.
- In Russia, Wimm-Bill-Dann Foods is the biggest producer of dairy products, ahead of Danone and Coca-Cola.

The local companies' success doesn't augur well for the developed world's corporations, many of which are seeking growth and profits in emerging markets. Two-thirds of respondents to a survey of transnational corporations we conducted in 2006 said they planned to expand their commitments to developing economies over the next five years. That isn't surprising. According to the Economist Intelligence Unit, rapidly developing economies will account for 45% of world GDP and 60% of annual GDP growth by 2010. At the same time, several Western and Japanese corporations have been unable to enter or have retreated from emerging markets. For instance, Yahoo and eBay have pulled out of China, and NEC and Panasonic have withdrawn from the Chinese market for cellular handsets. Other corporations have found it tough to fly down from the premium perches they constructed for themselves, and they no longer appear irresistible to consumers or unbeatable by local companies.

Arindam K. Bhattacharya (bhattacharya.arindam@bcg.com) is a Delhi-based partner and managing director, and David C. Michael (michael.david@bcg.com) is a Beijing-based senior partner and managing director, of the Boston Consulting Group.

Why don't the strategies of the biggest and brightest corporations work well in developing countries? Part of the problem is that many transnational enterprises mistakenly believe that emerging markets are years behind developed nations' and that the former's markets will eventually look like the latter's. Multinational corporations assume it's merely a matter of time before their existing business models and value propositions start delivering results in developing countries. These misconceptions are deadly – for several reasons.

Developing economies neither are behind developed ones nor show signs of converging with them. The emerging markets are different, behind in some ways and advanced in others. For instance, China's telecommunications infrastructure is newer and better than that in most parts of the United States. At the same time, roughly 300 million Chinese live on less than $1 a day, according to the World Bank. In India, an educated elite who command international wages flourish in a nation with high rates of illiteracy. In Russia, abundant venture capital coexists with murky property rights and intimidating bureaucratic barriers. These disparities aren't likely to disappear soon, and they're creating unique markets.

The obstacles and opportunities that characterize emerging markets render useless most cookie-cutter strategies. A simple example: In India, lack of reliable internet access renders online customer service useless. However, wireless telecommunication networks and widespread use of mobile telephones allow companies to help customers, even in rural areas, through text messages and handset-based internet portals. Only companies that are unfazed by such contradictions are likely to succeed.

Western companies often forget that entrepreneurship has recently exploded in most developing countries because of internal reforms. Governments have slashed red tape, and capital is cheaper than ever – and those changes are stoking competition. Emerging markets have become so volatile that multinational companies can't tackle them with strategies they developed decades ago and have since refined in mature home markets.

Multinational companies should, we believe, borrow a page, or more, from the local champions' playbook. When

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we analyzed how 50 companies have become winners, we found six common strands – and they aren't all about low-cost structures. One, unlike global companies, local leaders are not constrained by existing products or by preconceived notions about customer needs. They customize products and services to meet different consumer requirements, and they initially go after economies of scope. Two, their business models overcome roadblocks and yield competitive advantages in the process. Three, they turn globalization to their advantage, deploying the latest technologies by developing or buying them. Four, many of the homegrown champions find innovative ways to benefit from low-cost labor pools and to overcome shortages of skilled talent. Five, they go national as soon as possible to prevent regional rivals from challenging them. Finally, the domestic dynamos possess management skills and talent that multinational companies often underestimate.

In the following pages, we explore each of these factors in detail. No single element may seem groundbreaking, but the homegrown champions cleverly weave at least four of them – sometimes all six, as we show – into a tight strategy in order to gain competitive advantage. We also discuss three multinational companies that have followed the six-part path and have tasted success in emerging markets.

## A Six-Part Strategy for Success

Many types of local companies have been successful in developing countries. Some are part of old conglomerates owned by business families or tycoons; others are young start-ups spawned by a postreforms generation of entrepreneurs. All the companies we studied face stiff competition from domestic peers or government-owned enterprises. Most of them also face foreign competition at home, even though countries and markets vary in their degree of openness. These domestic private-sector enterprises have outperformed competitors by following several strategies.

**Create customized products or services.** The homegrown champions possess a deep understanding of the consumers in their countries. They know people's preferences by region or even city, by income level, by age group, and by gender. These companies also grasp the structures of the raw-materials, components, and finished-goods markets in which they operate. They are therefore able to provide consumers with a low level of customization inexpensively. These local leaders develop offerings tailored to several niche markets and learn to create a large variety of products or services cost-effectively. For example, Goodbaby, the leader in the Chinese market for baby-related products such as strollers, sells as many as 1,600 items in 16 categories. Customization becomes the basis on which companies like Goodbaby differentiate themselves from and get a leg up on multinational rivals.

Some companies develop sophisticated user-generated customization technologies. In China, consumers favor instant messaging on PCs and text messaging on cellular telephones over e-mail. Despite the presence of U.S. heavyweights – such as Microsoft (which launched a Chinese version of MSN Messenger three years ago), Yahoo, and recently MySpace – Shenzhen-based Tencent is the leader in the Chinese market. Its free messenger, QQ, had a market share of 70% to 80% in 2006, compared with 15% for MSN Messenger, according to Shanghai-based iResearch. QQ's cute penguin mascot and ultrasimple interface endear it to China's internet users, 70% of whom are younger than 30. In addition to the free chat program and chat rooms, QQ offers games, virtual pets, and ringtone downloads.

The U.S. players have tried to capitalize on users' desire to form cybercommunities, but Tencent has taken a different route: It taps into the Chinese craving for freedom of expression. QQ offers digital avatars that users can personalize online, from the clothes they wear to the virtual cars they drive. People can choose from a dizzying array of virtual outfits and accessories, each costing just RMB 1 or 2. The Chinese love the idea of customizing their online messengers, and in less than a decade QQ has become the market leader. "QQ" has even become a verb, and the phrase "QQ me" has been used in pop songs. Since its founding in 1998, Tencent has made steady progress: It had 220 million active users (caveat: many Chinese have more than one online identity) and US$375 million in revenues in 2006 – and counting.

## Fifty Homegrown Champions

Using a largely qualitative approach, we identified successful domestic companies in 10 emerging economies. We chose enterprises that generate almost all their revenues from their home markets and that have been (or are close to being) leaders in their main businesses. Below is a list of 50 companies that we studied in depth; it is neither a ranking nor an exhaustive catalog of homegrown winners.

| | Company | 2006 Net Revenues (in US$ millions) | 2006 Net Revenue Growth (% change from 2005) | Domestic Market Position | Main Foreign Rivals in Local Market |
|---|---|---|---|---|---|
| BRAZIL | B2W | 728 | 63% | largest online retailer | fnac.com |
| | Casas Bahia | 5,024 | not available | biggest consumer electronics and furniture retailer | Carrefour, Wal-Mart |
| | Cosan | 1,083 | 30% | largest manufacturer and seller of ethanol and sugar | Bunge, Cargill |
| | Gol Linhas Aéreas Inteligentes | 1,661 | 42% | second-biggest and fastest-growing airline | none on domestic routes |
| | Grupo Positivo | 507 | 89% | leader in PCs and notebooks | Dell, Hewlett-Packard, Lenovo |
| | O Boticário | 1,321 | 4% | one of the largest cosmetics brands | Avon, Revlon |
| | Totvs | 164 | 21% | leading ERP-solutions provider for medium and small companies | SAP |
| | TV Globo | 2,732 | 12% | number one television network | none |
| | Votorantim Finanças | 533 | -9% | third-largest automobile finance company | Citibank, Grupo Santander, HSBC |
| CHINA | Baidu | 104 | 163% | China's most-used internet search engine | Google China |
| | China Merchants Bank | 3,081 | 29% | one of the top 10 banks | local banks with foreign partners |
| | China Vanke | 2,103 | 70% | largest property developer | joint ventures with foreign partners |
| | Ctrip | 97 | 49% | biggest provider of hotel and flight bookings | eLong.com (Expedia), Zuji.com (Travelocity) |
| | Focus Media | 206 | 213% | largest outdoor advertising company | Clear Channel, JCDecaux |
| | Goldwind Science and Technology | 190 | 209% | biggest maker and seller of wind-power equipment | GE, Vestas |
| | Gome Electrical Appliances | 3,064 | 38% | largest home-appliances retail chain | Best Buy, Carrefour, Wal-Mart |
| | Goodbaby | 327 | 14% | largest seller of baby products | Chicco, Maclaren |
| | New Oriental Education & Technology | 129 | 36% | leader in language education | Wall Street Institute |
| | Shanda | 205 | -13% | leader in online games | Electronic Arts, Nintendo, Sony |
| | SIM Technology Group | 440 | 26% | largest handset-design house | Bellwave, Compal |
| | Tencent | 347 | 96% | leader in instant messaging | MSN, MySpace |
| | WuXi PharmaTech | 68 | 107% | biotech and pharmaceuticals contract R&D leader | Covance |
| | XinAo Group | 1,081 | 40% | largest gas utility | Hong Kong and China Gas Company |
| | Xinyi Glass | 249 | 40% | one of the biggest glassmakers | Pilkington |

| | Company | 2006 Net Revenues (in US$ millions) | 2006 Net Revenue Growth (% change from 2005) | Domestic Market Position | Main Foreign Rivals in Local Market |
|---|---|---|---|---|---|
| INDIA | **Apollo Hospitals** | 215 | 23% | largest private hospital chain | joint ventures with foreign partners |
| | **Bharti Airtel** | 4,162 | 59% | biggest private-sector telecom services provider | Hutchison Telecom |
| | **CavinKare** | 129 | 0.5% | third-largest shampoo maker | L'Oréal, P&G, Unilever |
| | **Gujarat Cooperative Milk Marketing Federation** | 961 | 13% | leader in dairy products with its Amul brand | Cadbury, Nestlé, Unilever |
| | **ICICI Bank** | 5,308 | 63% | biggest private-sector bank | Citibank, HSBC, Standard Chartered |
| | **The Indian Hotels Company** | 347 | 42% | one of the two biggest domestic hotel chains | none |
| | **ITC** | 2,856 | 26% | leader in ready-to-cook and other foods | Danone, PepsiCo, Unilever |
| | **NIIT** | 179 | 76% | largest IT education and training firm | Lionbridge |
| | **SKS Microfinance** | 7 | 169% | one of the fastest-growing microfinance groups | none |
| | **Subhiksha** | 180 | 140% | largest no-frills supermarket chain | none |
| | **Titan Industries** | 480 | 44% | largest watch manufacturer and retailer | Citizen, Swatch |
| INDONESIA | **Astra International** | 6,106 | -10% | biggest car maker (with six foreign partners) | Honda, Mitsubishi, Suzuki |
| MALAYSIA | **Air Asia** | 230 | 28% | one of Asia's fastest-growing low-cost airlines | Singapore Airlines |
| MEXICO | **Controladora Milano** | 258 (est.) | not available | leading retail apparel chain | Wal-Mart |
| | **Corporación Interamericana de Entretenimiento** | 944 | 14% | leading live-entertainment company | none |
| | **Desarrolladora Homex** | 1,190 | 46% | largest low-income-housing developer | none |
| | **Farmacia Guadalajara** | 1,066 | 13% | second-largest retail pharmaceutical chain | Wal-Mart |
| | **Grupo Elektra** | 3,270 | 10% | leading retail network | Wal-Mart |
| | **Sigma Alimentos** | 1,836 | 7% | top producer of refrigerated and frozen foods | Danone, Kraft, Nestlé |
| POLAND | **Atlas Group** | 282 | 5% | biggest construction chemicals and glues manufacturer | Henkel |
| | **Maspex Wadowice** | 634 | 11% | leader in instant foods, pasta, and fruit juices | Barilla, Cappy |
| RUSSIA | **Euroset** | 4,620 | 79% | largest mobile telecommunications retailer | none |
| | **MegaFon** | 3,733 | 56% | second-biggest cellular services operator | none |
| | **Wimm-Bill-Dann Foods** | 1,762 | 26% | leader in dairy products and among the top three in fruit juices | Coca-Cola, Danone |
| SLOVAKIA | **SkyEurope Airlines** | 198 | 41% | country's biggest airline | easyJet, Ryanair |
| THAILAND | **Siam Cement Group** | 6,625 | 18% | largest maker of building materials, cement, chemicals, and paper | Lafarge |

Note: For commercial banks, the figures correspond to operating income. For Indian companies, data are for the fiscal year ending March 31, 2007. Most currency conversions were calculated using the average interbank exchange rate from January 1, 2005, through December 31, 2006.

**Contrary to popular perceptions, local winners' products and services often incorporate the latest technologies.**

Other local winners' customization techniques are simple. The companies package products innovatively to make them affordable. In India's $500 million hair care market, the well-entrenched multinational incumbent Hindustan Unilever, which has operated there since 1933, and challengers such as America's Procter & Gamble and France's L'Oréal have been slugging it out in the cities for decades. While Hindustan Unilever and P&G are the leaders with 36% and 27% of the market in 2006, respectively, according to Datamonitor, CavinKare, a local company, is giving them a run for their money with its market share of 16%. The Chennai-based start-up, established in 1983, packs shampoo in sachets – an idea its founder borrowed from his father, who pioneered the use of these pouches, and his brothers, who first launched shampoo sachets in 1979.

CavinKare's single-use plastic sachets are convenient to use and easy to store, and they minimize product waste because people are not tempted to use more than what they need for one wash. The packaging size makes shampoo affordable for many Indians who don't earn enough money to spend on big bottles and who regard the product as an expensive indulgence. CavinKare went after lower-income city dwellers and rural consumers for the first time. For years, it found the going tough; the company had to demonstrate how shampoo cleans hair better than soap and used trade-ins and discounts to get people to try it. Once CavinKare tasted success, Hindustan Unilever and P&G started to package shampoo in sachets as well. Price matters, though, and CavinKare's relatively cheap Chik brand has allowed the company to become the largest local shampoo player in India.

**Develop business models to overcome key obstacles.** Multinational corporations often complain about insurmountable problems – structural issues such as a lack of distribution channels, or infrastructural hurdles like limited telecommunications bandwidth – that prevent them from doing business in their usual way. Smart local companies are adept at identifying the key challenges that their markets pose and, from the get-go, at designing strategies to overcome or sidestep those obstacles. Sure, multinational enterprises later copy the same tactics, but by then the local ones have sharpened their first-mover advantage.

For instance, the global leaders in video games, such as Microsoft, Nintendo, and Sony, haven't made much headway in China because of software piracy. Does that mean China doesn't have much of a market for games? Of course not. Chinese companies such as Shanda, which entered the industry in 2001, have developed a thriving game business by developing massively multiplayer online role-playing games (MMORPGs) instead. These products are impossible to pirate since they are live experiences created by technologies that link many players over the internet. China's youth, eager for entertainment options, have warmed to the idea. China's MMORPG industry, which generated revenues of about $600 million in 2005, has been growing at 40% a year since 2003, according to iResearch. Belatedly in 2007, Electronic Arts acquired a 15% equity stake in one of Shanda's competitors, The9, for $167 million.

It's tough to make money on the internet in China because of consumer concerns about online theft and the lack of a credit card culture. Shanda has tackled the online-payment problem by taking transactions off-line. China's gamers purchase prepaid cards from local merchants. When they scratch the film off the card, they get a number that entitles them to a fixed amount of game-playing time online. Shanda keeps adapting its business model. Sensing that Chinese gamers are becoming less willing to pay to play, it now offers free access to old games. It makes money, as Tencent does, by selling virtual merchandise such as weapons and equipment. The company is also moving into mobile gaming, which is set to take off. Later this year, Shanda will launch mobile versions of its popular *World of Legend* and *Magical Land* role-playing games on customized Motorola handsets.

Innovative strategies sometimes create new businesses in addition to giving local champions an edge. In Mexico, Grupo Elektra wanted to be a successful retailer, but it created a banking business along the way. The company realized early that to make money, it had to sell big-ticket items such as washing machines and refrigerators. Many middle- and low-income Mexicans could buy consumer durables only by taking loans or paying in installments. They couldn't get credit easily because Mexico's commercial banks didn't consider them creditworthy or know how to evaluate their repayment potential. Grupo Elektra started offering consumer

financing and, effectively, selling products on installment plans. Once the company offered credit, its business took off. In 1987 Grupo Elektra operated 59 stores; today it runs more than 1,600, making it one of the largest retailers in Mexico. Imitation is a form of followership: Wal-Mart, which is Mexico's largest retailer by sales, obtained a banking license in November 2006 to offer financial services in all its 997 Mexican stores.

In 2002, Grupo Elektra, which still sells about 60% of its goods on credit, set up a full-fledged bank, Banco Azteca, with branches inside Elektra stores. The bank's business, measured by assets under management, has had a compound annual growth rate of 133% for the past five years. Given that most customers have no credit histories, the bank has developed a novel credit-appraisal system. A corps of 4,000 loan officers uses motorcycles to visit prospective borrowers' homes. These officers on wheels assess whether each applicant's standard of living matches the claimed income level and conduct an on-the-spot credit assessment. Collectively, the corps clears as many as 13,000 new loans a day. This unique system has worked so far: Banco Azteca's repayment rate in 2006 was 90%.

**Deploy the latest technologies.** Contrary to popular perceptions, local winners' products and services often incorporate the latest technologies, as the cases of Shanda and Tencent show. New technologies keep operating costs low and enable companies to deliver good-quality products and services. That helps them outperform competitors that believe they can satisfy local consumers with older technologies.

Unburdened by past investments or old processes, younger companies in particular invest in the state of the art to lower costs and offer customers novel features. For example, Brazil's Gol Linhas Aéreas Inteligentes, South America's first low-cost airline, has shaken up the market since it started flying with five aircraft in January 2001. Gol's share of the domestic market, based on revenue passenger-kilometers, grew from 5% in 2001 to 37% in 2006, according to Brazil's civil aviation authority, Agência Nacional de Aviação Civil (ANAC). The world's second-most profitable airline after Ireland's Ryanair, Gol can attribute its success partly to its single-aircraft type of fleet – a model Southwest Airlines pioneered – and to investments in the latest models. In 2007, Gol operated 97 single-class Boeing 737 aircraft, and it had placed orders with Boeing for 64 new 737-800 aircraft that would join the fleet between 2008 and 2010. By buying an aircraft model with a capacity approximately 30% higher than that of its predecessor, Gol will be able to use its landing slots more effectively.

The planes in Gol's fleet were, on average, less than eight years old in December 2006, making it one of the youngest in South America. A young fleet requires less maintenance, so Gol manages quick aircraft turnarounds and operates more flights per day with each plane. In 2006, Gol's aircraft utilization rate (the time between a plane's departure from the gate and arrival at its destination) was 14.2 block hours a day – the highest in South America, according to ANAC – and the airline boasted the lowest cost per available-seat-kilometer. Gol has also reduced costs by using the latest technology in other operational areas. It was the first Brazilian airline to issue e-tickets and promote internet-based sales; in 2006, it sold 82% of its tickets on its website. Customers can check in on the internet or, if they don't have Web access, there are kiosks and attendants with wireless-enabled pocket PCs to process check-ins. Gol's call centers employ the latest automated voice recognition software to handle high call volumes with a limited staff.

New technologies can help old companies get a second wind after economic liberalization. Gujarat Cooperative Milk Marketing Federation (GCMMF), India's largest dairy company, manufactures and markets a range of dairy products under the brand name Amul. Despite the fierce competition that has come with the opening up of India's dairy industry to big business, the enterprise has managed to stay ahead, in part because it has invested in the latest technologies. For instance, it can collect and process 6.5 million liters of fresh milk every day from close to 13,000 villages in the western state of Gujarat. Farmers bring their milk to collection centers, each located roughly five to 10 kilometers away from a village, twice a day. Thanks to a new milk collection system, GCMMF's field staff can weigh the milk, measure the fat content, and pay the farmer – in less than five minutes. That contrasts with the old system whereby employees took samples and performed fat-content tests days later at a central facility. Not only did farmers have to wait for a week to receive payment, but the lack of transparency led to complaints about fraud.

GCMMF employs satellite communication technologies to collect and track transaction data. A customized ERP system coordinates all the back-office functions and analyzes data in real time to forecast imbalances between the demand for milk products and milk supplies. Its technological infrastructure permits the cooperative to make 10 million error-free payments every day, totaling US$4.3 million (170 million rupees) in cash, and to coordinate large numbers of trucks and processing plants with military precision. That efficiency has enabled GCMMF to penetrate India's urban and rural markets deeply.

**Take advantage of low-cost labor, and train staff in-house.** Many local champions have at their core a business model that taps a pool of low-cost labor instead of relying on automation. Consider, for instance, Focus Media, which has become China's largest outdoor advertising firm. It has placed LCD displays that it engineered in-house in more than 130,000 locations in 90 cities to create a national advertising platform. The company's screens are in office buildings, apartment blocks, retail stores, shopping malls, restaurants, hospitals, drugstores, beauty salons, health clubs, golf courses, hotels, airports, and airport transit buses.

Focus Media uses a decidedly low-tech solution to refresh and service all those LCD screens: a veritable army of employees who move from building to building on bicycles and replace, whenever necessary, the DVDs and flashcards that play the advertisements. Focus Media could link the LCD screens electronically – as any blue-blooded transnational company would – but it does not. Using people keeps the company's operating costs low while enabling it to offer clients a great deal of flexibility. For a small premium, Focus Media will allow a client to flash ads on office buildings nationwide on the week of a major product launch; or target only outdoor plaza locations on one weekend in one city; or use a mix of online, in-cinema, and shopping-center advertisements the day before Chinese New Year. Were Focus Media to use an automated system, the Chinese government could deem it a network-based broadcaster and regulate it as a media company, which might curtail its growth. Focus Media's bicycle-based solution fits well within an otherwise high-tech business.

At the other end of the labor spectrum, skilled talent is hard to find and difficult to retain in emerging markets. Successful companies such as Grupo Elektra, Gol, China Merchants Bank, and India's ITC invest heavily in in-house training. India's Apollo Hospitals, another case in point, has developed a good reputation by recruiting some of the country's best doctors and nurses. The quality of its services is a key differentiator, allowing the chain to charge patients 10 times what they would pay in a public hospital. Although the company employs 4,000 specialists and 3,000 medical officers at 41 facilities, it needs more people to staff new hospitals and to offer additional services. Recognizing that India's medical education infrastructure is growing slowly, Apollo Hospitals established a foundation in 1998 to finance new teaching institutes, including one that offers a postgraduate degree in hospital management and a nursing school. That's not all. In 2000, Apollo Hospitals and a leading Indian technology training company, NIIT, set up a joint venture to offer online medical classes. Medvarsity Online offers postgraduate courses in family medicine, emergency medicine, and health insurance. Apollo Hospitals has also introduced programs to train physiotherapists, medical technicians, and laboratory technicians. It provides nurses with medical training as well as communication and customer-service skills. Without all these investments in training, Apollo Hospitals would not have been able to sustain its growth.

**Scale up quickly.** In many emerging markets, when a new business opportunity becomes apparent, several companies crop up to capitalize on it. The size of countries like China, India, and Brazil – particularly the large number of provinces and cities – allows regional players to flourish. However, only companies that operate nationwide can reap the benefits of scale. Many homegrown champions go after scale economies after generating economies of scope.

Expansion often entails mergers and acquisitions. Focus Media, for instance, faced many rivals scattered across China's cities when it started out in 2003. It pursued an aggressive acquisition-led strategy, which soon gave it the nationwide reach to attract advertisers and diminish the competitiveness of regional rivals. By scaling up quickly, Focus Media vaulted past two global leaders in China's outdoor-advertising industry: America's Clear Channel Communications and France's JCDecaux. In 2006, Clear Channel was less than half of Focus Media's size in terms of revenue, even though it had set up shop in China back in 1998. JCDecaux, which entered the country by acquiring two companies in 2005, doesn't report its China revenues. However, it operates in only 20 cities, compared with Focus Media's presence in 90. While Clear Channel and JCDecaux have made a few acquisitions in the past decade, Focus Media struck five deals between January 2006 and February 2007 in order to cement its leadership.

Some local champions create regional entities to speed up organic growth. For example, Goodbaby has set up 35 companies, each operating in a Chinese province or a city, to strike local distribution agreements and to open new points of presence quickly. That has spawned one of the most extensive marketing and sales networks in the country: 1,600 stand-alone stores or department-store counters and 300 distributors. By 2010, the company plans to have opened 500 more locations. In addition, Goodbaby opened the first in a series of flagship stores two years ago. These sites offer a few foreign brands, Goodbaby's own products, and access to professionals who dispense parenting advice. By overcoming the distribution challenges of the Chinese market quickly, Goodbaby has laid the foundation for success.

**Invest in talent to sustain rapid growth.** In market after market in emerging economies, invading multinational corporations encounter domestic rivals with the entrepreneurial zeal and the knack to keep growing quickly for a long time. They discover, to their shock, that there are great local managers in these countries. In fact, most transnational giants underestimate the management depth and capability of rivals that have the additional advantage of not needing to negotiate with headquarters in a distant First World city.

**Many homegrown champions go after scale economies after generating economies of scope.**

Many companies face the risk of meltdown when they grow at double-digit rates for years. There are no silver bullets to prevent that altogether, but smart organizations minimize senior management turnover and institutionalize management systems to tackle the complexities of rapid growth. Consider Russia's Wimm-Bill-Dann Foods (WBD), which five entrepreneurs founded in 1992 with borrowed funds. They leased a production line at the partially idle Lianozovsky Dairy Plant near Moscow to make fruit juices and decided to make a foray into the dairy industry. Since the short shelf life of dairy products limits their distribution to a radius of 400 kilometers, WBD had to manufacture products close to consumers. Between 1995 and 2003, the company acquired 19 dairy companies and created a national distribution system by appointing 100 distributors. However, by 2003, multinational companies such as Danone and Coca-Cola also built strong sales and distribution systems and capitalized on the growth of local retailers to storm the Russian market. Soon, Danone's dairy products and Coca-Cola's fruit juices were selling faster than WBD's products.

The founders of WBD realized that they needed to adopt a new approach in order to retain the company's leadership position. In April 2006, they hired a new CEO, who had worked with Coca-Cola in Europe for 20 years. To allow him a free hand, the founders moved into new roles as members of a supervisory board. They helped create a more powerful corporate center and a new company mission. Led by the new CEO, WBD focused on reducing costs; improving quality; and investing in its people, including executives. To ensure high quality at a reasonable cost, the company drew up detailed specifications for all of its products and raw materials, improved forecasting and demand planning, reengineered processes to eliminate bureaucracy, simplified its legal structure, and invested in information technology. WBD adopted a number of human resource management practices including a key performance indicator system, semiannual performance reviews, and individual development plans for the top 500 employees. It also linked salaries with performance and offered stock options to top managers for the first time. Finally, WBD brought in seasoned managers, many from multinational companies, even as it sought to maintain the culture of a Russian company. Partly as a result, WBD had around 34% of the Russian market for packaged dairy products in 2006, according to ACNielsen – more than double Danone's 16% share – and was one of the top three players in fruit juices, with an 18% share.

Like WBD, many national champions have used the appeal of ballooning equity valuations and the prospect of rapid career advancement to attract talent from multinational companies. Gone are the days when executives regarded working for a foreign corporation as something special; now they believe it is just as rewarding to work for a homegrown giant. Several executives have left multinational companies or jobs abroad to join local leaders. In China, for instance, Focus Media CFO Mingdong Wu used to work for Merrill Lynch; Ctrip chairman Jianzhang Liang is a veteran of Oracle, and CFO Jie Sun used to work for KPMG; and Shanda president Jun Tang previously headed Microsoft's China business, and CFO Yong Zhang came from PricewaterhouseCoopers.

### How One Local Winner Wove Its Strategy

Many companies pursue one or the other of the success strategies just described. What distinguishes winners is their ability to pursue several, or often all, of them simultaneously and to execute them well. Ctrip, China's largest travel consolidator and online travel agent, has been able to do just that. Founded in 1999, the start-up recognized at the outset that online travel services such as Travelocity, Orbitz, and Expedia wouldn't do well in China with the business models they use so effectively in the United States. At the time, China didn't have a national ticketing system, such as Sabre, and it still lacks a secure online-payment system. Most of the country's hotels don't belong to a global or national chain, and most local airlines and consumers prefer paper tickets to electronic tickets. Ctrip therefore decided to focus on both off-line and online sales.

Chinese consumers prefer to deal with travel agents, so Ctrip has set up a call center where more than 3,000 representatives can serve 100,000 customers a day. To break into the corporate travel services market, where personal relationships dominate, Ctrip has cleverly developed a loyalty program for executive assistants. Although 70% of Ctrip's revenues still come from off-line sales, it has invested in a sophisticated, automated voice-response system so that it can offer 24/7 booking to consumers. The company has also developed a booking infrastructure that links its online and call center operations to a central database. A large team of researchers constantly updates the database while technical experts integrate it with the systems of Ctrip's airline and hotel partners that are slowly computerizing their operations. The database has yielded the company a formidable advantage since most rivals lack a similar system. In a classic move to use low-cost labor, Ctrip collects payments and provides delivery of paper tickets through couriers who get around China's cities on bicycles and scooters.

**What distinguishes winners is their ability to pursue several, or often all, of the six strategies simultaneously and to execute them well.**

It's tough to operate in China's travel market, which comprises hundreds of cities in dozens of provinces, because of regulatory and licensing barriers. Setting up shop in each city requires a license from the local government, which usually owns a competing travel company. There's also the challenge of organizing sales teams and delivery services in many cities. Over the past 10 years, Ctrip has patiently overcome these hurdles and built a national travel business with 5,600 hotel partners and alliances with all of China's leading airlines. Recognizing that Ctrip is a widely dispersed organization, senior executives have created a companywide management culture, the Ctrip Way, and they emphasize the use of common business processes across the company. Ctrip has even established Six Sigma standards for customer-service operations and expects employees to meet them. Furthermore, the company has a strong management team with its cofounders still at the helm. Not surprisingly, Ctrip has beaten back several foreign competitors, such as Expedia's eLong.com and Travelocity's Zuji.com as well as Travelsky, the online portal launched by Chinese state-owned airlines and foreign investors such as Sabre in 2001. At the time, many believed that Travelsky would be the winner in China since it had government backing and priority access to airline tickets. However, it hasn't caught up with Ctrip, at least not yet.

### Beating the Locals at Their Own Game

If multinational companies are to succeed on local champions' home turf, they have to fight on two fronts. First, they must emulate some of the local companies' strategies, as we said earlier. Second, they must develop other strategies that local companies cannot easily copy. That's tough but not impossible, as is clear from the recent experiences in China of three multinational companies, each from a different continent and industry.

Kentucky-based Yum Brands, which owns restaurant chains such as KFC, Pizza Hut, and Taco Bell, is thriving in China. The company has adapted in many ways in order to break into the Chinese market. It has customized menus to local tastes and has launched dozens of new items each year. It has also tailored store formats to consumers' behavior, and as preferences change, it modifies those formats. For example, Yum recently introduced drive-throughs to cater to China's growing car-driving population. Its marketing emphasizes educational content, not just food, so its restaurants appeal to parents' priorities. The company positions stores as fun places; for instance, a KFC outlet in China averages two birthday parties a day. In addition, Yum has grown faster than McDonald's. In 2002, KFC outlets in China numbered 766, compared with 538 for McDonald's; by November 2007, the gap had widened to about 2,000 KFC restaurants (in 420 Chinese cities and towns) versus about 800 McDonald's locations. The company is also expanding Pizza Hut, which has nearly 300 restaurants in China, and its local chain, East Dawning, which serves Chinese food. In fact, Yum opens an average of one new restaurant every day in China.

Yum uses its global expertise to differentiate itself from local players. A network of 16 distribution and two processing centers supports its expansion. To ensure consistent deliveries of quality raw materials, the company has adopted tough supplier-selection policies. Yum also uses its global reputation and resources to influence the Chinese government's policies regarding food safety and supply chain regulations. By doing so, it protects its local reputation, builds government support, and influences industry structure. The result is a combination not easily found in China: a family of quick-service restaurant brands that serve good-quality food in clean environments with local appeal. Yum's strategy is working: Its China business accounted for 20% of its global profits in 2006.

Yum may have set the pace, but Finland's Nokia came from behind to win in China. Five years ago, Nokia trailed Motorola in the Chinese market. It also faced stiff competition from local players such as TCL and Ningbo Bird, whose basic cellular telephones targeted midtier cities and mid-market and low-end customers. In the early 2000s, the local companies moved fast, opening retail outlets and distribution capabilities across China. Surprisingly, Nokia countered equally quickly by investing in a national sales and distribution network. It used a sophisticated IT platform, which provides near real-time information on sales volumes and competitor pricing, as well as an army of 3,000 in-store promoters to push products. Nokia also focused on areas where its Chinese rivals were hard-pressed to match its efforts. For instance, it accelerated product development and launched a stream of innovative cellular telephones. The company rapidly ramped up production of these products to high volumes and leveraged its bargaining power to keep costs competitive. Partly because of these factors, Nokia has become the market leader in China today.

The experience of South Korea's Hyundai shows that even late entrants can succeed in crowded emerging markets. The automaker's share rose from zero in 2002, when it entered China, to 7% in 2006; cumulative sales topped the 500,000 mark just 40 months after launch. Hyundai identified a consumer need that other automakers had overlooked, because it sent teams who spent months learning what Chinese consumers want. The company noticed that foreign players held the top end of the market and local players the bottom end, but no company offered a good-quality car at an affordable price. Understanding that China's new middle class wanted such a car, Hyundai refined the Sonata and Elantra models for that market.

Hyundai was determined to bring its expertise and experience to China. China's laws require foreign automakers to enter into joint ventures with domestic firms. These arrangements often result in local enterprises' taking control. Hyundai retained operational control of its joint venture but created a healthy working relationship with its partner, Beijing Automotive Industry Holding Corporation (BAIC). For instance, it insisted that South Korean employees who worked in China learn Chinese. Hyundai minimized its up-front investment by using BAIC's functional but labor-intensive production line. It has kept costs down by forcing its South Korean suppliers to set up operations in China. Buoyed by its success in China's fiercely competitive market, Hyundai is building a $1 billion manufacturing plant in Beijing, which will start operations in April 2008 and will double the company's production capacity to 600,000 units a year.

...

Globalization is clearly a double-edged sword. The advantages of being a transnational corporation in emerging markets have declined dramatically in recent times. Smart local companies have used the benefits of globalization to close gaps in technology, capital, and talent with their rivals from the developed world. Although the average local competitor is weak, transnational corporations would do well to rethink their strategies. After all, it often takes only one strong homegrown champion to shut a multinational out of an emerging market.

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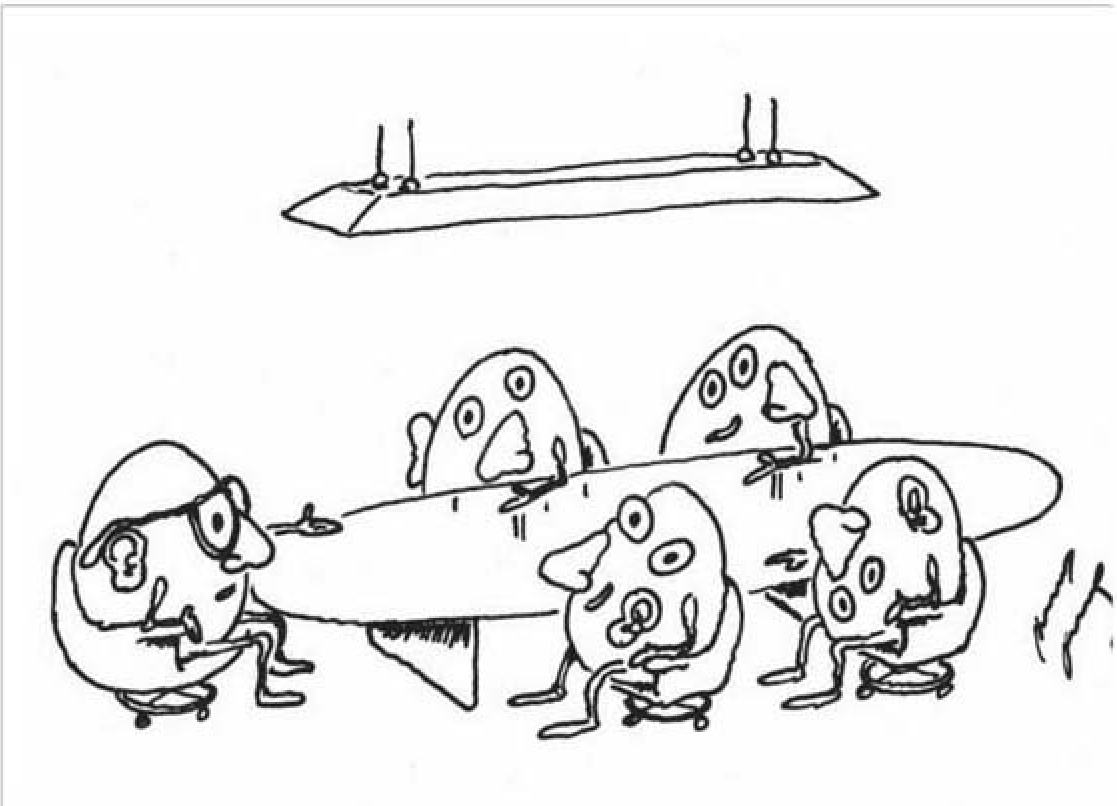


Scott Arthur Masear

"First, I want to apologize for calling this meeting on such short notice."

When development costs are high and failure is common, companies should structure research to seek truth first, success second. Experiments at Eli Lilly show how it's done.

# A More Rational Approach to New-Product Development

by Eric Bonabeau, Neil Bodick, and Robert W. Armstrong

COMPANIES OFTEN TREAT new-product development as a monolithic process, but it can be more rationally divided into two distinct stages: a truth-seeking early stage, focused on evaluating novel products' prospects and eliminating bad bets, and a success-seeking late stage, focused on maximizing the value of products that have been cleared for development. Recognizing the potential of this approach, in 2001 Eli Lilly designed and piloted Chorus, an autonomous experimental unit dedicated solely to early-stage drug development. Chorus looks for the most likely winners in a portfolio of molecules (most of which are destined to fail), recommending only the strongest candidates for costly late-stage development.

Jude Buffum

The unit has evaluated 19 drug candidates, 12 of which are still being assessed. (By the end of 2007, Chorus had completed work on seven molecules, recommending that four enter into full-scale clinical development and that the other three go no further.) Although Chorus absorbs just one-tenth of Lilly's investment in early-stage development, it has recently delivered a substantially greater fraction of the molecules slated for late Phase II trials – at almost twice the speed and less than a third of the cost of the standard process, in some cases shaving 12 to 24 months off the usual development time.

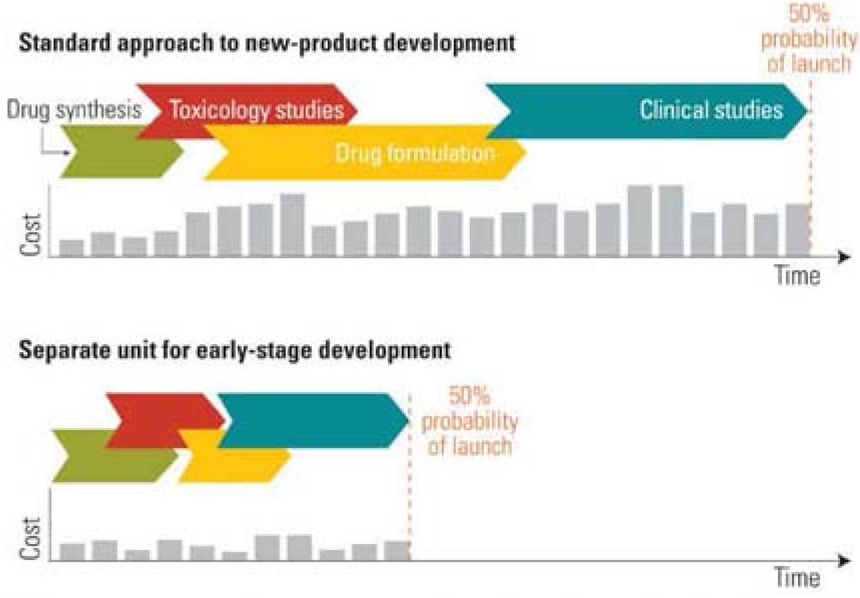
The success of Chorus represents the ideal match of an innovation-management problem and solution. The model is well suited to drug development because, although it may postpone the scale-up of successful products, it reduces risk in an environment where development costs and failure rates are extremely high. Indeed, any company that needs to absorb a lot of risk in early-stage development – for instance, in the chemical, biotechnology, medical devices, high-technology, and semiconductor industries – could probably benefit from adopting the Chorus model. The model would make less sense for companies that have low development costs and failure rates and are therefore well served by concurrent engineering or rapid-prototyping approaches that promote fast scale-up at relatively low risk.

Consider, for example, how two different molecules were evaluated in early development. In 2001, Lilly had begun work on a drug candidate for treating psychosis that we'll call molecule X32. Three years later, human brain-imaging studies showed that little of the drug actually reached the central nervous system – in all likelihood, not enough to have a therapeutic effect. Nonetheless, the development team kept the project alive, arguing that only minute amounts of the molecule should be necessary to get results.

Fast-forward to 2006. After five years of conventional development, it was still unclear whether X32 had any clinical promise. Frustrated by the lack of definitive information, Lilly managers handed the molecule over to Chorus for evaluation. Chorus undertook a new set of small-scale clinical experiments and in just seven months demonstrated that X32 had no therapeutic benefit. This put an end to years of costly procrastination. The resolution was quick, decisive, and obviously cost-effective.

## Determining Probability of Launch

Here are alternative plans for developing a single pain-relief drug candidate. The upper chart represents typical late-stage-oriented, success-seeking behavior; the lower one shows an early-stage, truth-seeking approach – the kind Chorus employs at Eli Lilly. Companies with a separate organization for early-stage development can determine more quickly and less expensively – and with a similar level of probability – whether a product will launch.




The chevrons represent segments of work, and the gray bars indicate the associated costs. The effect of ongoing work in each plan is to either increase or decrease the probability of launch. Typically, the clinical test of safety and efficacy (the chevron on the far right) has the greatest impact on launch probability.

In a success-seeking program, expensive and lengthy large-scale manufacturing and long-term animal studies are often initiated before critical data from the early-stage safety and efficacy studies are available. So in this hypothetical case, in the standard success-seeking path an extensive effort (yellow chevron) is made to manufacture a sustained-release tablet to clinically test effects on pain – the crucial experiment. In the truth-seeking plan, minimal work is conducted to support the crucial experiment. Instead of being delivered as a manufactured sustained-release tablet, the drug is repeatedly administered as a suspension in de-gassed Sprite, which mimics the effects of sustained release in a fraction of the time and at much lower cost. In addition, measuring the drug's effect on a surrogate marker reduces both the cost of the crucial experiment and the time needed.

Meanwhile, Lilly managers turned to Chorus to reevaluate a second drug – 4AB, for short – that had looked promising for certain neurological disorders but had been abandoned prior to clinical testing because similar molecules were found to affect vision at therapeutic doses. Tapping a network of in-house scientists and external academics, Chorus identified a novel biomarker to help in testing the compound's efficacy. The unit then ran several small trials, finding that 4AB did not cause visual problems and was likely to be of clinical benefit. Chorus's new data put 4AB back in the running, motivating large-scale investment in further clinical testing. The drug is now in late Phase II trials, and preliminary data suggest that it is both safe and effective.

Chorus delivered these results by focusing on what should be the only objective of early-stage development: reducing uncertainty about a drug candidate's clinical promise – or lack thereof – quickly and effectively.

## The Two Faces of Pharmaceutical New-Product Development

The early and late stages of new-product development require fundamentally different goals, strengths, and approaches.

| Early | Late |
|---|---|
| **Organizational Goal** | |
| Seek truth | Seek success |
| **Organizational Strength** | |
| Establish novel products' promise or lack thereof | Take products to market |
| **Organizational Approach** | |
| Reduce risk | Maximize value |
| Maintain loyalty to the experiment | Maintain loyalty to the product |
| Focus on scientific method | Focus on commercialization |
| Operate with low fixed costs, low capital requirement | Operate with high fixed costs, high capital requirement |
| Work in small, experiment-based teams | Work in large, product-based teams |
| Emphasize testing | Emphasize refining |

### Kill or Persist?

The examples of X32 and 4AB illustrate two classes of decision-making errors that can impede traditional drug development and new-product development (NPD) in general. One type occurs when managers ignore evidence challenging their assumption that a project will succeed. There are many reasons for this sort of failure, including the power of champions to stir up collective faith in a project's promise and the human tendency to seek only evidence that supports our beliefs. Projects like X32 that survive despite multiple red flags are the outcome; some of them even reach the market, only to fail dramatically after their introduction.

The other type of error occurs when a project is terminated prematurely for lack of evidence that it could succeed. Such mistakes result from a failure to conduct the right experiments to reveal a product's potential, sometimes because of organizational or personal biases against the project or because of a shortage of resources. Halting the development of 4AB falls into this category. Indeed, some of the pharmaceutical industry's biggest blockbusters, such as Prozac, narrowly escaped cancellation due to this kind of error.

Neither class of error is unique to pharmaceutical development. The first type, ignored evidence, abounds in industries ranging from chemicals to building materials to entertainment, where new products with questionable viability – remember RCA's videodisk? – are propelled to market by a dogmatic, success-seeking mentality. (For more examples, see Isabelle Royer, "Why Bad Projects Are So Hard to Kill," HBR February 2003.) And many mature companies cancel promising projects too early for lack of adequate data. Xerox, for example, abandoned projects that went on to drive the success of Documentum and 3Com.

Any company in an industry that relies on NPD for growth must avoid both kinds of errors. This requires encouraging what may seem like contradictory instincts: a willingness to kill a product early and a willingness to persist until its potential is realized. Management consultants and portfolio theorists have offered a range of opinions on the shortcomings of NPD in large organizations, but none have managed to address how to avoid both types of decision-making errors simultaneously.

That's because most organizations promote both kinds of errors by focusing disproportionately on late-stage development; they lack the early, truth-seeking functions

**Eric Bonabeau** (eric@icosystem.com) is the chairman of Icosystem, a strategy-consulting firm in Cambridge, Massachusetts. **Neil Bodick** (nbodick@gmail.com), recently retired, was the chief operating officer of Chorus, an R&D unit devoted to early-stage development at Lilly Research Laboratories in Indianapolis. **Robert W. Armstrong** (roba@lilly.com) is the vice president of global external R&D for Lilly Research Laboratories.

whose explicit job is to head off such errors. The late-stage model – which in drug development is designed for massive pre- and postlaunch activities – imposes a rigid bureaucracy that encourages large-scale experiments, conducted to maximize the likelihood of launch. For many large companies, this approach comes naturally, because their NPD objectives, incentives, processes, and workflows are geared toward seeking success. But this makes it hard to expose the truth about risky prospects quickly and cost-effectively. Because a late-stage mind-set dominates most innovation companies, creating an early-stage organization with its own objectives, governance, and operations often requires a fundamentally new way of thinking.

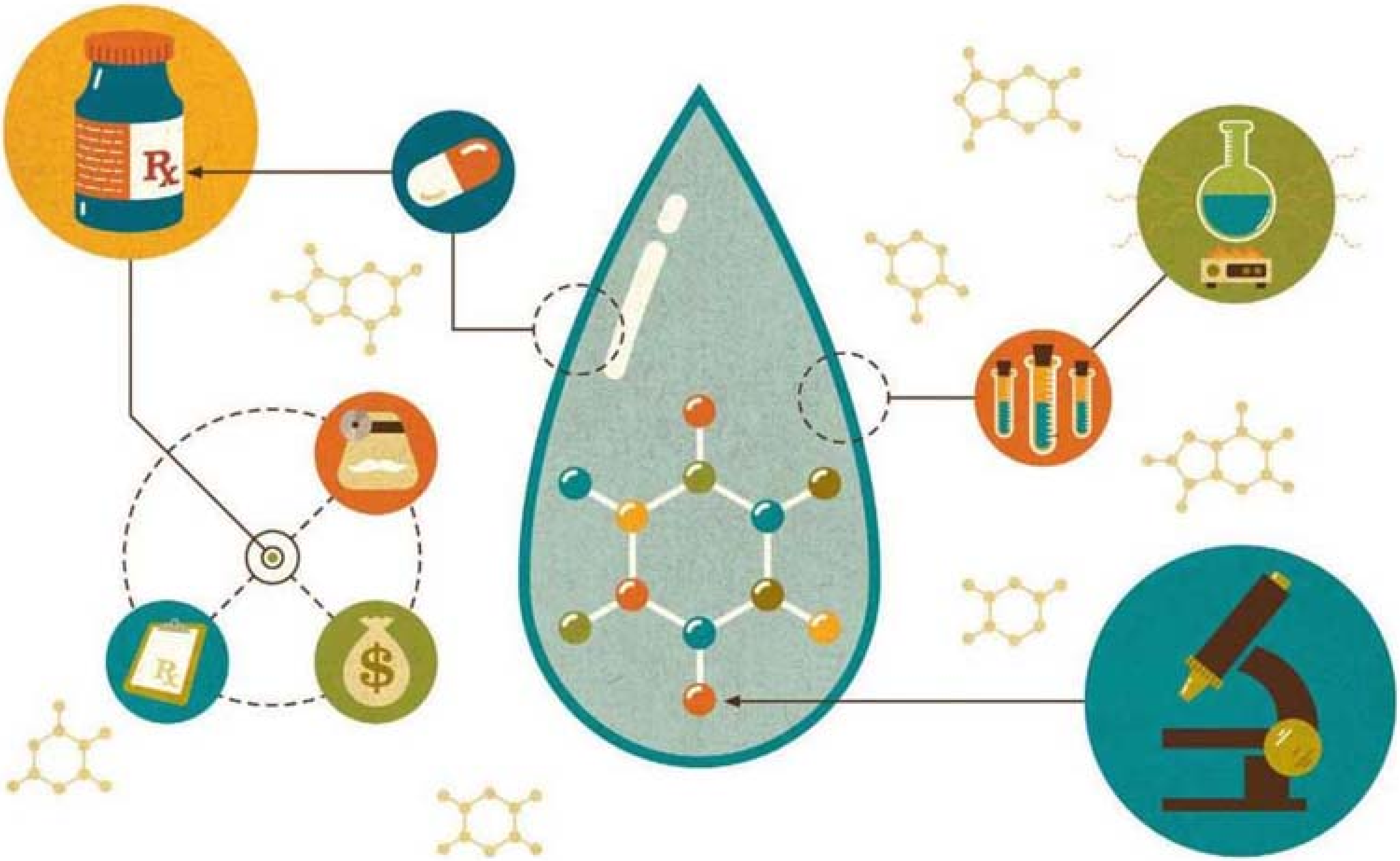
## Building an Early-Stage Organization

Chorus defines "early stage" as the work of determining proof of concept (POC) for a drug candidate. Researchers must show – in small, highly focused clinical trials – that the drug is likely to be effective and not to have obvious serious side effects. Establishing POC reduces uncertainty about the product's prospects for commercialization and measurably affects the probability of launch.

Unlike the late-stage organization's portfolio, which consists of products headed toward launch, Chorus's portfolio is made up of experiments conducted primarily to resolve uncertainty about a drug candidate's promise and thus substantially increase or decrease the probability that the candidate will launch (see the exhibit "The Two Faces of Pharmaceutical New-Product Development"). Changing this probability involves first identifying key attributes that would affect commercialization (for example, Does the drug occupy and affect its biological target? Does it show efficacy? Does it have undesirable side effects?) and then designing small experiments to establish whether these attributes exist. As data flow from the experiments, Chorus managers modify the experimental plan weekly or even daily in order to discover the intrinsic attributes of a candidate as efficiently as possible.

Because experiments are valued according to their impact in determining the probability of launch, whether they increase it is immaterial to Chorus. The staff cultivates loyalty to the experiment, not to the product. Failure, then, is not only acceptable but periodically expected and rewarded. Reducing uncertainty quickly and inexpensively is the goal that drives the Chorus process, which consists of defining what data are required to change the probability of success, designing the simplest clinical trials that will provide such data, executing the trials cost-effectively, evaluating the data objectively, and delivering a recommendation to either continue or terminate development.

Although Chorus's approach is novel, the notion of pursuing such high-yield "killer," or critical, experiments is not new. About 14 years ago, P. Roy Vagelos, then the CEO of



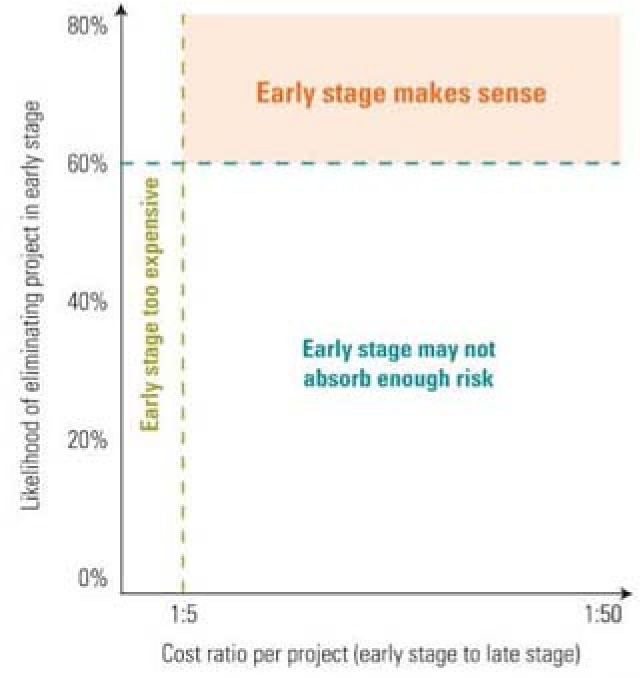
Merck, lamented the fear that such trials inspire. In an interview in *Harvard Business Review* (November–December 1994), Vagelos observed: "There is one sure road to failure that I have seen many wander down: some people become so afraid of failing that they are unable to do a critical experiment....[Merck] has missed out on some major opportunities because people were unwilling to take that truth-telling step – to conduct the experiment that would show once and for all if what they had spent so many years studying would actually produce a new drug."

Efficiency also requires avoiding large fluctuations in resource utilization, the bane of new-product development in general and early pharmaceutical development in particular. To prevent idle capacity, Chorus taps a network of 50 external experts, who advise on topics such as experimental design and drug delivery, and 75 external vendors, who provide most of the manufacturing, toxicology, and clinical work the unit requires. This frees Chorus's staff of 24 (15 of whom are senior scientists) to focus on the evidence generated by the trials. As a result, 80% of Chorus's annual expenditures are dispersed through the network; the remaining 20% are the fixed costs of running the unit. In addition to providing flexible capacity, such outsourcing reinforces truth-seeking by injecting dispassionate outside perspectives.

The considerably complex job of managing the work of vendors and outside experts with minimal in-house staff is facilitated by a suite of software tools developed for the Chorus enterprise. At the level of the portfolio, the software suite, known as Voice, tracks the impact of different experiments on probability of launch; at the level of planning, it integrates the opinions of external content experts; and at the level of operations, it organizes work according to subject area (clinical, toxicology, manufacturing, and so on) and distributes tasks and associated documents throughout the network.

## When a Separate Early Stage Makes Sense

You may be able to increase your chances of success in new-product development by dividing the process into early and late stages. In the former, the goal is to quickly eliminate poor candidates and absorb risk; in the latter, it is to increase the probability of launch. This segmented approach is a good bet for your company if 60% to 80% of candidates would be eliminated at the early stage and 70% to 90% of the rest would go on to have successful market launches – and if, per project, the early stage would cost between one-fifth and one-fiftieth as much as the late stage. (Ranges are approximate; they reflect potential for a separate early stage in most situations.)




## A Choice of Models

The Chorus model can help companies improve the efficiency of their innovation processes by establishing proof of concept early and reducing project attrition downstream, particularly in the later and more expensive phases of drug development. However, such truth seeking does have a cost: It may impede parallel processing or concurrent engineering and defer scale-up and commercialization of products that will ultimately prove successful. For example, in a Chorus experiment it is possible to use a test molecule made through an unoptomized process that would not be adequate for larger-scale trials and commercialization, but waiting until Chorus delivers a POC before starting the time- and resource-intensive optimization could delay launch and hinder commercial success. Nonetheless, the net benefit may be substantial. In large pharmaceutical firms, 80% to 90% of drug candidates that enter clinical trials will never launch; therefore, early investment in large-scale processes usually does not pay off.

While no company has replicated the Chorus approach precisely, there are examples of its principles at work in nonpharmaceutical industries. At one global chemicals company, for example, NPD suffered from both types of decision-making errors (ignoring evidence that challenged assumptions and abandoning candidates too early). To fix the problem, the company implemented carefully staged decision making, rigorous progress reviews, and strict timelines for NPD projects. But skillful project champions would invariably marshal whatever numbers and materials were needed to win support at reviews for their projects. As a result, NPD's failure rate didn't improve after the new processes were put in place. Then, recognizing the need for different mind-sets in early- and late-stage development, management altered its recruitment strategy, working with HR to identify truth-seeking personalities for the early stage and success-seeking types for the late stage. That simple change improved NPD productivity.

In another case, a global semiconductor manufacturer – realizing that its reward systems created a disincentive for killing dicey projects early – redefined its systems to promote fast, evidence-based failure (in other words, to encourage truth seeking). This company, too, experienced improvements in NPD productivity – although, as we've noted, speed to failure is only one ingredient of successful NPD.

To gauge whether a model like Chorus's would make sense in your organization, determine whether your NPD process can be rationally segmented into early-stage development, in which you absorb risk by culling poor prospects, and late-stage development, in which you maximize the probability of launch. As a rule of thumb, in a good risk-based segmentation, 20% to 40% of all assets (such as drug candidates) or projects make it to the late stage, and 70% to 90% of those end up having successful market launches. A good segmentation also yields a per-asset cost ratio of between 1:5 and 1:50. That is, moving an asset or project through the early stage costs one-fifth to one-fiftieth as much as moving it through the late stage. (See the exhibit "When a Separate Early Stage Makes Sense.")

Consider the segmentation of drug development: If the early stage comprises Phase I and early Phase II clinical trials, and the late stage is made up of late Phase II and Phase III trials (post-POC studies), then about 20% of all candidates entering early-stage development will move on to the late stage, and about 70% of those will have successful market launches. Typically, the late-stage cost per candidate is about 10 times the early-stage cost. Thus the relationship between risk absorption and cost places pharmaceutical NPD within the bounds of good segmentation. Other industries where NPD would meet the criteria for good segmentation include biotechnology and medical devices. In industries that have a higher probability of technical success at the outset – such as cell phones, software, and consumer products in general – early POC and segmentation may do little more than extend cycle times.

Companies that could benefit from an early-stage NPD unit like Chorus need to be aware that the approach is not just a form of process reengineering. They will have to create a new, separate organization that focuses on truth seeking. A small team must be selected to plan, implement, and manage that organization. The team builds the infrastructure and recruits both internal staff and consultants, who, as discussed, may bring essential expertise and objectivity to the project. Being able to ask the right questions and design the critical experiments to rule in or rule out a product's key attributes are essential skills for people in Chorus. Teams within the unit are small and fluid, composed of individuals motivated by intellectual curiosity. Each team member works on several products simultaneously, and of course, no one will follow any of the products into later stages – a rule created to promote objective truth seeking.

As the early-stage organization develops its unique capability, it will work in parallel with the established NPD operation. It offers additional capacity but does not replace existing NPD functions. The goal for any early-stage organization and, indeed, for R&D overall should be to head off costly downstream attrition of unpromising projects. Chorus offers a promising model for reducing risk and improving R&D productivity.

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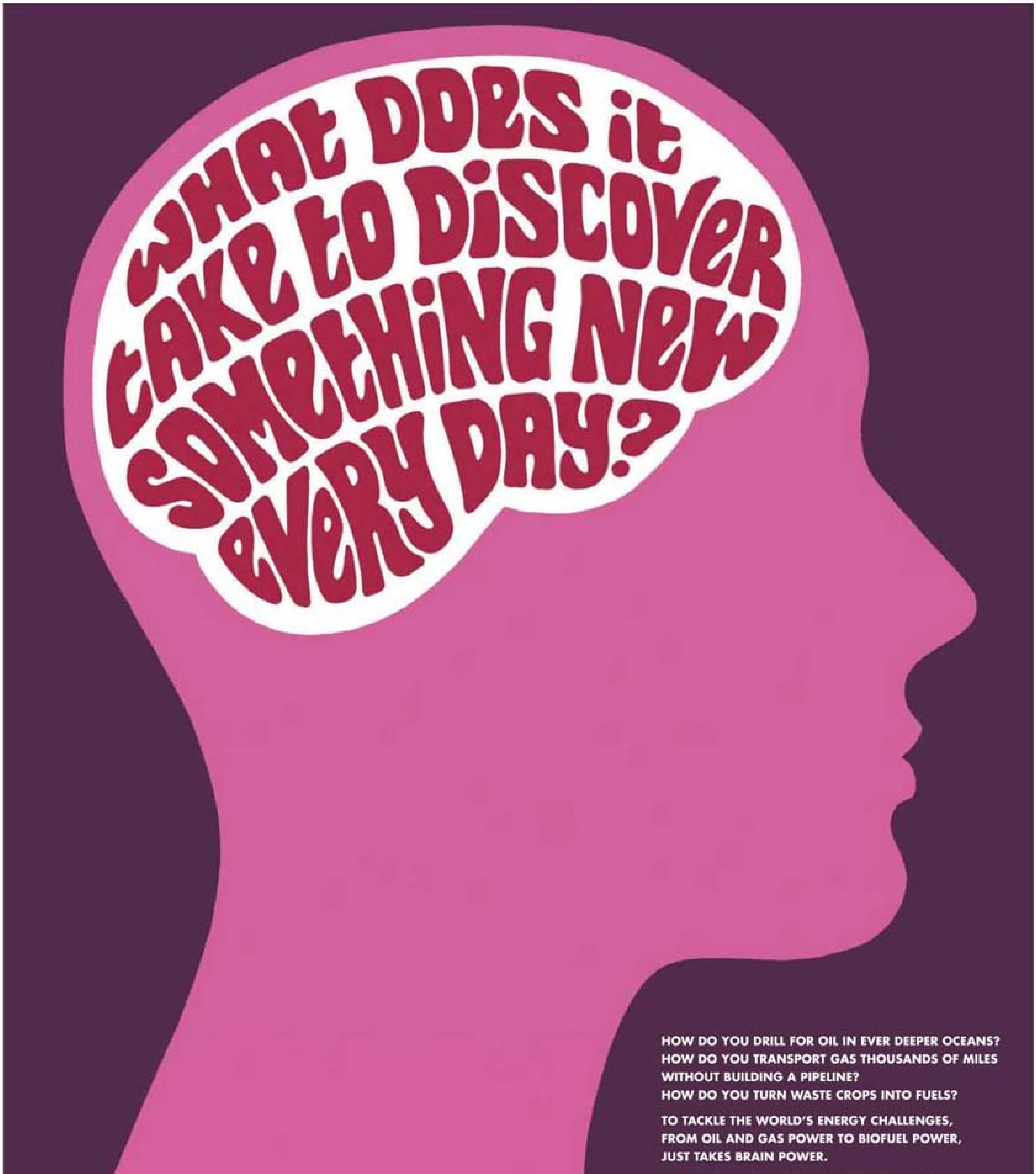
David Harbaugh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# The Good Times Continue to Roll

## Business schools adapt to meet new needs

**IN 2001,** applications to business schools and the hirings of MBA graduates were in decline, and the starting salaries of MBA graduates were stagnant. Respected authorities were decried the increasing irrelevance of business school curricula and called for fundamental changes.

But by 2005, the situation started to improve as worldwide competition for top talent heated up again. Last year, according to the Graduate Management Admission Council, the hiring of MBA graduates increased by 18 percent globally. MBA applications were up, and the average starting salary for MBA graduates had climbed above the pre-2001 levels. Meanwhile, among the leading business schools, curricular reform continues. Three ongoing trends stand out:

### Internationalization

As the call for global leadership skills intensifies, leading schools are adapting their curricula to have more of an international focus. Many schools have developed courses on how to motivate, communicate, and negotiate cross-culturally. Georgetown University's McDonough School of Business and Walsh School of Foreign Service recently joined forces with ESADE Business School in Barcelona, Spain, to create an international executive management program. Alliances such as the one between Northwestern University's Kellogg School of Management, the University of Pennsylvania's Wharton School, and the Indian School of Business, are proliferating.

At Columbia Business School, the Jerome A. Chazen Institute of International Business offers language programs and international study tours, sponsors visiting international scholars, and facilitates exchange study at nearly two dozen business schools around the world. The Global Access Program at UCLA's Anderson School of Management matches MBA students with technology companies in eight foreign countries to develop comprehensive business strategies. Business schools with a preponderance of international students and faculty are now in the spotlight. Interest in schools such as IESE Business School in Spain and INSEAD in France, most of whose students hail from outside the host country, has spiked. Ditto the UK's Durham Business School, which the *Financial Times* ranked fifth in Europe for international faculty and seventh in the world for international students last year. In the United States, the Hough Graduate School of Business at the Warrington College of Business Administration at the University of Florida was ranked first in The Economic Intelligence Unit 2007 list of the most international alumni at public institutions.

### Practical relevance

Several schools are now creating a closer connection between how business is taught and how careers are evolving. Northeastern University College of Business Administration has partnered with the 20 firms that employ most of its graduates to ensure that its courses give students the skills they'll need on the job. At Pepperdine's Graziadio School of Business and Management, students tackle marketing problems brought by companies including Raytheon, Disney, and Coca-Cola.

Other schools have hired business executives rather than academics to serve as dean. In December 2005, INSEAD hired Frank Brown, a businessman who had spent 26 years with PricewaterhouseCoopers, as its dean; London Business School did the same with former Bain Managing Partner Robin Buchanan.

### A "softer" focus

In The Upwardly Global MBA, a recent survey of more than 100 executives from more than 20 countries, almost none of the respondents emphasized a need for greater functional or technical knowledge among future recruits. Instead, they said they wanted recruits who were more thoughtful, more aware, more sensitive, more flexible—in short, people with the soft skills to effectively act upon the knowledge they have.

Most business schools have responded by placing greater emphasis on leadership skills. The Institute for Leadership Advancement at the University of Georgia's Terry College of Business, for example, offers undergraduate, MBA, and executive-education programs that help participants hone their personal leadership styles and improve their group skills. The Sovereign Institute for Strategic Leadership at Drexel University's LeBow College of Business makes use of real-world scenarios to help executives learn not only how to lead in times of accelerating change but also how to effect transformational change.

The University of Toronto's Rotman School of Management has established the Desautels Centre for Integrative Thinking, which seeks to develop managers who can hold in their heads two opposing ideas at once and then come up with a new idea that contains elements of each but is superior to both. As Rotman Dean Roger Martin argues in his new book, *The Opposable Mind,* it is this process of consideration and synthesis—not superior strategy or faultless execution—that is the hallmark of exceptional businesses and the people who run them. Other schools, such as Stanford's Graduate School of Business and Harvard Business School, are fostering a stronger cross-enterprise perspective and a more integrated approach to problem-solving by replacing first-year functional courses such as marketing, strategy, and accounting with courses that emphasize multidisciplinary themes such as customers, competitors, and business and society.

There has also been a rapid increase in corporate responsibility, environmental sustainability, and social entrepreneurship courses. Stanford's Graduate School of Business and Berkeley's Haas School of Business remain at the forefront of schools offering courses devoted to sustainability and social and environmental entrepreneurship. Last year, the MIT Sloan School of Management introduced the S-Lab, a project-based course that enables teams of students to work with local and international businesses, NGOs, and nonprofits to devise environmentally sustainable business models.

To augment the development of environmental economics courses, researchers at Duke's Fuqua School of Business, Harvard Business School, and Dartmouth's Tuck School of Business Administration recently unveiled MapEcos.org, a Web site that uses advanced mapping tools to provide a balanced view of the environmental performance of more than 20,000 industrial facilities in the United States.

Other schools are widening their focus to include the managerial challenges implicit in public-sector leadership. Kellogg's Center for Nonprofit Management recently launched two executive programs geared specifically toward education leaders. The University of Virginia's Darden School of Business and Curry School of Education have been running a similar partnership since 2003.

Five years ago, some experts were wondering whether business schools were on the road to extinction. Today they seem more relevant than ever. ◆

# Is Yours a Learning Organization?

Using this assessment tool, companies can pinpoint areas where they need to foster knowledge sharing, idea development, learning from mistakes, and holistic thinking.

**by David A. Garvin, Amy C. Edmondson, and Francesca Gino**

LEADERS MAY THINK that getting their organizations to learn is only a matter of articulating a clear vision, giving employees the right incentives, and providing lots of training. This assumption is not merely flawed – it's risky in the face of intensifying competition, advances in technology, and shifts in customer preferences.

Organizations need to learn more than ever as they confront these mounting forces. Each company must become a *learning organization.* The concept is not a new one. It flourished in the 1990s, stimulated by Peter M. Senge's *The Fifth Discipline* and countless other publications, workshops, and websites. The result was a compelling vision of an organization made up of employees skilled at creating, acquiring, and transferring knowledge. These people could help their firms cultivate tolerance, foster open discussion, and think holistically and systemically. Such learning organizations would be able to adapt to the unpredictable more quickly than their competitors could.

Daniel Chang

Unpredictability is very much still with us. However, the ideal of the learning organization has not yet been realized. Three factors have impeded progress. First, many of the early discussions about learning organizations were paeans to a better world rather than concrete prescriptions. They overemphasized the forest and paid little attention to the trees. As a result, the associated recommendations proved difficult to implement – managers could not identify the sequence of steps necessary for moving forward. Second, the concept was aimed at CEOs and senior executives rather than at managers of smaller departments and units where critical organizational work is done. Those managers had no way of assessing how their teams' learning was contributing to the organization as a whole. Third, standards and tools for assessment were lacking. Without these, companies could declare victory prematurely or claim progress without delving into the particulars or comparing themselves accurately with others.

In this article, we address these deficiencies by presenting a comprehensive, concrete survey instrument for assessing learning within an organization. Built from the ground up, our tool measures the learning that occurs in a department, office, project, or division – an organizational unit of any size that has meaningful shared or overlapping work activities. Our instrument enables your company to compare itself against benchmark scores gathered from other firms; to make assessments across areas within the organization (how, for, example, do different groups learn relative to one another?); and to look deeply within individual units. In each case, the power is in the comparisons, not in the absolute scores. You may find that an area your organization thought was a strength is actually less robust than at other organizations. In effect, the tool gives you a broader, more grounded view of how well your company learns and how adeptly it refines its strategies and processes. Each organization, and each unit within it, needs that breadth of perspective to accurately measure its learning against that of its peers.

**Supportive learning environments allow time for a pause in the action and encourage thoughtful review of the organization's processes.**

**Article at a Glance**

A learning organization is a place where employees excel at creating, acquiring, and transferring knowledge. There are three building blocks of such institutions: (1) a supportive learning environment, (2) concrete learning processes and practices, and (3) leadership behavior that reinforces learning.

The online tool presented here can help you assess the depth of learning in your organization and its individual units. The power of the instrument lies in the comparisons it allows users to make – within and among an institution's functional areas, between organizations, and against established benchmarks.

Exploring how well your company learns relative to others reveals both the multidimensionality of the organizational learning process and the specific areas where your company needs to improve.

## Building Blocks of the Learning Organization

Organizational research over the past two decades has revealed three broad factors that are essential for organizational learning and adaptability: a supportive learning environment, concrete learning processes and practices, and leadership behavior that provides reinforcement. We refer to these as the *building blocks of the learning organization.* Each block and its discrete subcomponents, though vital to the whole, are independent and can be measured separately. This degree of granular analysis has not been previously available.

Our tool is structured around the three building blocks and allows companies to measure their learning proficiencies in great detail. As you shall see, organizations do not perform consistently across the three blocks, nor across the various subcategories and subcomponents. That fact suggests that different mechanisms are at work in each building-block area and that improving performance in each is likely to require distinct supporting activities. Companies, and units within them, will need to address their particular strengths and weaknesses to equip themselves for long-term learning. Because all three building blocks are generic enough for managers and firms of all types to assess, our tool permits organizations and units to slice and dice the data in ways that are uniquely useful to them. They can develop profiles of their distinctive approaches to learning and then compare themselves with a benchmark group of respondents. To reveal the value of all these comparisons, let's look in depth at each of the building blocks of a learning organization.

**David A. Garvin** (dgarvin@hbs.edu) is the C. Roland Christensen Professor of Business Administration and the chair of the Teaching and Learning Center, and **Amy C. Edmondson** (aedmondson@hbs.edu) is the Novartis Professor of Leadership and Management and the chair of the doctoral programs, at Harvard Business School in Boston. **Francesca Gino** (fgino@andrew.cmu.edu) is a visiting assistant professor of organizational behavior and theory at Carnegie Mellon University in Pittsburgh.

**BUILDING BLOCK 1: A supportive learning environment.** An environment that supports learning has four distinguishing characteristics.

*Psychological safety.* To learn, employees cannot fear being belittled or marginalized when they disagree with peers or authority figures, ask naive questions, own up to mistakes, or present a minority viewpoint. Instead, they must be comfortable expressing their thoughts about the work at hand.

*Appreciation of differences.* Learning occurs when people become aware of opposing ideas. Recognizing the value of competing functional outlooks and alternative worldviews increases energy and motivation, sparks fresh thinking, and prevents lethargy and drift.

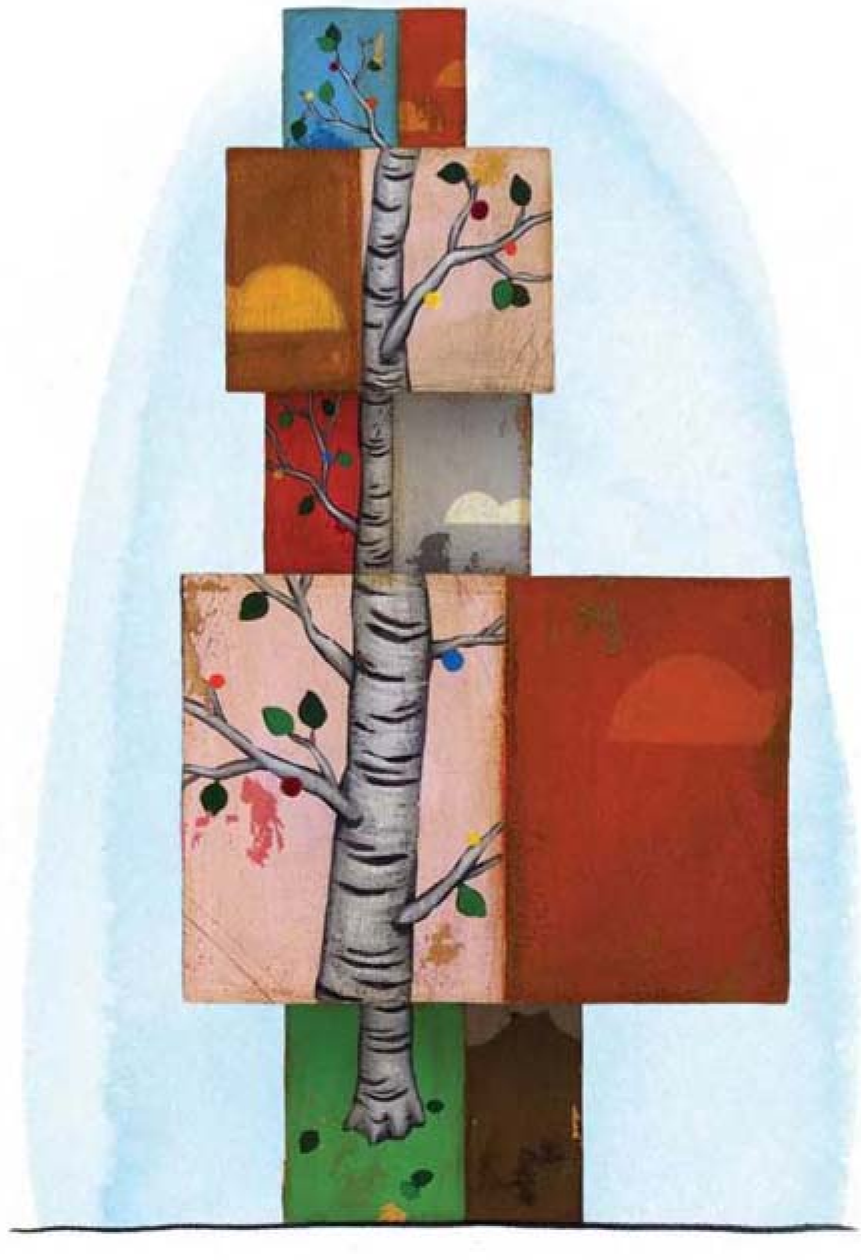
*Openness to new ideas.* Learning is not simply about correcting mistakes and solving problems. It is also about crafting novel approaches. Employees should be encouraged to take risks and explore the untested and unknown.

*Time for reflection.* All too many managers are judged by the sheer number of hours they work and the tasks they accomplish. When people are too busy or overstressed by deadlines and scheduling pressures, however, their ability to think analytically and creatively is compromised. They become less able to diagnose problems and learn from their experiences. Supportive learning environments allow time for a pause in the action and encourage thoughtful review of the organization's processes.

To change a culture of blame and silence about errors at Children's Hospitals and Clinics of Minnesota, COO Julie Morath instituted a new policy of "blameless reporting" that encouraged replacing threatening terms such as "errors" and "investigations" with less emotionally laden terms such as "accidents" and "analysis." For Morath, the culture of hospitals must be, as she told us, "one of everyone working together to understand safety, identify risks, and report them with out fear of blame." The result was that people started to collaborate throughout the organization to talk about and change behaviors, policies, and systems that put patients at risk. Over time, these learning activities yielded measurable reductions in preventable deaths and illnesses at the institution.

**BUILDING BLOCK 2: Concrete learning processes and practices.** A learning organization is not cultivated effortlessly. It arises from a series of concrete steps and widely distributed activities, not unlike the workings of business processes such as logistics, billing, order fulfillment, and product development. Learning processes involve the generation, collection, interpretation, and dissemination of information. They include experimentation to develop and test new products and services; intelligence gathering to keep track of competitive, customer, and technological trends; disciplined analysis and interpretation to identify and solve problems; and education and training to develop both new and established employees.

For maximum impact, knowledge must be shared in systematic and



clearly defined ways. Sharing can take place among individuals, groups, or whole organizations. Knowledge can move laterally or vertically within a firm. The knowledge-sharing process can, for instance, be internally focused, with an eye toward taking corrective action. Right after a project is completed, the process might call for post-audits or reviews that are then shared with others engaged in similar tasks. Alternatively, knowledge sharing can be externally oriented – for instance, it might include regularly scheduled forums with customers or subject-matter experts to gain their perspectives on the company's activities or challenges. Together, these concrete processes ensure that essential information moves quickly and efficiently into the hands and heads of those who need it.

Perhaps the best known example of this approach is the U.S. Army's After Action Review (AAR) process, now widely used by many companies, which involves a systematic debriefing after every mission, project, or critical activity. This process is framed by four simple questions: What did we set out to do? What actually happened? Why did it happen? What do we do next time? (Which activities do we sustain, and which do we improve?) In the army, lessons move quickly up and down the chain of command, and laterally through sanctioned websites. Then the results are codified by the Center for Army Lessons Learned, or CALL. Such dissemination and codification of learning is vital for any organization.

**BUILDING BLOCK 3: Leadership that reinforces learning.** Organizational learning is strongly influenced by the behavior of leaders. When leaders actively question and listen to em-

## Assess the Depth of Learning in Your Organization

This diagnostic survey, which you take online, is designed to help you determine how well your company functions as a learning organization. The complete interactive version, available at los.hbs.edu, includes all the self-assessment statements to the right; they are divided into three sections, each representing one building block of the learning organization. In the first two blocks, your task is to rate, on a seven-point scale, how accurately each statement describes the organizational unit in which you work. In the third block, your task is to rate how often the managers (or manager) to whom you report exemplify the behavior described.

Dynamic scoring online synthesizes your ratings (some are reverse-scored because they reflect undesirable behaviors) and yields an estimated score for each building block and subcomponent. Synthesized scores are then converted to a zero-to-100 scale for ease of comparison with other people in your unit and other units in your organization. In addition, you can compare your scores with benchmark data that appear in the table on page 114.

HBR.ORG Visit **learning.tools.hbr.org** for a short version of this survey and for recommended lists of learning resources that are tailored to your results. For the complete interactive tool, including scoring, go to **los.hbs.edu**.

BUILDING BLOCK 1

### Supportive Learning Environment

**Psychological Safety**

In this unit, it is easy to speak up about what is on your mind.

If you make a mistake in this unit, it is often held against you.*

People in this unit are usually comfortable talking about problems and disagreements.

People in this unit are eager to share information about what does and doesn't work.

Keeping your cards close to your vest is the best way to get ahead in this unit.*

**Appreciation of Differences**

Differences in opinion are welcome in this unit.

Unless an opinion is consistent with what most people in this unit believe, it won't be valued.*

This unit tends to handle differences of opinion privately or off-line, rather than addressing them directly with the group.*

In this unit, people are open to alternative ways of getting work done.

**Openness to New Ideas**

In this unit, people value new ideas.

Unless an idea has been around for a long time, no one in this unit wants to hear it.*

In this unit, people are interested in better ways of doing things.

In this unit, people often resist untried approaches.*

**Time for Reflection**

People in this unit are overly stressed.*

Despite the workload, people in this unit find time to review how the work is going.

In this unit, schedule pressure gets in the way of doing a good job.*

In this unit, people are too busy to invest time in improvement.*

There is simply no time for reflection in this unit.*

ployees – and thereby prompt dialogue and debate – people in the institution feel encouraged to learn. If leaders signal the importance of spending time on problem identification, knowledge transfer, and reflective post-audits, these activities are likely to flourish. When people in power demonstrate through their own behavior a willingness to entertain alternative points of view, employees feel emboldened to offer new ideas and options.

Harvey Golub, former chief executive of American Express, was renowned for his ability to teach employees and managers. He pushed hard for active reasoning and forced managers to think creatively and in unexpected ways. A subordinate observed that he often "came at things from a different angle" to ensure that conventional approaches were not accepted without first being scrutinized. "I am far less interested in people having the right answer than in their thinking about issues the right way," Golub told us. "What criteria do they use? Why do they think the way they do? What alternatives have they considered? What premises do they have? What rocks are they standing on?" His questions were not designed to yield particular answers, but rather to generate truly open-minded discussion.

The three building blocks of organizational learning reinforce one another and, to some degree, overlap. Just as leadership behaviors help create and sustain supportive learning environments, such environments make it easier for managers and employees to execute concrete learning processes and practices smoothly and efficiently. Continuing the virtuous circle, concrete processes provide opportunities

BUILDING BLOCK 2

## Concrete Learning Processes and Practices

### Experimentation

This unit experiments frequently with new ways of working.

This unit experiments frequently with new product or service offerings.

This unit has a formal process for conducting and evaluating experiments or new ideas.

This unit frequently employs prototypes or simulations when trying out new ideas.

### Information Collection

This unit systematically collects information on

- competitors
- economic and social trends
- customers
- technological trends

This unit frequently compares its performance with that of

- competitors
- best-in-class organizations

### Analysis

This unit engages in productive conflict and debate during discussions.

This unit seeks out dissenting views during discussions.

This unit never revisits well-established perspectives during discussions.*

This unit frequently identifies and discusses underlying assumptions that might affect key decisions.

This unit never pays attention to different views during discussions.*

### Education and Training

Newly hired employees in this unit receive adequate training.

Experienced employees in this unit receive

- periodic training and training updates
- training when switching to a new position
- training when new initiatives are launched

In this unit, training is valued.

In this unit, time is made available for education and training activities.

### Information Transfer

This unit has forums for meeting with and learning from

- experts from other departments, teams, or divisions
- experts from outside the organization
- customers and clients
- suppliers

This unit regularly shares information with networks of experts within the organization.

This unit regularly shares information with networks of experts outside the organization.

This unit quickly and accurately communicates new knowledge to key decision makers.

This unit regularly conducts post-audits and after-action reviews.

BUILDING BLOCK 3

## Leadership That Reinforces Learning

My managers invite input from others in discussions.

My managers acknowledge their own limitations with respect to knowledge, information, or expertise.

My managers ask probing questions.

My managers listen attentively.

My managers encourage multiple points of view.

My managers provide time, resources, and venues for identifying problems and organizational challenges.

My managers provide time, resources, and venues for reflecting and improving on past performance.

My managers criticize views different from their own.*

* Reverse-scored items

for leaders to behave in ways that foster learning and to cultivate that behavior in others.

### Uses for the Organizational Learning Tool

Our online diagnostic tool is designed to help you answer two questions about the organizational unit that you lead or in which you work: "To what extent is your unit functioning as a learning organization?" and "What are the relationships among the factors that affect learning in your unit?" People who complete the survey rate how accurately a series of brief, descriptive sentences in each of the three building blocks of learning describe their organization and its learning culture. For the list of statements in the complete survey, information about where to find it online, and details about how it works, see the exhibit "Assess the Depth of Learning in Your Organization."

There are two primary ways to use the survey. First, an individual can take it to get a quick sense of her work unit or project team. Second, several members of a unit can each complete the survey and average their scores. Either way, the next step is to compare individual or group self-evaluations with overall benchmark scores from our baseline group of organizations. The benchmark data are stratified into quartiles – that is, the bottom 25%, the next 25%, and so on – for each attribute, arrayed around a median (see the exhibit "Benchmark Scores for the Learning Organization Survey"). Once you have obtained your own scores online, you can identify the quartile in which your scores fall and reflect on how they match your prior expectations about where you stand.

Having compared individual or unit scores with the benchmarks, it's possible to identify areas of excellence and opportunities for improvement. If employees in multiple units wish to take the survey, you can also make the comparisons unit-by-unit or companywide. Even if just two people from different

## Benchmark Scores for the Learning Organization Survey

Our baseline data were derived from surveys of large groups of senior executives in a variety of industries who completed an eight-week general management program at Harvard Business School. We first conducted the survey in the spring of 2006 with 100 executives in order to evaluate the statistical properties of the survey and assess the underlying constructs. That autumn we surveyed another 125 senior executives to use as our benchmark data.

After you've taken the complete survey at los.hbs.edu, compare the average scores for people in your group with the benchmark scores in the following chart. If your group's scores fall at or below the median in a particular building block or subcomponent – especially if they are in the bottom quartile – consider initiating an improvement effort in that area. One possibility is to assemble a team to brainstorm specific, concrete strategies for enhancing the area of weakness. In any building block or subcomponent where your group's scores fall above the median – especially if they are in the top quartile – consider partnering with other units in your organization that may benefit from specific, concrete strategies that you can articulate and model for them in the area of weakness.

| | Scaled Scores | | | | |
|---|---|---|---|---|---|
| Building Blocks and Their Subcomponents | Bottom quartile | Second quartile | Median | Third quartile | Top quartile |
| **Supportive Learning Environment** | | | | | |
| • Psychological safety | 31–66 | 67–75 | 76 | 77–86 | 87–100 |
| • Appreciation of differences | 14–56 | 57–63 | 64 | 65–79 | 80–100 |
| • Openness to new ideas | 38–80 | 81–89 | 90 | 91–95 | 96–100 |
| • Time for reflection | 14–35 | 36–49 | 50 | 51–64 | 65–100 |
| Learning environment composite | 31–61 | 62–70 | 71 | 72–79 | 80–90 |
| **Concrete Learning Processes and Practices** | | | | | |
| • Experimentation | 18–53 | 54–70 | 71 | 72–82 | 83–100 |
| • Information collection | 23–70 | 71–79 | 80 | 81–89 | 90–100 |
| • Analysis | 19–56 | 57–70 | 71 | 72–86 | 87–100 |
| • Education and training | 26–68 | 69–79 | 80 | 81–89 | 90–100 |
| • Information transfer | 34–60 | 61–70 | 71 | 72–84 | 85–100 |
| Learning processes composite | 31–62 | 63–73 | 74 | 75–82 | 83–97 |
| **Leadership That Reinforces Learning** | | | | | |
| Composite for this block | 33–66 | 67–75 | 76 | 77–82 | 83–100 |

Note: The scaled scores for learning environment and learning processes were computed by multiplying each raw score on the seven-point scale by 100 and dividing it by seven. For learning leadership, which was based on a five-point scale, the divisor was five.

parts of a firm compare scores, they can pinpoint cultural differences, commonalities, and things to learn from one another. They may also discover that their unit – or even the company – lags behind in many areas. By pooling individual and unit scores, organizations as a whole can begin to address specific problems.

### Holding Up the Mirror at Eutilize

Consider how managers from a major European public utility, which we will call Eutilize, used the survey to assess their company's readiness for and progress in becoming a learning organization. In the summer of 2006, 19 midlevel managers took the survey. Before learning their scores, participants were asked to estimate where they thought Eutilize would stand in relation to the benchmark results from other firms.

Virtually all the participants predicted average or better scores, in keeping with the company's espoused goal of using knowledge and best-practice transfers as a source of competitive advantage. But the results did not validate those predictions. To their great surprise, Eutilize's managers rated themselves below the median baseline scores in almost all categories. For example, out of a possible scaled score of 100, they had 68 on leadership, compared with the median benchmark score of 76. Similarly, they scored 58 on concrete learning processes (versus the median benchmark of 74) and 62 on supportive learning environment (versus the median of 71). These results revealed to the Eutilize managers that integrating systematic learning practices into their organization would take considerable work. However, the poorest-scoring measures, such as experimentation and time for reflection, were common to both Eutilize and the baseline organizations. So Eutilize was not unusual in where it needed to improve, just in how much.

The portrait that emerged was not unexpected for a public utility that had long enjoyed monopolies in a small number of markets and that only recently had established units in other geographic areas. Eutilize's scores in the bottom quartile on openness to new ideas, experimentation, conflict and debate, and information transfer were evidence that changing the company's established culture would be a long haul.

Eutilize's managers also discovered the degree to which their mental models about their own ways of working were inaccurate. For example, they learned that many people in their firm believed that "analysis" was an area of strength for Eutilize, but they interpreted analysis to be merely number crunching. The survey results helped them to understand the term analysis more broadly – to think about the degree to which people test assumptions, engage in productive debate, and seek out dissenting views. Each of those areas was actually a weakness in the firm. This revelation led Eutilize's managers to understand that without a more open environment buttressed by the right processes and leadership, the company would have difficulty implementing a new strategy it had just adopted.

Eutilize's experience illustrates how our organizational learning tool prompts reflective discussion among managers about their leadership and organizational practices. Without concrete data, such reflection can become abstract and susceptible to idiosyncratic assessments and often emotional disagreements about the current state of affairs. With the survey data in hand, managers had a starting point for discussion, and participants were able to point to specific behaviors, practices, or events that might explain both high and low scores. The results also helped Eutilize's managers to identify the areas where their firm needed special attention.

Given that the survey-based scores derive from perceptions, the best use of the data at Eutilize was, as it would be at any company, to initiate conversation and self-reflection, not to be the sole basis for decision making. Discussions had to be conducted with a healthy balance of what scholars call "advocacy and inquiry." The communication allowed people the latitude to assert their personal observations and preferred suggestions for action, but it also ensured that everyone took the time to carefully consider viewpoints that were not their own. In addition, managers learned the importance of using concrete examples to illustrate interpretations, to refer to specific practices or processes, and to clarify observations. Finally, the participants from Eutilize identified specific actions to be taken. Had they not done so, the discussions could have deteriorated into unproductive complaint sessions.

**When leaders demonstrate a willingness to entertain alternative points of view, employees feel emboldened to offer new ideas.**

### Moving Forward: Four Principles

Our experiences developing, testing, and using this survey have provided us with several additional insights for managers who seek to cultivate learning organizations.

**Leadership alone is insufficient.** By modeling desired behaviors – open-minded questioning, thoughtful listening, consideration of multiple options, and acceptance of opposing points of view – leaders are indeed likely to foster greater learning. However, learning-oriented leadership behaviors alone are not enough. The cultural and process dimensions of learning appear to require more explicit, targeted interventions. We studied dozens of organizations in depth when developing our survey questions and then used the instrument with four firms that had diverse sizes, locations, and missions. All four had higher scores in learning leadership than in concrete learning processes or supportive learning environment. Performance often varies from category to category. This suggests that installing formal learning processes and cultivating a supportive learning climate requires steps beyond simply modifying leadership behavior.

**Organizations are not monolithic.** Managers must be sensitive to differences among departmental processes and behaviors as they strive to build learning organizations. Groups may vary in their focus or learning maturity. Managers need to be especially sensitive to local cultures of learning, which can vary widely across units. For example, an early study of medical errors documented significant differences in rates of reported mistakes among nursing units at the same hospital, reflecting variations in norms and behaviors established by unit managers. In most settings, a one-size-fits-all strategy for building a learning organization is unlikely to be successful.

**Comparative performance is the critical scorecard.** Simply because an organization scores itself highly in a certain area of learning behavior or processes does not make that area a source of competitive advantage. Surprisingly, most of the organizations we surveyed identified the very same domains as their areas of strength. "Openness to new ideas" and "education and training" almost universally scored higher than other attributes or categories, probably because of their obvious links to organizational improvement and personal development. A high score therefore conveys limited information about performance. The most important scores on critical learning attributes are relative – how your organization compares with competitors or benchmark data.

**Learning is multidimensional.** All too often, companies' efforts to improve learning are concentrated in a single area – more time for reflection, perhaps, or greater use of post-audits and after-action reviews. Our analysis suggests, however, that each of the building blocks of a learning organization (environment, processes, and leadership behaviors) is itself multidimensional and that those elements respond to different forces. You can enhance learning in an organization in various ways, depending on which subcomponent you emphasize – for example, when it comes to improving the learning environment, one company might want to focus on psychological safety and another on time for reflection. Managers need to be thoughtful when selecting the levers of change and should think broadly about the available options. Our survey opens up the menu of possibilities.

**Managers need to be especially sensitive to local cultures of learning, which can vary widely across units.**

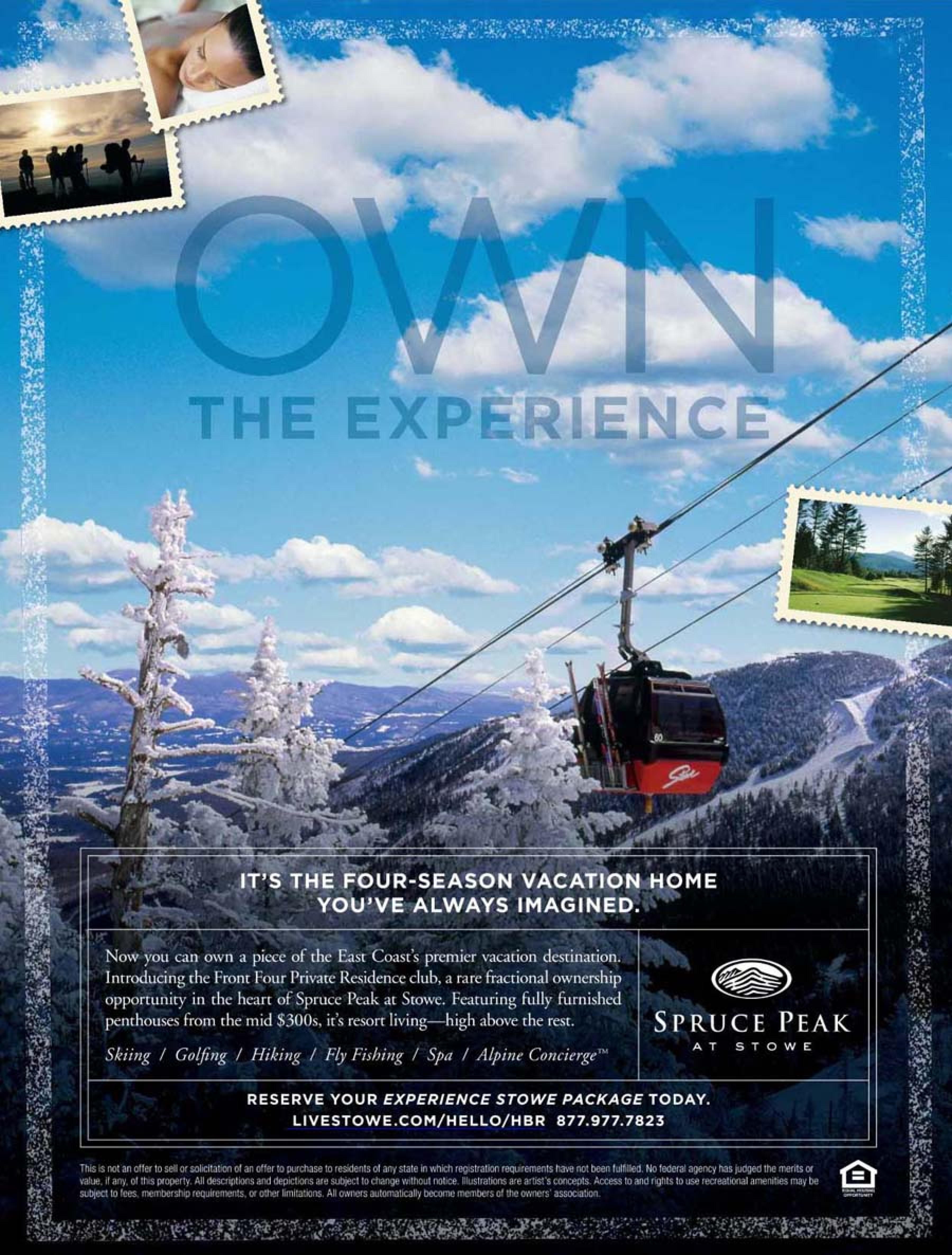
...

The goal of our organizational learning tool is to promote dialogue, not critique. All the organizations we studied found that reviewing their survey scores was a chance to look into a mirror. The most productive discussions were those where managers wrestled with the implications of their scores, especially the comparative dimensions (differences by level, subunit, and so forth), instead of simply assessing performance harshly or favorably. These managers sought to understand their organizations' strengths and weaknesses and to paint an honest picture of their cultures and leadership. Not surprisingly, we believe that the learning organization survey is best used not merely as a report card or bottom-line score but rather as a diagnostic instrument – in other words, as a tool to foster learning.

Reprint R0803H
To order, see page 135.

"OK, if we could just work through this without the whistling."

Patrick Hardin



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# Radically Simple IT

By designing and deploying enterprise systems in a different way, Japan's Shinsei Bank turned IT from a constraint into a launchpad for growth.

**by David M. Upton and Bradley R. Staats**

Enterprise IT projects – both custom and packaged "one size fits most" systems – continue to be a major headache for business leaders. The fundamental problem with these systems is that for the most part, they're constructed using what programmer and open source champion Eric Raymond dubbed a cathedral approach. Like the great edifices that Europeans erected in the Middle Ages, enterprise IT projects are costly, take a great deal of time, and deliver value only when the project is completed. In the end, they yield systems that are inflexible and cement companies into functioning the way their businesses worked several years ago, when the project started. Despite recent improvements in the flexibility of packaged software, companies often find it exorbitantly expensive and difficult to modify their enterprise systems in order to exploit new business opportunities.

Lasse Skarbövik

Instead of building systems that are legacy from the day they are turned on, managers can and should develop systems that can be improved – rapidly and continuously – well after they've gone live. Over the past decade, we've studied the design and implementation of enterprise IT systems and assisted numerous firms with the process. Through our work, we have identified an approach that not only reduces a company's costs but supports the growth of existing businesses and the launch of new ones. We call it a "path based" approach, because rather than attempting to define all of the specifications for a system before the project is launched, companies focus on providing a path for the system to be developed over time. The approach's premises are that it is difficult and costly to map out all requirements before a project starts because people often cannot specify everything they'll need beforehand. Also, unanticipated needs almost always arise once a system is in operation. And persuading people to use and "own" the system after it is up and running is much easier said than done.

In our research, we discovered a standout among the companies applying the path-based method: Japan's Shinsei Bank. It succeeded in developing and deploying an entirely new enterprise system in one year at a cost of $55 million: That's one-quarter of the time and about 10% of the cost of installing a traditional packaged system. The new system not only served as a low-cost, efficient platform for running the existing business but also was flexible enough to support the company's growth into new areas, including retail banking, consumer finance, and a joint venture to sell Indian mutual funds in Japan.

The path-based principles that Shinsei applied in designing, building, and rolling out the system – forging together, not just aligning, business and IT strategies; employing the simplest possible technology; making the system truly modular; letting the system sell itself to users; and enabling users to influence future improvements – are a model for other companies. Some of these principles are variations on old themes while others turn the conventional wisdom on its head.

## Born of Necessity

Shinsei came into being when Long-Term Credit Bank, founded by the Japanese government to assist in the rebuilding of the country's industries after World War II, went bust in 1998 with nearly $40 billion in nonperforming loans. The firm was nationalized, then sold in 2000 to Ripplewood Holdings, a U.S. private equity fund, and renamed Shinsei, which means "new birth." Ripplewood executives coaxed Masamoto Yashiro, the former chairman of Citibank Japan, out of retirement to lead Shinsei. In addition to deciding to revamp existing commercial-banking operations, Yashiro formulated a plan for revolutionizing retail banking in Japan by offering a value proposition that was unique in the country at that time: high-quality products and services provided on a convenient, easy-to-use, low-cost basis. The strategy called for Shinsei to offer services that were then uncommon in Japan, including ATMs available 24/7 free of charge, internet banking, online foreign-exchange trading, online bilingual banking, and quick service supported by real-time database reconciliation (meaning customers' accounts were updated immediately after each transaction).

Yashiro felt that the bank needed to move quickly to seize the opportunity in retail banking. However, the firm's existing IT systems were antiquated and could not even support the bank's existing corporate business adequately. To address these issues, Yashiro hired his former colleague Dhananjaya "Jay" Dvivedi, who had led IT operations at Citibank Japan, to be chief information officer. Upon taking the job, Dvivedi quickly surrounded himself with a talented core team, most of whom had worked for him previously. Since the recovering bank had limited investment funds, Yashiro gave Dvivedi the mandate to revolutionize IT but with the understanding that his team needed to do it "fast" and "cheap." Recognizing that they could not fully know what the retail operation would need, the two men agreed that the goal should be to build a system that could scale with growth and adapt to new opportunities that the dynamic business would create.

The conventional choices for building a major enterprise system were two: the "big bang" approach of replacing the current system with an entirely new system and processes all at once or the incremental method of improving or replacing the existing system one small piece at a time. Dvivedi and his team were leery of taking the big bang route, believing it was too risky given the

**Article at a Glance**

Japan's Shinsei Bank used a path-based approach to build an enterprise IT system that would provide a low-cost, efficient platform for running its existing business but was flexible enough to support the company's growth into new areas.

The approach addresses the three main challenges of an IT project: It is difficult and costly to map out all requirements before a project starts because people often cannot specify everything they'll need beforehand. Unanticipated needs almost always arise once a system is in use. And persuading people to adopt and "own" the system after it is in operation is much easier said than done.

The path-based principles that Shinsei applied in designing, building, and rolling out the system – forging together, not just aligning, business and IT strategies; employing the simplest possible technology; making the system truly modular; letting the system sell itself to users; and enabling users to influence future improvements – are a model for other companies.

bank's cash constraints and knowing all too well the problems endemic to such projects. The incremental course, however, which would probably take three to five years, would be far too slow. So they decided to blaze a third path. They would put into place a new, modular infrastructure that at first would function in parallel with but eventually would supersede the current infrastructure. According to traditional IT thinking, this was madness. Much bridging software would have to be developed to span the old and the new, which would require an enormous effort.

But Dvivedi knew from his prior work and his conversations with other CIOs that technical problems were almost never the reason that new IT systems flopped. Human problems were. People typically resist adopting new systems, often because the cost (the effort) outweighs the benefits. To address this, Dvivedi used simple but innovative technology solutions to avoid the wrenching go-live experience. For example, by mimicking the old system's look and feel at least for a while, Dvivedi and his team were able to speed adoption of the new system.

While the retail unit has yet to break solidly into the black (due to the expenditures required to build the business and Japan's difficult economic and regulatory environment), the new enterprise IT system was instrumental in helping Shinsei quickly become a significant player in the retail banking market in Japan. By June 30, 2007, Shinsei had more than 2 million retail customers, up from fewer than 50,000 in 2001, when its retail business was limited to wealthy clients. *The Asian Banker Journal* named Shinsei the best retail bank in Japan in 2004 and 2005, and *Nihon Keizai Shimbun,* one of Japan's most influential business newspapers, proclaimed Shinsei to be number one in customer satisfaction among banks in Japan in 2004, 2005, and 2006.

Let's take a closer look at Shinsei's path-based approach.

## Don't Just Align Business and IT Strategies – Forge Them Together

The notion that business strategy and IT strategy should be aligned and, therefore, that business users should be involved in the design of enterprise systems has been widely accepted. However, doing this has proven fiendishly difficult, for several reasons. For one thing, IT leaders struggle to truly understand the business context. What's more, business leaders do not invest the time required to appreciate the power and the challenges of technology and tend to treat the IT staff as second-class service providers. Even when the two groups meet to discuss a project, those occasions tend to be isolated, onetime events, rather than part of an ongoing discussion. Like it or not, however, information systems are an integral part of business strategy in almost all industries today. If business leaders view the IT staff as an ancillary player rather than a partner, then knowledge transfer between the two groups will suffer, resulting in missed opportunities and suboptimal performance.

Complicating the situation, when companies adopt standard packaged software, they often end up adapting the business to the technology. To be sure, this sometimes means that businesses abandon inefficient processes and institute best practices that are embedded in the software. But more often than not, managers sacrifice idiosyncratic, competitively powerful capabilities that the system could make possible because developing them would add to the time and cost of carrying out an already expensive, time-intensive project.

So what should a company do to integrate its IT and business strategies? Before the planning work on a project begins, general managers need to be sure that the IT staff understands the business and takes a central role in the organization. One way to make sure this happens is to have the head of IT report to the CEO or COO (as Dvivedi does at Shinsei) rather than the CFO, as is common at many major corporations. The perception of importance often becomes the reality.

**The first step is to focus on the foreseeable business objectives, not the existing environment. Too often, firms spend their time thinking about how current processes work.**

Business managers also need to have an understanding of what IT can do. At Shinsei, Yashiro and his successor, Thierry Porté, invested substantial amounts of their time in learning about IT. Porté speaks with Dvivedi frequently, meets with him formally a minimum of once a week, and visits the company's IT and operations center at least once a month. Porté believes that as CEO, "I have to be able to explain IT to my customers and employees so that we can meet our customers' business needs and deliver value going forward."

In project development, the first step is to focus on the foreseeable business objectives, not the existing environment. Too often, firms spend all their time thinking about how existing systems do a job and the current processes that are used to complete a task. This results in a paving of the old dirt paths. Anyone who has tried to drive the confusing streets of Boston or London will

**David M. Upton** (dupton@hbs.edu) is the Albert J. Weatherhead III Professor of Business Administration and **Bradley R. Staats** (bstaats@hbs.edu) is a doctoral candidate in the technology and operations management unit at Harvard Business School in Boston.

understand the consequences of this approach.

Having identified the foreseeable business objectives, managers must build an IT strategy that fits them. This should be an ongoing effort: There must be a constant interaction between the business and IT groups about business goals and IT decisions and constraints. By engaging in iterative discussions, the two sides gradually come to speak the same language. As business users educate systems people about their needs and IT people put prototypes in front of them, new potential solutions will emerge.

The close relationship between the IT and business groups helped Shinsei fully harness technology in its drive to transform the customer's experience at the bank's branches. For example, Shinsei tellers were equipped with two screens – one facing the teller and the other facing the customer. The customer screen was the same as that on the internet banking site, while the teller screen displayed that content plus additional information about the customer. When a customer came in for a transaction, the teller would literally show the customer how to execute the transaction herself (without telling the customer that she was being trained to conduct future transactions on a personal computer at home or on an ATM). Tellers were cashless. If a customer wanted to deposit or withdraw money, the teller would walk over to an ATM with the customer and again execute the transaction with the customer's participation. Customers were never forced to serve themselves, but through its IT systems and other infrastructure (branches, ATMs, tellers), Shinsei could provide a high-level of service while training and encouraging customers to handle certain transactions themselves.

Tellers were also able to see firsthand the kinds of transactions that were troublesome for customers, generating a raft of ideas to improve the systems. For instance, when customers were conducting tasks such as opening an account and transferring funds, they had to fill out paper forms and hand them to tellers, who then entered the information into the system. Tellers noticed that customers often chose the wrong forms or filled them out incorrectly. To fix this problem, Shinsei changed its process. Tellers now take the necessary information from customers, enter it into the system, and present a computer-generated confirmation to the customer for immediate verification.

## Strive for Extreme Simplicity

William of Ockham, the medieval philosopher, said theories should be as simple as possible. The same principle applies to enterprise IT systems: They should be designed with as few standards (such as network protocols, operating systems, and platforms) as possible – ideally one of each. While organizations usually start with a handful of standards, most allow them to multiply over time as a result of acquisitions and individual businesses' initiatives. In addition, the technology chosen or developed to satisfy specific needs should be as simple as possible, should assume there will be technical failures and have ways to mitigate them, and, as much as possible, should be reusable.

**Minimal standards.** Standardization of a small set of components is critical to a path-based approach. Just as Southwest Airlines has reaped benefits from flying only Boeing 737s, simplifying the IT infrastructure allows a company to reduce complexity, deepen specialized expertise, and increase the potential for reusing elements of the system – all of which accelerates development and lowers maintenance costs. In addition, standardizing components allows organizations to devote less time to maintaining quality and more to building new functionality.

Indeed, one of the biggest sources of added value that external big-bang software providers can bring is often that they limit the standards that are used in an organization to their own proprietary set. Most IT managers do

not have the power or long-term discipline to hold the line themselves. That means business managers must have an understanding of technology to appreciate the trade-offs and help avoid the exceptions that can balkanize IT systems.

Dvivedi ruthlessly drove standardization at Shinsei. He solicited input from relevant players but did not wait for consensus to act. One of his most radical decisions was to eliminate Shinsei's mainframe systems, the traditional backbone of a bank's IT, and replace them with Intel-based servers. This was a significant change from the prevailing practice among banks in Japan and most financial services firms around the world, which loved the high throughput speeds and dependable uptime of mainframes. The problem was, mainframe systems were expensive and difficult to keep up (the annual cost of maintaining a typical mainframe is 15% to 20% of the original purchase price). The software for older mainframe-based systems is usually written in arcane proprietary languages, which are difficult to untangle even if you can find programmers conversant in the code. The switch to a server-based platform immediately saved the bank $40 million in expenses annually. Along with selecting a single server platform, Dvivedi and his team chose other standards, such as Dell PCs, Microsoft Windows, the internet, IP phones, and standard messaging between business systems.

**Simple, reusable solutions.** Not wanting the new bank (the retail as well as the commercial and investment-banking units) to be shackled by the capabilities of the existing technology, Dvivedi worked with his team to create an architecture that would allow Shinsei to address business issues as they arose. This involved a straightforward process that they followed consistently. After first identifying a business issue, the team would break it down into its constituent pieces and would then determine a technology solution for each one. To do so, they first delved into their tool kit of standard modules and components to see if a solution already existed. If they did not have a solution in-house, they looked outside for an off-the-shelf solution. If none were available, they would turn to one of five or six independent Indian software-services partners to develop the capability.

The invention and deployment of Shinsei's entirely new ATM network is an excellent illustration of this approach. In 2000, other Japanese banks charged fees for using their own ATMs as well as those of competitors and offered ATM services only during branch business hours. Shinsei realized that if it wanted to offer free transactions 24 hours a day, it could not build a replica of others' costly ATM networks. Accordingly, the project team of business and IT people precisely identified the functionality that they needed to offer and then broke down the issues involved as far as they possibly could. That allowed them to solve problems in new, more cost-effective ways. For example, traditionally, ATMs were connected to a bank's back-end systems through expensive leased lines. The team realized that the internet could serve the same role. The uptime, or reliability, of an internet connection, though, was worse than that of a leased line. The simple solution: Design the system to expect and deal with failure by installing two internet connections from two different providers. This yielded better reliability than a leased line at one-tenth of the cost. Altogether, the new approach allowed Shinsei to offer customers ATMs that were always available and provided greater functionality than competitors' traditional networks at a fraction of the cost.

**Business managers must have an understanding of technology to appreciate the trade-offs and help avoid the exceptions that can balkanize IT systems.**

Another example of an ingeniously simple solution is the IT team's cure for failures stemming from memory leaks. Any operating system may be prone to memory leaks – which happen when an application does not release the memory that it used once it has finished a task. Eventually, the operating system may run out of memory, become unstable, and crash. The commonly prescribed remedy is to design sophisticated memory management and debugging tools to try to prevent all memory leaks. However, such tools cannot reliably plug every leak. Shinsei decided to simply assume that memory would leak within its servers and to have them perform a staggered reboot at frequent intervals – a crude but effective and inexpensive solution.

Whether Dvivedi's staff developed a component internally or asked an outside vendor to provide it, the component had to be reusable in other projects at Shinsei if at all possible. To make sure of that, the team clearly specified the required function of the component and the standard interfaces that would ensure it could "speak" to any other existing or future modules. For instance, business and IT personnel at Shinsei realized early on that credit checking was a key process in a number of services that the bank offered. Therefore, the team developed a reusable module for credit checking that could be deployed across products. Today, more than 90% of the technology components are used in more than one place.

**Modularity, not just modules.** While the prevailing view that big IT programs and systems should consist of modules is hardly new, the concept of modularity is often misunderstood. Just because a software developer claims that the various parts of its applications are modules does not mean that they are actually modular. Modularity involves clearly specifying interfaces so that development work can take place within any one module without affecting the others. Companies often miss that point when developing enterprise systems. For example, we know of an automobile company that had teams working on multiple modules of a new enterprise system and claimed to have a modular design. However, one team was in charge of interfaces and was constantly changing them. Every alteration by this group forced all the other groups to spend huge amounts of time redoing the work they had already completed. Rather than limiting the impact of changes by embracing modularity, this company had actually amplified problems!

A truly modular architecture allows designers to focus on building solutions to local problems without disturbing the global system. With small, modular pieces, the organization can purchase off-the-shelf solutions or turn to inside or outside developers for a certain piece, accelerating the speed of development. Modular architecture also makes it easier to upgrade the technology within modules once the system is up and running.

Breaking down and solving problems in this way offers a number of advantages beyond speed. It allows the IT team to concentrate on obtaining the lowest-cost solution for each part and (by partitioning work) reduces the impact of a single point of failure. Clearly specifying the functions of modules and the interfaces makes it easier to build a module that can be reused in other applications.

The modular approach was a critical part of achieving the bank's strategy, as Dvivedi described it, "to scale up and expand into new activities with ease, to be able to service the needs of the organization as it grows from a baby into an adult…and avoid building capacity before we need it." Take loan-processing capabilities. The project team rolled out the capabilities in small stages for three reasons: to prove to management that the computer system would perform as promised, to avoid overwhelming managers and users with too much automation all at once, and to be able to address any technical issues quickly as they arose. Accordingly, the team initially sought to show that the system could correctly approve credit for a small number of loans (20 to 30 a day). Then the team developed the capacity to fully process 200 to 300 loans a day. As the business grew, Shinsei eliminated manual work to reach a capacity for processing 6,000 loans a day.

**A truly modular architecture allows designers to focus on building solutions to local problems without disturbing the global system.**

Thanks to the modular structure of the automated system, Shinsei can simply replace one part (the loan-application or credit-checking functions, for example) without affecting the rest. What's more, modularity has allowed Shinsei to change its IT when appropriate or necessary without having to risk upsetting customers. It can keep the customer interfaces (such as web pages or the format of the ATM screen) the same while changing the back-end systems.

## Give (Some) Power to the People

Many of the failures in large IT projects stem from organizational resistance – users torpedoing new systems – rather than from technology that does not work. Sometimes the problem is that the company tries to force the system on its people, and they rebel; more often, people simply do not see a compelling reason for making the effort to learn how to operate the new system.

In general, firms should not have to sell new systems to users; rather they should build systems that users willingly embrace. This is not to say that every technology will be adopted enthusiastically by every member of the organization. But if a system is universally hated long past the "get to know you" stage, it is likely that the system needs significant improvement or should be scrapped.

When Shinsei rolls out a new system, it starts the process by offering an interface, or screen format, that is similar to that of the old system. A Shinsei employee starting to use the new system for inputting loan applications could navigate to a page that was an exact replica of the old system's data entry screen. However, if the new loan-application form required information (a customer's mobile phone number, for instance) that was not included in the old screen, the employee would have to go to the new data entry screen to type in the information. By going back and forth in this fashion, the user would become accustomed to the new system. Only after the vast majority of users make the transition to the new system does Dvivedi's team turn off the old data entry screens. This approach will add to costs in the short term, but Dvivedi believes it is a small price to pay for the quicker and more enthusiastic adoption of the new system.

**Continuous improvement.** Dvivedi's belief in user power extends beyond the rollout stage. It also applies to continuous improvement. One bedrock principle is that any continuous-improvement effort will fail without the committed involvement of users. Shinsei actively solicits users' ideas for improving its enterprise systems, involves them in daily experimentation, and strives to make them feel that their input matters. It realizes that if people do not feel their ideas are being listened to and acted on quickly, they stop offering them.

To that end, Dvivedi and his team created a system for addressing feedback and requests from customers, business users, and technical users. In recent months, such comments and requests have averaged about 100 a day. Both suggestions and system failures generate electronic work orders, which are routed to the relevant personnel and escalated to higher levels in the organization if they stay open for too long. When an issue has been resolved, the person who raised it is notified.

For example, the feedback system helped business leaders detect that something was amiss in the mortgage business. When customers applying for home loans complained that they had already sent requested documents to Shinsei that the system showed as outstanding, managers were automatically notified of the problem, and a team of business and IT personnel was assigned to find the root cause and address it. When the team studied the issue, it found that the actual problem was that the bank had been sending customers a list of the documents to submit, but customers weren't certain what the documents were (for example, they did not know what their deeds looked like). As a result, customers submitted the wrong documents. The team's remedy: Have the IT system automatically identify the unique set of documents that a customer had to submit, and then send the customer samples of those documents, no more and no less. By making sure that customers send the correct documents the first time, Shinsei has reduced the time it takes both customers and the bank to process the documents and increased customer satisfaction. All this may not sound like a major breakthrough – and that is precisely the point. When continuous improvement is an integral part of daily work, the need for catchy slogans to inspire the workforce and heroic problem solving greatly diminishes.

**When continuous improvement is an integral part of daily work, the need for catchy slogans to inspire the workforce and heroic problem solving greatly diminishes.**

...

Companies currently spend about 5% of their revenues on IT. While there is a large variance in this number, there is an even greater variance in the benefit companies get out of their IT. If anything, the already daunting task of choosing the right IT systems – those that can support the business strategy, provide a competitive advantage, and serve as a platform for growth – is getting more challenging. That's because the choices are greater, are changing faster, and are growing more complex with the advent of cheap processing power, network capability, and sophisticated IT vendors in developing economies.

In such a world, businesses must focus on building IT systems that cannot fail to improve. This outlook can be very disquieting for the traditional manager who thinks that constructing a major IT system is like putting up a warehouse: You build it; then it is finished. But that does not work for IT anymore. If you take that approach to building enterprise systems, you will get rigid, costly systems that are outdated from the day they are turned on. If you adopt the path-based approach, you'll get flexible systems that can change as the business demands and can shift IT from being a simple platform for existing operations to a launchpad for new functions and brand new businesses.

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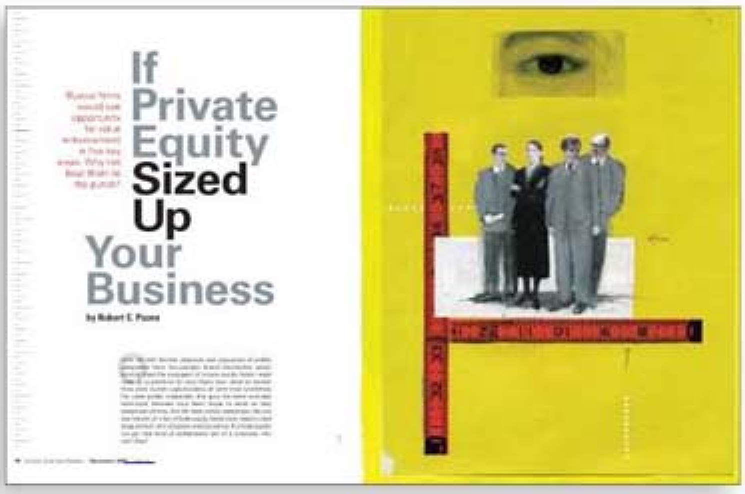
To order, see page 135.


"I like to think my staff sees me as more than just an authority figure."

Patrick Hardin

# Letters to the Editor

## If Private Equity Sized Up Your Business




Robert C. Pozen advises public companies to adopt many of the practices that top private equity firms use to generate superior returns for their investors ("If Private Equity Sized Up Your Business," November 2007). Yet for the most part, the best public companies have already done so, and the top quartile consistently produces shareholder returns that are at least as good as (and when adjusted for leverage, maybe even better than) the limited partnership returns generated by top quartile private equity firms. When Pozen compares top quartile private equity returns with the S&P 500, he is effectively measuring premium private equity firms against only average public companies – an apples to oranges comparison – and ignoring the fact that an average public company has just as much to learn from top public companies as it does from leading private equity firms.

Nevertheless, Pozen is right to point out that too many public companies consistently fall short on his five key tests and thus produce mediocre returns for their investors. I have found that the leaders of many S&P 500 companies are bright, hardworking, experienced, highly motivated, and perfectly capable of passing Pozen's tests and following his prescriptions. So why do so many public companies fail to meet the challenge? Pozen offers many reasons, but a fundamental cause is the fixation on earnings per share in the public markets. Leaders of public companies make countless decisions based on how those choices will affect EPS: avoiding even the smallest decline in debt ratings, holding "excess" cash, choosing to repurchase shares, hanging on to parts of the portfolio even when they are failing to earn their weighted average cost of capital, making acquisitions that will never justify their cost of capital – the list goes on and on.

Private equity firms, however, reward neither their general partners nor their portfolio company managers on the basis of EPS. That helps them avoid many traps that average public companies often fall into – hidden dangers that prevent "bold strategies and operating improvements" from ever seeing the light of day – and explains why the average S&P 500 returns are so paltry

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compared with those of top-quartile private equity firms. It also explains why they're so paltry compared with those of top-quartile *public* companies, too. Bold strategies and successful implementation – along with efficient balance sheets, effective boards of directors, and well-designed compensation incentives – are their hallmark, as well.

The relevant comparison is not "private versus public"; it is shareholder value versus EPS. We should stop lionizing private equity as a superior form of capitalism. Instead, we should emphasize what all top-quartile companies – whether public or private – have in common: an unyielding focus on growing shareholder value and a greater understanding of what it takes to do so. I've seen up close and personal the huge difference this approach can make to the direction, decision making, execution, and performance of any company, public or private.

**Ken Favaro**
*Managing Partner*
*Trinsum*
*New York*

## Realizing the Promise of Personalized Medicine

We read with great pleasure Mara G. Aspinall and Richard G. Hamermesh's article concerning barriers to the adoption of targeted therapies ("Realizing the Promise of Personalized Medicine," October 2007). Industry stakeholders are keenly aware of the need to overcome those barriers in order to reduce the costs of our bloated health care system and improve patient care, the ultimate goals of all involved.

The authors, however, reiterate two common misconceptions about personalized medicine that we would like to address. The first is that the pharmaceutical industry must abandon the blockbuster model in favor of targeted therapies – even though blockbuster drugs' high ROI permits pharmaceutical companies to recover not only those drugs' R&D costs but also the costs of other therapies that either fail to gain approval or have smaller market shares. Aspinall and Hamermesh suggest that stepping away from this model is as simple as exchanging, say, a single blockbuster drug generating $1 billion per year for five targeted therapies with yearly sales of $200 million each. This view ignores the tremendous investment needed to develop each compound. In addition to the costs associated with developing not only the drugs but also their companion tests (which the authors suggest the pharmaceutical industry should bear), each of the five targeted therapies would need appropriate investment in its launch – patient and doctor education, reimbursement negotiation, and cooperation with testing laboratories – to ensure market adoption. Thus, five targeted therapies, even if they were to generate $200 million apiece, simply could not equal a single billion-dollar blockbuster drug.

The second misconception is that the market segmentation implicit in targeted therapies necessarily translates into fewer patients and reduced returns. This view fails to take into account several key economic facets of both one-size-fits-all therapy returns and potential returns from personalized markets. "One size fits all," for instance, is something of a misnomer. Though such therapies are presumed to capture between 50% and 60% of the overall patient pool, more often than not they capture less than 15%. Conversely, a personalized therapy that might work in only 25% of the overall patient pool behaves more like a first-to-market drug in a niche when it is enabled by a companion diagnostic and thus typically will capture a 40% to 50% market share of that subgroup of patients. This is because companion diagnostics are more efficient than traditional empirical diagnosis at identifying patients for whom the therapy is appropriate.

The numbers clearly demonstrate that targeted therapies do not inevitably result in smaller market shares and could have the same revenue potential if the optimal companion test program were in place. Consider, for example, a hypothetical one-size-fits-all therapy that has a potential patient population of 1 million patients. The drug is likely to capture fewer than 150,000 patients out of the pool, and that number will diminish through the attrition of those for whom the drug seems ineffective. A targeted therapy appropriate for a much smaller population, perhaps a third the size, is likely nevertheless to capture the same 150,000 patients. Yet because the attrition rate will be lower, this therapy may well translate into significant market share.

We agree with the authors, however, that the pharmaceutical industry is justifiably concerned about making any drug dependent on the performance and adoption of a companion diagnostic, given that diagnostic tests are frequently underutilized and often inappropriately applied in clinical practice.

Historically, the diagnostic industry has been a high-volume, low-cost business that has never invested in the validation and launch of diagnostics to the same degree that the pharmaceutical industry has invested in drugs. And the diagnostic industry has not yet suggested an equitable solution for this disparity other than to place the burden on the pharmaceutical industry.

As the model for personalized medicine continues to develop, stakeholders will continue to work on building the best business platform to realize its potential. It is high time for the two main stakeholders – the pharmaceutical and diagnostic industries – to stop their finger-pointing and find a way to work together.

**Peter Keeling**
*CEO*
**Mollie Roth**
*Corporate Counsel and VP, Business Development*
*Diaceutics*
*www.diaceutics.com*

Aspinall and Hamermesh's recommendation of a partnership between the pharmaceutical industry and the diagnostic-testing industry – combining testing and treatment under one roof – barely skirts the legal minefield of a monopolistic practice. And though all physicians decry the inadequacies and unjustness of the current reimbursement system, the authors' push for greater reimbursement of diagnostic testing ignores both the added cost burden on health care (unless existing resources are redistributed) and the disproportionate rewards for procedure-based medicine – which includes current diagnostic testing – over cognitive clinical practice (patient-physician primary care services).

Physicians are also called to task for failing to understand the immense promise of genomics in personalizing care to individual patients. I do not believe, however, that clinician ignorance is at the heart of the problem. Rather, I think clinicians just aren't convinced the juice is worth the squeeze. I submit that in an era of "evidence-based medicine," studies in real-world settings comparing the cost-effectiveness of new tests and therapies against current practices should drive a change in physician practice.

**Eric M. Wall, MD**
*Senior Medical Director*
*Qualis Health*
*Seattle*

Aspinall and Hamermesh make important points, but their conceptual misuse of the word "personalized" illustrates a fundamental problem. "Personalized" means tailoring treatment to the person. It does not mean biological specificity. Despite molecular advances in medicine, it is unlikely that there will ever be one "right" treatment for a person with a complex illness like coronary artery disease, diabetes, alcohol dependence, schizophrenia, or depression. Such conditions involve multiple genetic variants compounded by environmental, emotional, social, and behavioral factors. Moreover, individuals often suffer from more than one chronic illness concurrently. Diabetics, for example, have higher rates of heart disease, as do people with depression. This further complicates treatment choices.

Medical decision making for complex clinical problems, therefore, will continue to involve subtle differences in risk and benefit that require physicians and patients to consider both subjective factors like patient values and objective factors like genomic testing. Ignoring medicine's inherent subjectivity risks introducing error. For instance, mislabeling "genomically informed medicine" as "personalized medicine" devalues the critical decision-making component: a trusting patient-physician relationship. A physician helps create such trust by using finely honed communication and listening skills to develop a shared understanding of the patient's disease in the context of a whole life. Efficacious treatments are only one variable in individualized treatment planning.

Physicians need more substantial communication training and improved reimbursement for the time that effective communication and shared decision making require. (Currently, those practices rank below technical diagnostic and treatment procedures for reimbursement.) Only the proper recognition of what is personal will lead to personalized medicine.

**Joseph S. Weiner, MD**
*Chief, Consultation Liaison Psychiatry*
*North Shore University Hospital*
*Manhasset, New York*

*Aspinall and Hamermesh respond:* We agree with Peter Keeling and Mollie Roth's second point – that targeted therapies often reach much bigger markets than originally anticipated. Indeed, we say as much in our article. In response to their first point, however, we would still assert that the pharmaceutical industry needs to abandon its overreliance on the blockbuster model. Clinical trials of targeted therapies cost less than those of broad-based medications; even more important, the pursuit of increasingly elusive new blockbuster drugs strains limited resources, which then hinders the development of more targeted therapies.

As Eric M. Wall suggests, more studies are needed. Still, even in cases where good data do exist, the adoption of personalized medicine has been too slow.

Finally, we concur with Joseph S. Weiner that physician judgment should be an integral part of personalized medicine and genetic information. Indeed, the probabilistic nature of much genetic information will make doctors' and patients' relationships – and ability to communicate with one another – essential.

## Munchausen at Work

In his article "Munchausen at Work" (Forethought, November 2007), Nathan Bennett highlights the important and underdiscussed behavioral problem of MAW. I would like to add two observations based on my background as a psychiatrist working in both the health care and pharmaceutical industries.

First, individuals who have experience in the health care profession may be particularly susceptible to MAW because of the motivations and psychopathology that led them to that field in the first place. Managers in pertinent industries may find it useful to incorporate this additional consideration into an assessment of possible MAW.

Second, for high-energy people placed in low-energy roles, MAW serves as a means for maintaining energy homeostasis. Those individuals often exhibit MAW because the excitement of a crisis and the rewards of its resolution make up for the otherwise ordinary routines of their jobs. In addition to the remedies outlined by Bennett, managers should consider moving those employees into roles that better match their energy levels, thereby eliminating a key driver for MAW.

**Jane Tiller**
*Senior Director, Clinical Research*
*Cephalon*
*Frazer, Pennsylvania*

*Bennett responds:* Jane Tiller makes two important points that help improve our understanding of, and response to, MAW. Over the long run, a more comprehensive appreciation of the MAW behavior pattern's etiology will indeed prove most useful. Some professions by their nature may attract individuals with a predisposition to "fire setting" and "firefighting" behavior. And the reward systems in others, such as management consulting, practically demand it: The more "problems" the consultant finds, the more the client is billed, and the more "valuable" the consultancy's expertise appears to be. Clearly, industry norms, compensation practices, and selection criteria all play a role in setting the stage for MAW.

Tiller's second observation raises a question for the short run: How can executives best manage employees who exhibit MAW behavior? An employee's need to correct a mismatch between the level of excitement he or she craves and the level of excitement the job actually requires can be compelling. Redirecting employees' energies in a way that does not put the company's health at risk can only benefit all involved. Of course, as we learn more about the drivers of MAW, our ability to manage it will no doubt improve.

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*Clarification:* In his article "Is It Real? Can We Win? Is It Worth Doing?" (December 2007), George S. Day noted that the R-W-W ("real, win, worth it") screen is "sometimes known as the Schrello screen." The reference was to Dominick ("Don") M. Schrello, of Long Beach, California, who developed the original framework in the 1960s.

# Executive Summaries

MARCH 2008


> The vast majority of stall factors result from a choice about strategy or organizational design. They are, in other words, controllable by management.
> –page 50

STRATEGY & COMPETITION

COVER STORY

## 50 | When Growth Stalls

Matthew S. Olson, Derek van Bever, and Seth Verry

An abrupt and lasting drop in revenue growth is a crisis that can strike even the most exemplary organization. The authors' comprehensive analysis of growth in *Fortune* 100–size companies over the past half century revealed, in fact, that 87% of them had stalled out at least once. The record shows that if management cannot turn a company around within a few years, the odds are that it will never again see healthy top-line growth.

Fortunately, Olson, van Bever, and Verry, of the Corporate Executive Board, have uncovered and categorized the most common causes of growth stalls. The majority of these standstills are preventable because, according to the authors, they arise from management choices about strategy or organizational design; external factors, such as regulatory actions or economic downturns, account for only 13%. Four categories predominate:

**Premium-position captivity.** When a firm's world-class offering has won the most demanding customers in the market, it often fails to respond effectively to new, low-cost competitive challenges or shifts in customer valuation of product features.

**Innovation management breakdown.** Because most large corporations generate sequential product innovations, any systemic inefficiency or dysfunction in the innovation chain can cause extremely serious problems that last for years.

**Premature core abandonment.** Managers may conclude too quickly that a core market is saturated. Or they may incorrectly interpret operational impediments in the core business as evidence that it's time to move into new competitive terrain.

**Talent bench shortfall.** Insufficient capabilities – particularly at the executive level and typically in areas of acute and specialized need – will stop growth dead in its tracks.

The authors also identified a common culprit in detailed case studies of 50 stalled companies – failure to adapt the assumptions that drive company strategy to changes in the external environment. Two tools can help managers avoid growth stalls: a self-test to diagnose impending stalls and a choice of practices to explicitly identify strategic assumptions and test them for ongoing relevance.

**Reprint R0803C**

FORETHOUGHT

## 18 | Megaregions: The Importance of Place

Richard Florida

The world isn't just flat. Alongside the dispersing centrifugal forces of globalization there are equally powerful centripetal forces that trigger economic concentration in a few dozen megaregions – areas like the Boston–New York–Washington corridor and the Shanghai-Nanjing-Hangzhou triangle – which account for the bulk of the globe's economic activity and innovation. **Reprint F0803A**

## In E-Commerce, More Is More

Andreas B. Eisingerich and Tobias Kretschmer

Most managers believe that filling their websites with a broad array of information diverts attention from their company's core offerings. A new global study, however, has revealed just the opposite: that such information increases customer engagement. The research also shows that exploiting consumers' desire for engagement is the strongest predictor of superior shareholder value for e-commerce companies. **Reprint F0803B**

## Mining Unconscious Wisdom

Ian Ayres

The true power in the collective wisdom of crowds isn't in people's expressed opinions – it's buried deep inside your company's database. New tools are allowing organizations to mine their data for the "unconscious wisdom" that the crowd itself may never have thought to share. **Reprint F0803C**

## Rudeness and Its Noxious Effects

The mere thought of being on the receiving end of verbal abuse hurts people's ability to perform complex tasks requiring creativity, flexibility, and memory recall, new research reveals. **Reprint F0803D**

## The Hidden Risk in Cutting Retail Payroll

Zeynep Ton

When retailers' sales slip, the biggest opportunity to boost profits comes from improving execution. To do that, research shows, managers may actually need to increase staff. **Reprint F0803E**

## Avoid Hazardous Design Flaws

Hari Bapuji and Paul W. Beamish

The vast majority of product safety recalls are due not to problems with Chinese manufacturing processes but to highly preventable design mistakes that Western companies keep making over and over again. **Reprint F0803F**

## A Conversation with Jennifer Daley

Jennifer Daley agreed to take on a dramatic overhaul of Tenet Healthcare's clinical quality under two conditions: She would work only on behalf of the patients, and she would consider every day to be her last. **Reprint F0803G**

## Fledgling Firms Offer Hope on Health Costs

Julia Adler-Milstein and Ashish Jha

Regional health information organizations – RHIOs – are springing up in the United States to meet a vital need: to connect the nation's disparate patient-health information systems. If RHIOs can find a viable business model, they stand to improve the quality and decrease the cost of U.S. health care dramatically. **Reprint F0803H**

## The Best Advice I Ever Got

Kris Gopalakrishnan

The head of Infosys Technologies talks about the power of a well-placed word of encouragement and what it taught him about the CEO's toughest challenge – motivating people. **Reprint F0803J**

## Reviews

Featuring *Here Comes Everybody: The Power of Organizing Without Organizations*, by Clay Shirky.

| ORGANIZATION & CULTURE |

HBR CASE STUDY

### 33 | Authenticity: Is It Real or Is It Marketing?

David Weinberger

Marty Echt, the new head of marketing at Hunsk Engines, is determined to bring the motorcycle maker back to its roots. He says it's not enough to project authenticity to customers – employees must personally subscribe to the brand's values. Should the company's CEO support Marty's "real deal" vision? Five experts comment on this fictional case study.

Bruce Weindruch, the founder and CEO of the History Factory, says that an authenticity-based campaign can be effective – but only if it's truly drawn from history. Marketers like Marty often remember their organization's past in a golden haze. Weindruch recommends exploring old engineering drawings, ads, and product photos in order to understand what customers and employees really valued back in the day.

Gillian Arnold, a consultant to luxury fashion and fine jewelry brands, thinks Marty's approach is right: People in key marketing posts must be passionate about their products and know them inside and out. She argues that the CEO needs to commit more fully to the new campaign and address the significant gap between the staff and the brand.

James H. Gilmore and B. Joseph Pine II, the cofounders of Strategic Horizons, point out that Hunsk needs to manage customers' perceptions rather than trying to be a "real company" or forming a management team whose personal interests match the brand. People purchase a product if it conforms to their self-image; that alone determines the brand's authenticity.

Glenn Brackett of Sweetgrass Rods, a maker of bamboo fly-fishing rods, says Marty seems to be one of the few people who understand Hunsk motorcycles. If employees bring blood, sweat, heart, and soul to a product, it will manifest that spirit, and customers will line up for it.

**Reprint R0803A**

**Reprint Case only R0803X**

**Reprint Commentary only R0803Z**

| LEADERSHIP |

### 45 | Timeless Leadership
A Conversation with David McCullough

The historian David McCullough, a two-time Pulitzer Prize winner and well-known public television host, has spent his career thinking about the qualities that make a leader great. His books, including *Truman, John Adams,* and *1776,* illustrate his conviction that even in America's darkest moments the old-fashioned virtues of optimism, hard work, and strength of character endure.

In this edited conversation with HBR senior editor Bronwyn Fryer, McCullough analyzes the strengths of American leaders past and present. Of Harry Truman he says, "He wasn't afraid to have people around him who were more accomplished than he, and that's one reason why he had the best cabinet of any president since George Washington....He knew who he was." George Washington – "a natural born leader and a man of absolute integrity" – was unusually skilled at spotting talent. Washington Roebling, who built the Brooklyn Bridge, led by example: He never asked his people to do anything he wouldn't do himself, no matter how dangerous. Franklin Roosevelt had the power of persuasion in abundance.

If McCullough were teaching a business school leadership course, he says, he would emphasize the importance of listening – of asking good questions but also noticing what people *don't* say; he would warn against "the insidious disease of greed"; he would encourage an ambition to excel; and he would urge young MBAs to have a sense that their work matters and to make their good conduct a standard for others.

**Reprint R0803B**

| STRATEGY & COMPETITION |

### 62 | Transforming Strategy One Customer at a Time

Richard J. Harrington and Anthony K. Tjan

A decade ago, the Thomson Corporation, like most B2B companies, had a much better understanding of the people who purchased its newspapers, journals, and textbooks for their organizations than of the people who actually used them in their daily jobs. Facing an internet shakeup of its market, Thomson realized it needed to bridge that critical knowledge gap. The company began systematically scrutinizing its end users – in much the same way that Procter & Gamble tackles consumer research – as part of a new front-end customer strategy that would become the cornerstone of the firm's transformation.

In this article, Harrington, Thomson's CEO, and Tjan, a consultant who advised him, describe how the company adopted a user-centric mind-set – initially in the Thomson Financial division and then throughout the organization. First came a redefinition of the division's market, which was mapped not by type of purchaser but by eight end-user segments. That gave Thomson a clear view of the division's real, addressable market and of corresponding opportunities. After conducting surveys and "day in the life" observations of users, Thomson charted their entire work flow, beginning with what they were doing three minutes before and after using a product, and saw where the organization could add value. Then, through cluster and conjoint analysis, the company determined how pain points and product preferences varied among the users. With that information, Thomson was able to identify three clusters of customers in one segment and develop three categories of offerings.

Since beginning to implement this approach, Thomson has changed radically. Its revenue now comes mostly from digital, not print, products, and it generates twice the operating profit and four times the free cash flow it did 10 years ago. In a market that changes by the day, Thomson's revenue is unusually predictable and profitable.

**Reprint R0803D**

HUMAN RESOURCES

## 74 | Talent Management for the Twenty-First Century

Peter Cappelli

Most firms have no formal programs for anticipating and fulfilling talent needs, relying on an increasingly expensive pool of outside candidates that has been shrinking since it was created from the white-collar layoffs of the 1980s. But the advice these companies are getting to solve the problem – institute large-scale internal development programs – is equally ineffective.

Internal development was the norm back in the 1950s, and every management-development practice that seems novel today was routine in those years – from executive coaching to 360-degree feedback to job rotation to high-potential programs. However, the stable business environment and captive talent pipelines in which such practices were born no longer exist. It's time for a fundamentally new approach to talent management. Fortunately, companies already have such a model, one that has been well honed over decades to anticipate and meet demand in uncertain environments: supply chain management.

Cappelli, a professor at the Wharton School, focuses on four practices in particular. First, companies should balance make-versus-buy decisions by using internal development programs to produce most – but not all – of the needed talent, filling in with outside hiring. Second, firms can reduce the risks in forecasting the demand for talent by sending smaller batches of candidates through more modularized training systems in much the same way manufacturers now employ components in just-in-time production lines. Third, companies can improve their returns on investment in development efforts by adopting novel cost-sharing programs. Fourth, they should seek to protect their investments by generating internal opportunities to encourage newly trained managers to stick with the firm. Taken together, these principles form the foundation for a new paradigm in talent management: a talent-on-demand system.

**Reprint R0803E**

STRATEGY & COMPETITION

## 84 | How Local Companies Keep Multinationals at Bay

Arindam K. Bhattacharya and David C. Michael

A substantial number of local companies in emerging markets have managed to hold their own – or better – in the face of competition from global Goliaths. Bhattacharya and Michael of the Boston Consulting Group show how these domestic Davids have achieved that impressive feat. The secret is to adopt most, if not all, elements of a six-part strategy.

One, the homegrown winners customize products and services to meet local needs and initially go after economies of scope. Two, they develop business models to overcome market-specific obstacles and gain competitive advantage in the process. Three, they create or buy the latest technologies and use them effectively. Four, they find ways to benefit from low-cost labor and train workers in-house to overcome shortages of skilled employees. Five, they scale quickly by going national before regional rivals can challenge them. Six, they invest in top management talent in order to sustain rapid growth. No element on its own is groundbreaking, but in the aggregate the strategy is a potent one, as the authors illustrate with the story of Ctrip, China's largest online travel agent.

Successful as homegrown champions have been – and this article identifies 50 of them – a few multinationals, such as Yum Brands, Nokia, and Hyundai, have managed to beat the locals at their own game by using the six-part strategy. Global companies would do well to study these models of achievement and, armed with acquired wisdom, rethink their own strategies before local rivals shut them out of lucrative emerging markets.

**Reprint R0803F; HBR Article Collection "Winning in the World's Emerging Markets, 2nd Edition" 10030**

INNOVATION

## 96 | A More Rational Approach to New-Product Development

Eric Bonabeau, Neil Bodick, and Robert W. Armstrong

Companies often treat new-product development as a monolithic process, but it can be more rationally divided into two parts: an early stage that focuses on evaluating prospects and eliminating bad bets, and a late stage that maximizes the remaining candidates' market potential. Recognizing the value of this approach, Eli Lilly designed and piloted Chorus, an autonomous unit dedicated solely to the early stage. This article demonstrates how segmenting development in this way can speed it up and make it more cost-effective.

Two classes of decision-making errors can impede NPD, the authors say. First, managers often ignore evidence challenging their assumptions that projects will succeed. As a result, many projects go forward despite multiple red flags; some even reach the market, only to fail dramatically after their introduction. Second, companies sometimes terminate projects prematurely because people fail to conduct the right experiments to reveal products' potential.

Most companies promote both kinds of errors by focusing disproportionately on late-stage development; they lack the early, truth-seeking functions that would head such errors off. In segmented NPD, however, the early-stage organization maintains loyalty to the experiment rather than the product, whereas the late-stage organization pursues commercial success.

Chorus has significantly improved NPD efficiency and productivity at Lilly. Although the unit absorbs just one-tenth of Lilly's investment in early-stage development, it delivers a substantially greater fraction of the molecules slated for late Phase II trials – at almost twice the speed and less than a third of the cost of the standard process, sometimes shaving as much as two years off the usual development time.

**Reprint R0803G**

ORGANIZATION & CULTURE

## 109 | Is Yours a Learning Organization?

David A. Garvin, Amy C. Edmondson, and Francesca Gino

An organization with a strong learning culture faces the unpredictable deftly. However, a concrete method for understanding precisely how an institution learns and for identifying specific steps to help it learn better has remained elusive. A new survey instrument from professors Garvin and Edmondson of Harvard Business School and assistant professor Gino of Carnegie Mellon University allows you to ground your efforts in becoming a learning organization.

The tool's conceptual foundation is what the authors call the three building blocks of a learning organization. The first, a supportive learning environment, comprises psychological safety, appreciation of differences, openness to new ideas, and time for reflection. The second, concrete learning processes and practices, includes experimentation, information collection and analysis, and education and training. These two complementary elements are fortified by the final building block: leadership that reinforces learning.

The survey instrument enables a granular examination of all these particulars, scores each of them, and provides a framework for detailed, comparative analysis. You can make comparisons within and among your institution's functional areas, between your organization and others, and against benchmarks that the authors have derived from their surveys of hundreds of executives in many industries.

After discussing how to use their tool, the authors share the insights they acquired as they developed it. Above all, they emphasize the importance of dialogue and diagnosis as you nurture your company and its processes with the aim of becoming a learning organization. The authors' goal – and the purpose of their tool – is to help you paint an honest picture of your firm's learning culture and of the leaders who set its tone.

**Reprint R0803H**

MANAGING TECHNOLOGY

## 118 | Radically Simple IT

David M. Upton and Bradley R. Staats

Many managers think that developing and rolling out a major IT system is like putting up a warehouse: You build it and you're done. But that does not work for IT anymore. Taking that approach results in rigid, costly systems that are outdated from the day they are turned on. What's needed for today's businesses is IT that serves not only as a platform for existing operations but also as a launchpad for new functions and businesses.

In this article, the authors present a *path-based* approach that addresses the primary challenges of IT: the difficulty and expense of mapping out all requirements before a project starts because people often cannot specify everything that they need beforehand; the other unanticipated needs that almost always arise once a system is in operation; and the tricky task of persuading people to use and "own" it.

Japan's Shinsei Bank emerged during the authors' research as a standout among the companies applying the path-based method. The firm designed, built, and rolled out its system by forging together, not just aligning, business and IT strategies; employing the simplest possible technology; making the system truly modular; letting it sell itself to users; and ensuring that users influence future improvements. Some of the principles are variations on old themes, while others turn the conventional wisdom on its head.

**Reprint R0803J**

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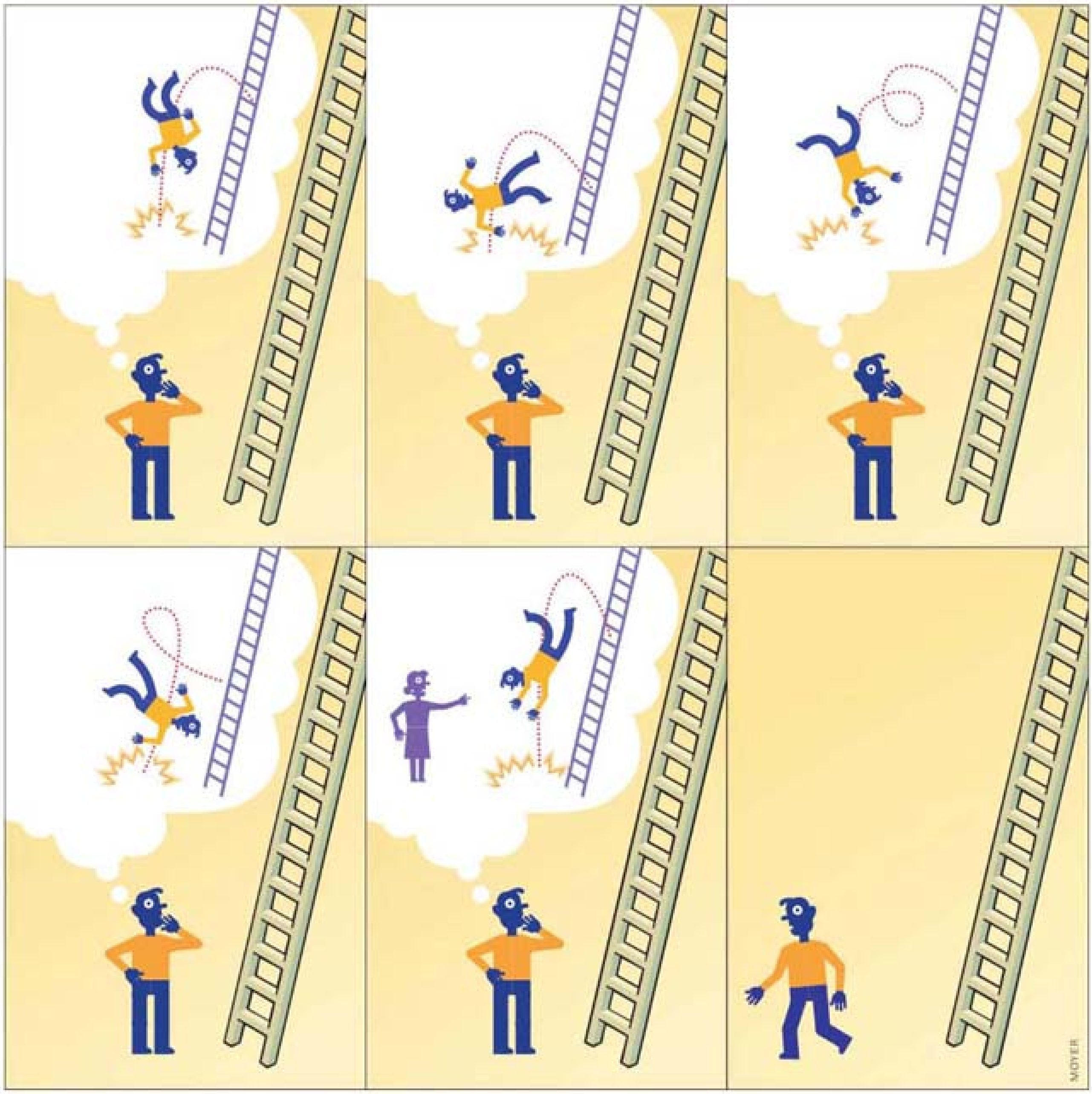

# Zero Risk

NO ONE enjoys contemplating failure – which is a shame, at least from an organization's point of view. As Richard Farson and Ralph Keyes observe in "The Failure-Tolerant Leader" (HBR August 2002), executives from Thomas Watson, Sr., to Jack Welch have viewed failure as an asset, an investment in future breakthroughs and innovation. However, they write, "while companies are beginning to accept the value of failure in the abstract at the level of corporate policies, processes, and practices, it's an entirely different matter at the personal level."

That's partly because failure causes us to question our own worth. But even those of us willing to risk a blow to our self-image in pursuit of a bold new idea may hesitate because of something else: the fear that others will witness our failure. This could lead to tangible consequences – the loss of a bonus or a promotion – or simply public embarrassment in the eyes of peers and subordinates.

Clearly, companies need to create an environment that calms such anxieties – though that may be difficult, considering that many firms' worth depends on the opinions of others, including customers, investors, analysts, and the media.

*Don Moyer can be reached at dmoyer@thoughtformdesign.com.*