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THE LONG TERM

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MANAGING YOURSELF
“Above All, Acknowledge the Pain”
A conversation about resilience with Sheryl Sandberg and Adam Grant
Adi Ignatius
As the world becomes dependent on the Internet of Everything, there’s one state that’s developing innovative solutions for protecting the security of both systems and people. Michigan. Home to two world-class cybersecurity testing ranges, we’re one of the few states that actively trains and cultivates cyber talent. Which gives cybersecurity businesses in Michigan a solid lock on the future of the industry.
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It’s pretty much a given in modern capitalism that managers’ top priority is maximizing value for shareholders. So when we publish articles about how to create a sustainable, long-term business, we sometimes get pushback from executives of publicly listed companies. They say the goal is admirable, but real-world pressures require them to put shareholder returns first. Anything else is secondary.

But what if the assumption underlying that thinking is wrong? What if it’s built on a debatable, perhaps even incorrect, interpretation of the law? These are some of the provocative questions put forth in this month’s lead Spotlight article by Harvard Business School professors Joseph Bower and Lynn Paine: “The Error at the Heart of Corporate Leadership” (page 50).

The idea of shareholder primacy is relatively recent and is rooted in the agency theory laid out by academic economists in the 1970s in articles in HBR and elsewhere. Simply put, the notion is that shareholders own the corporation and, by virtue of that, have the ultimate authority over its business. Bower and Paine demonstrate the flaws in the theory, particularly its inability to deal with the “accountability vacuum” that arises because shareholders—many of whom are merely short-term investors—have no real responsibility to the companies whose stock they own.

The authors argue that the current orthodoxy is an “extreme version of shareholder centricity” that is “confused” as a matter of law and harmful to society. It forces executives to focus excessively on the short term, weakening companies’ long-term prospects and damaging the overall economy.

A better approach, they say, would have at its core the health of the company, not the near-term gains of shareholders. Corporations are independent entities endowed by law with the potential for indefinite life. With good leadership, they can serve markets and society over long periods of time.

More than 40 years ago, academic writing changed how modern corporations are run. Perhaps Bower and Paine’s article can lead us down a new path.

ADI IGNATIUS, EDITOR IN CHIEF
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When Lynn Paine first heard the theory that management’s sole purpose was to maximize shareholder wealth, she “more or less wrote it off” because it didn’t jibe with what she’d learned in law school. “That was a big mistake. The theory spread like wildfire,” she says. As a board member she became keenly aware of the deep tension between the theory and “what’s actually involved in running a company that can sustain itself.” She explores that tension with coauthor Joseph Bower in our lead Spotlight article.

Jennifer and Gianpiero Petriglieri fell for each other 13 years ago, while planning a research project on the experiences of high-potential managers. In their work, they would meet many “hi-pos” who floundered just as their dreams seemed to be coming true. In this issue the couple share their insights into how to recognize and overcome this “talent curse.”

After studying colonial Kenyan history at Harvard, Irene Yuan Sun decided to find out for herself what Africa was like and took a job teaching in Namibia for a year. She returned to the United States, got master’s degrees in business administration and public policy, and joined McKinsey, which sent her back to Africa. While working on health care and infrastructure projects there, she became aware of Chinese entrepreneurs’ growing investment in African manufacturing—the subject of her article for us.

When Stefano Puntoni was starting college in his native Italy, he couldn’t figure out what he wanted to do with his life. He found a course in statistics interesting enough, but it wasn’t until he took a market research elective that he discovered his passion. Now at Rotterdam School of Management, Erasmus University, he focuses on consumer choices and decision making. That work informs his feature (cowritten with Bart de Langhe and Richard Larrick) on how linear bias often leads people to make suboptimal choices.

Gabriel Silveira is an illustrator based in São Paulo. He usually works freelance from his home studio, but the work that appears in this month’s Managing Yourself article, he says, was inspired by the commute he dealt with on his last regular job—a daily ordeal that involved buses, subways, and trains.

When
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"In this blunt, compelling, tightly argued manifesto, Joan C. Williams sets out to truly understand the white working class whose raw anger was so evident during the recent presidential race."

TONY SCHWARTZ, AUTHOR OF THE WAY WE’RE WORKING ISN’T WORKING, CEO, THE ENERGY PROJECT

MY FATHER-IN-LAW GREW UP EATING BLOOD SOUP.

He hated it, whether because of the taste or the humiliation, I never knew. His alcoholic father regularly drank up the family wage, and the family was often short on food money. They were evicted from apartment after apartment.

He dropped out of school in eighth grade to help support the family. Eventually he got a good, steady job he truly hated, as an inspector in a factory that made those machines that measure humidity levels in museums. He tried to open several businesses on the side, but none worked, so he kept that job for 38 years. He rose from poverty to a middle-class life: the car, the house, two kids in Catholic school, the wife who worked only part time. He worked incessantly. He had two jobs in addition to his full-time position, one doing yard work for a local magnate and another hauling trash to the dump.

Throughout the 1950s and 1960s, he read The Wall Street Journal and voted Republican. He was a man before his time: a blue-collar white man who thought the union was a bunch of jokers who took your money and never gave you anything in return. Starting in the 1970s, many blue-collar whites followed his example.

Over the past 40-odd years, elites stopped connecting with the working class, whom prior generations had given a place of honor. Class consciousness has been replaced by class cluelessness—and in some cases, even class callousness.

An entire book—a different one than mine—could seek to explain why this shift occurred. But the upshot is simply this: during an era when wealthy white Americans have learned to sympathetically imagine the lives of the poor, people of color, and LGBTQ people, the white working class has been insulted or ignored during precisely the period when their economic fortunes tanked.

This book focuses on the class comprehension gap that is allowing the United States (and Europe) to drift toward authoritarian nationalism. When you leave the two-thirds of Americans without college degrees out of your vision of the good life, they notice.

—from the Introduction
Consumers are often unhappy with the help they get from customer service. The authors say this is because companies don’t hire the right people as frontline reps or equip them to handle complex challenges. Every rep can be classified as one of seven types. Supportive Empathizers constitute the largest group, and managers prefer them. But take-charge Controllers, who make up only 15% of all reps, actually do best at solving customers’ problems.

As the authors explain, companies that transition to self-service options leave frontline service reps with problems that are increasingly tough to solve because they’re the ones customers can’t solve on their own. They cite one manager who woefully admitted that his contact center has for this very reason become “a factory of sadness.”

Spencer Davis, finance student, Texas A&M University

The Controller type seems less valuable than, say, the Innovator, who is much more likely to provide feedback to influence the product or service and to drive lasting solutions for customers. Customers don’t just want a great customer-service experience; they want a product or service that works. The only way to get that is through incremental continuous improvement based on frontline feedback. The biggest problem with customer support in most organizations is that it’s treated as a cost center rather than as a valuable source of product feedback.

Warren Johnson, principal program manager, Microsoft

This idea applies beyond contact centers. For example, I believe that the Controller mindset also proves effective when consulting with clients to design tech solutions or processes. Empathy is an important component of a Controller’s motivation. Controllers genuinely care about solving the customer’s problem.

William Oshodin, advisory manager, PwC

This article provides comprehensive insight into customer service today. Service recovery is becoming a core customer-service skill, as companies push toward greater self-service and automation. I like that the authors identify the need for a shift in how coaching is conducted. The “meeting in the principal’s office” approach does little to improve behaviors in a live environment.

Shaun Belding, CEO, The Belding Group

I have been consulting with contact centers for 30 years, and this article truly represents the challenges many organizations face today. I would add, however, that efforts to get the best frontline reps are frequently stymied by management. Contact-center leaders are often promoted from within, so the dominant Empathizers advance to leadership roles where their focus is on making do with what they get rather than arguing effectively for what they need.

Many executives have essentially tuned out the contact center by hiring or promoting managers who don’t complain or make waves.

Kathleen M. Peterson, chief vision officer, PowerHouse Consulting

Many executives have tuned out the contact center by hiring managers who don’t complain or make waves.”

—KATHLEEN M. PETERSON
This cloud turns tiny insects into big data.
CUSTOMER LOYALTY IS OVERRATED

HBR ARTICLE BY A.G. LAFFLE AND ROGER L. MARTIN, JANUARY-FEBRUARY

Why do companies routinely succumb to the lure of rebranding? Research suggests that what makes competitive advantage truly sustainable is helping consumers avoid having to make a choice. They choose the leading product in the market primarily because that’s the easiest thing to do. And each time they select it, its advantage increases over that of the products they didn’t choose, creating what the authors call cumulative advantage.

All things being equal, habit beats conscious decision making. If you have various brands in front of you, you’ll pick the one that your habit subconsciously tells you to. But things get less and less equal every day.

Building on Clayton Christensen’s “jobs to be done,” Rita Gunther McGrath rightly observes in her counterpoint to the authors that as long as the customer’s job and the way it’s done remain the same, cumulative advantage works, and the strongest brands get stronger. But as soon as a more attractive, simpler, cheaper, or more ingenious way of doing the job is brought to the market, cumulative advantage gets killed by disruptive advantage. Why? Because things are no longer equal: Now the subconscious mind tells the buyer that the new product or service is a better solution than the old one.

Mihai Ionescu, senior strategy consultant, Strategic Systems Consulting

The idea that consumers (and humans in general) are “cognitive misers” has been around since the mid-1980s. It has been used to explain suboptimal decision making in multiple fields, such as opinion formation, voting behavior, and investing. This article’s intellectual contribution lies in some useful applications of the “cognitive miser” idea to CPG products (for example, being careful about introducing too much novelty when updating a product; design for habit), but the core thesis about the role of automaticity in consumer decision making should have been acknowledged as one that was “standing on the shoulders of giants.”

Jonathan Knowles, CEO, Type 2 Consulting

“How Habit Beats Novelty,” which accompanies this article in the Spotlight package, is so right about the potential for damage when freshening a product. But the two key concepts mentioned should not be confused, although they may sometimes overlap. “Trying to make a product stand out” is not necessarily the same as “creating novelty.” Pursuing too much novelty can easily be detrimental, but finding other effective ways to stand out is often highly worthwhile. It’s important to stand out in a way that is right for the brand.

Phyllis Ezop, president, Ezop and Associates

THE STRETCH GOAL PARADOX

HBR ARTICLE BY SIM B. SITKIN, C. CHET MILLER, AND KELLY E. SEE, JANUARY-FEBRUARY

Stretch goals rarely work out. The problem is that organizations that would most benefit from stretch goals—those with recent wins and slack resources—seldom employ them. But businesses in trouble often adopt them in a desperate attempt to turn things around—and they nearly always fail.

Whereas stretch goals may be good for individual motivation and inspiration, they can have a negative impact on the organization, especially if their fundamental purpose is questionable. Organizations considering adopting them must ensure that employees are driven intrinsically, since that may be the key to achieving goals, and that the goals are based on current realities, not on lofty ideals. Short-term goals should be set to avoid demotivation.

Ojoh Taiwo Oluwakayomide, lead accountant, Blackbit Limited

ARE YOU SOLVING THE RIGHT PROBLEMS?

HBR ARTICLE BY THOMAS WEDELL-WEDELLSBORG, JANUARY-FEBRUARY

In surveys of 106 C-suite executives representing 91 private- and public-sector companies from 17 countries, the author found that a full 85% agreed that their organizations were bad at problem diagnosis, and 87% agreed that this carried significant costs. What these executives struggle with, it turns out, is not solving problems but figuring out what the problems are. The author outlines seven practices to effectively reframe problems.

Bernard Roth, a professor at Stanford, has also discussed the topic of finding the right problems to solve. He uses design thinking to reframe problems, and his technique, too, is very simple and quick. He suggests asking, “What would it do for me if I solved this problem?” Does that fit into the author’s seven techniques?

Fahad Alahmari, assistant professor, King Khalid University, Saudi Arabia

The author responds: My framework is not meant to be comprehensive; it simply shares the practices I’ve found to be most helpful for busy executives. Many other experts, from the design-thinking movement and elsewhere, offer useful techniques for reframing, and I would encourage you to experiment with various approaches to find out what works best for you. Roth’s question is one powerful example, and it mirrors my practice around exploring the objective.

More broadly, though, I’ve found that the problems of this world are too diverse for a one-size-fits-all question to work. I recommend asking first, “What is the problem we’re trying to solve?” next, “Is there a different way to think about that problem?” and then whichever questions (mine or others’) seem most appropriate to the problem at hand. Finally, remember to manage the context, too. As my article points out, asking the right questions is not enough.
The Mission
What if technology could stop the next epidemic before it happens? Microsoft and its partners are using smart traps to capture mosquitoes and sequence their DNA to identify new diseases early.

Machine Learning
New mosquito traps are getting smarter every day. These traps measure distinct patterns insects’ wings make while flying and capture only mosquitoes. This improves both efficiency and accuracy in the field and in the lab.
Most advertisers believe that search ads are more effective than static banners. But according to new research, most companies use them incorrectly. eBay, the world’s best-known auction site, got no lift from advertising on a popular search engine. But a new restaurant can attract substantially more business by advertising on Yelp, where people usually search on a cuisine rather than an establishment’s name. Brands should bear in mind that search ads work best when alerting consumers to something they’re not already aware of.

The article doesn’t mention that in the era of competitive conquetting, spending ad money for your own brand name ensures that competitors won’t insert themselves into the consideration set.

Sachin Panjwani, senior CRM strategy director, Spark44-Jaguar/Land Rover

The researcher Mike Luca responds: Advertising on competitor brands gets into murky territory. When eBay was advertising on its brand, it was presumably thinking of similar issues. In its case, advertising on the term “eBay” turned out to be a waste of money—which was a core finding of the company’s analysis. I just searched on Google for “Land Rover” and saw that the company is currently advertising on its brand. But Land Rover is also the first organic result. Just like eBay, Land Rover might benefit from eliminating its ad.

This article made me want to read the original research. The researchers are reported to have proved that when their ads were up, restaurants had more page views across devices, more requests for directions, and more click-throughs. All good. But did those restaurants see an increase in revenue quantitatively correlated to—and therefore directly attributable to—the ads? Did they become more marginally profitable during the ad period, after accounting for the ad costs?

These fundamental inquiries seem to me to be the marketing pioneer John Wanamaker’s questions. They’re as valid today as they were more than a century ago. In this article, they are still unanswered. Michael Pocalyko, CEO, Monticello Capital; managing partner, Special Investigations

I agree with some of the other commenters that attribution is the real holy grail here. Did those new leads from the ads convert to opportunities and then to paying customers? How much revenue was realized, and at what profit level, to justify the cost of advertising? Perhaps people accidentally clicked on a random link and quickly realized that it wasn’t something they wanted to buy.

These are the kinds of questions you have to be able to answer in the 2017 digital-advertising and demand-generation market. It’s an exciting time for advertising technology, because much of this testing and analytics will be automated in the future.

Will W. Slota, CFA, VP Finance, Metadata

Mike Luca responds: These comments raise a number of good points. Internet advertising has made experimentation much easier and allowed for better measurement of the impact of advertisements. But measurement is still imperfect, and part of our goal is to better map the relationship between clicks and revenue (and, more generally, to shed light on the advertising funnel)—an issue that is now getting a lot of attention. In our experiment, we initially observed increases in clicks, along with other metrics that are more-direct signals of restaurant success: requests for directions to the restaurant, calls to the restaurant, reviews, and so forth. To see how these effects might map to revenue changes, we then acquired sales data for a set of restaurants and looked at whether marginal increases in clicks mapped to marginal increases in sales. The results suggest that, on average, the sales gains were greater than ad costs (and yielded a positive return, given the cost of goods sold and the marginal costs of servicing additional customers).

Stepping back, we see broader lessons as well. For example, we encourage the many businesses that are running experiments to collect a wide range of outcomes to understand the full extent of the changes they are making. We also encourage large businesses to run their own experiments, since we see companies making mistakes in both directions—some advertising when they shouldn’t, and others missing what might be profitable opportunities.

The rise of online advertising has led to many fascinating new studies aimed at understanding when, where, and how companies should advertise. I look forward to seeing more work in this exciting area.
Faster Analysis
Gene sequencing converts mosquitoes into genetic data. Then Microsoft Cloud powered data analysis searches for pathogens so researchers can quickly identify emerging diseases and better understand how they spread.

Rethinking Disease
With the help of the cloud, Microsoft and its partners are fundamentally changing the way we think about infectious disease and may one day be able to stop outbreaks before they begin.
I have time to complete the things that require focus and strategic thinking.

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SOURCE "CAN YOU HANDLE THE INCREASED WORKLOAD OF BEING A MODERN LEADER?" BY AMY JEN SU

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**T-MOBILE’S CEO ON WINNING MARKET SHARE BY TRASH-TALKING RIVALS**

HBR ARTICLE BY JOHN LEGERE, JANUARY-FEBRUARY

When John Legere joined T-Mobile, in 2012, he saw that people hated the wireless industry and that to succeed, he’d have to do things differently from other carriers. He got rid of long-term contracts, made it easier to upgrade phones, and eliminated global roaming charges. He also began criticizing Verizon and AT&T Wireless on Twitter. T-Mobile had nearly 69 million subscribers by the end of Q3 in 2016.

Legere may be known for how he tweets and for using the tool to do bold outward messaging, but he mentions here that he also uses it for “listening” to and “learning” about consumers, competitors, and partner industries. Too many CEOs (and their legal teams, who keep them away from Twitter) think of it as merely a way to broadcast, when the truth lies in the stealth ways it can be used for research. Legere is right: Social media should be a key part of any CEO’s leadership strategy. Twitter, specifically, still has the edge in that regard.

Andrea Learned, influencer relations specialist, Learned On

This article’s headline boils the ingenious accomplishments of John Legere down to “trash-talking rivals.” But he is inspirational at many levels and has done a tremendous job of making T-Mobile a very impressive success story. Many of his principles apply not just to marketing but also to numerous other organizational areas in telecom providers, such as IT operations.

Christian Grambow, strategy consultant, Accenture Strategy

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**THE NEW SALES IMPERATIVE**

HBR ARTICLE BY NICHOLAS TOMAN, BRENT ADAMSON, AND CRISTINA GOMEZ, MARCH-APRIL

B2B customers are deeply uncertain and stressed. With an ever-expanding array of options, virtually infinite information available on any solution, and a swelling raft of stakeholders involved in each purchase, they often feel overwhelmed and paralyzed rather than empowered. The authors suggest a more prescriptive approach that guides customers through decision making. Companies that have mastered prescriptive selling work to (1) understand customers’ purchase journeys, (2) identify customer challenges at each buying stage, (3) give sellers tools to overcome each challenge, and (4) track customers’ purchase progress.

This was a very insightful article, especially considering the data provided. But it seems that this pattern could apply equally well to B2C in many contexts. Is there any research available there?

Fred Reikowsky, principal, Legacy Business Leaders

Author Nicholas Toman responds: I’d direct you to the work Barry Schwartz has done. We reference his HBR article in our piece. As with so many challenges in B2B, B2C almost always experiences them first. There have always been many options in B2B purchasing, but the recent explosion in information and consensus requirements (that is, more stakeholders) is what has put B2B over the edge lately.
GROWTH & INCLUSIVE PROSPERITY
The Secular Management Challenge

Guillaume Alvarez  Steve Blank  Sydney Finkelstein  Pankaj Ghemawat  Rick Goings  Hal Gregersen
Rahaf Harfoush  Julia Hobsbawm  Adi Ignatius  Rita McGrath  Mariana Mazzucato  Don Tapscott
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HOW VENTURE CAPITALISTS REALLY ASSESS A PITCH
The surprising behaviors that can make a difference. Plus how short-term sales quotas affect profits, why election years are terrible times to launch products, and more

DEFEND YOUR RESEARCH
Sometimes, Less Innovation Is Better

HOW I DID IT
State Street’s CEO on Creating Employment for At-Risk Youth

COMPiled BY HBR EDITORS
Getting Cybersecurity Right

Safeguarding your company in a complex world

APRIL 25 THROUGH MAY 22

For years, cybersecurity experts have warned companies and the public about the perils of ignoring this field. Many people responded only with a shrug. It sounded important in theory, but it was an easy thing to put out of mind. No longer. Hacks at Sony and then the DNC have made cybersecurity the focus of some of the most significant news stories of the past two years. That raises the possibility that 2017 will be the year that companies and individuals finally get it, the year cybersecurity truly becomes a priority. This Insight Center will cover standard best practices as well as innovations in the field, and it will consider how to handle cybersecurity in new domains like self-driving cars, AI-powered decision-making systems, a world moving toward remote work, and more.

LIVE ON APRIL 25
hbr.org/cybersecurity
VENTURE CAPITALISTS DON’T WANT TO SEE CERTAIN BEHAVIORS, SO IF YOU’RE OVERLY EMOTIONAL OR EXPRESSIVE, YOU SHOULD CONSIDER PRACTICING TO AVOID THOSE THINGS.”

From “How Venture Capitalists Really Assess a Pitch,” page 26
The Surprising Behaviors That Can Make a Difference

How Venture Capitalists Really Assess a Pitch

Before Lakshmi Balachandra entered academia, she spent a few years working for two venture capital firms, where she routinely witnessed a phenomenon that mystified her. The VCs would receive a business plan from an entrepreneur, read it, and get excited. They’d do some research on the industry, and their enthusiasm would grow. So they’d invite the company founder in for a formal pitch meeting—and by the end of it they’d have absolutely no interest in making an investment. Why did a proposal that looked so promising on paper become a nonstarter when the person behind the plan actually pitched it? “That’s what led me to pursue a PhD,” says Balachandra, now an assistant professor at Babson College. “I wanted to break down and study the interaction between the VC and the entrepreneur.”

Even before she began her research, Balachandra had some hunches. Most entrepreneurs believe that the investment decision will hinge primarily on the substance of their pitch—the information and logic, usually laid out in a PowerPoint deck. But in fact most VCs review pitch decks beforehand; the in-person encounter is more about asking questions, gaining clarity, and sizing up personalities. To better understand those dynamics, Balachandra spent almost 10 years capturing what happens in pitch meetings and quantifying the results. Some patterns were obvious from the start. For instance, entrepreneurs who laugh during their pitches have more success, as do people who name-check friends they have in common with the VCs. But after drilling down, she drew four broad conclusions:

**Passion is overrated.** Working with video recordings of 185 one-minute pitches during an MIT Entrepreneurship Competition (with real VCs as judges), Balachandra had coders turn off the sound and use only the visuals to assess how energetic and how positive or negative each founder appeared. (The coders controlled for presenters’ gender and attractiveness along with the size of the market the start-ups were addressing.) Among both VCs and entrepreneurs, conventional wisdom holds that “passion” is a positive attribute, connoting high energy, persistence, and commitment. “There’s this mythology that they want to see that you’re dying to do this business and work hard,” Balachandra says. But when the coders looked at their assessments in light of which start-ups were chosen as finalists in the competition, they found that the opposite was true: The judges preferred a calm demeanor. Follow-up studies showed that people equate calmness with leadership strength. So temper the enthusiasm and project stone-cold preparedness instead.

**Trust beats competence.** In a second study, Balachandra worked with a California-based network of angel investors who gather monthly to hear 20-minute pitches from start-ups. Immediately after each pitch, the investors filled out detailed surveys about their reactions and indicated whether they wanted to send the company through to due diligence (the next step before investing). The results showed that interest in a start-up was driven less by judgments that the founder was competent than by perceptions about character and trustworthiness. Balachandra says that this makes sense: A CEO who lacks a skill-based competency, such as a financial or technical background, can overcome that through training or by hiring the right complementary talent, but character is less malleable. And because angel investors often work closely for several years with entrepreneurs on highly risky ventures, they seek evidence that their new partners will behave in honest, straightforward ways that don’t heighten the risks. In fact, the research showed that entrepreneurs who projected trustworthiness increased their odds of being funded by 10%.

**Coachability matters.** Particularly among angel investors, who get involved earlier than traditional VCs do, decisions aren’t driven only by potential returns; they are driven by ego as well. Most angel investors are experienced entrepreneurs who want to be hands-on mentors, so they prefer investments where they can add value. For that to happen, a founder must be receptive to feedback and have the potential to be a good protégé.

Balachandra reached this conclusion by conducting surveys and evaluating video sessions with the same California investors’ network. Coders examined the videos for behaviors, such as nodding and smiling in response to questions, indicating that founders were open to ideas. When analysis and survey results indicated that they were, and when the investor was experienced in the relevant industry—giving him or her knowledge that could add value—the company was more likely to move on to due diligence.
Bong Koh: “I Prefer Investing in Missionaries”

Bong Koh worked for a traditional venture capital firm based in the Bay Area and cofounded three start-ups before launching KohFounders, a Chicago- and Los Angeles–based early-stage investment fund. He spoke with HBR about how he sizes up founders. Edited excerpts follow.

Do entrepreneurs overestimate the importance of the business idea they’re pitching relative to the way they present themselves? I 100% believe that they do. Although the business idea is obviously very important, I tend to filter out ideas and markets I’m not interested in before deciding whether to even take a pitch meeting. In the earliest stages, when you’re an angel or a pre-seed investor, there isn’t a lot of information about whether the business will gain traction. You have to take an educated guess about whether there’s a market, and you have to evaluate the other aspects of the pitch. A lot of it comes down to: Do you believe in this team? That’s first and foremost for me once I’ve decided something is a market opportunity I want to explore. I want to know if the entrepreneurs are willing to grind it out.

This research suggests that a calm demeanor is more attractive to investors than passion or energy. Do you agree? I actually prefer high-passion, high-energy entrepreneurs. People who start businesses are either mercenaries or missionaries, and I prefer investing in missionaries—people who really believe in the pain point they’re solving.

How important is an entrepreneur’s willingness to be mentored? I can’t make a company succeed. Any investors who say they can are arrogant. That said, I do look for people who will be good partners, who are open to feedback. If people get too defensive when receiving feedback, it can be challenging to work with them.

How hard is it to assess these traits in a single pitch? I try not to focus too much on how the entrepreneur pitches. Just as there are people who excel in job interviews but make horrible employees, there are people who are really good at pitching but are not necessarily good as operators. I try to spend a lot of time with an entrepreneur outside the pitch setting before I invest. That’s one of the reasons I do not invest a lot in the Bay Area—deals can move very quickly there, so it can be hard to spend a lot of time with a start-up before reaching a decision.
Gender stereotypes play a role. In Balachandra’s first job in venture capital, she rarely encountered other women, whether among VCs or among entrepreneurs; in fact, she says, 94% of venture capitalists are male. (She then worked at an all-female firm that focused on funding start-ups headed by women.) In her research, she and her colleagues used videos from the MIT competition to test the perception that VCs are biased against female entrepreneurs. Coders noted whether the presenter was male or female and then measured whether he or she exhibited stereotypically masculine behaviors (such as forcefulness, dominance, aggressiveness, and assertiveness) or stereotypically female ones (warmth, sensitivity, expressiveness, and emotionality). The analysis revealed that although gender alone didn’t influence success, people with a high degree of stereotypically female behavior were less likely than others to succeed at pitching. “The study shows that VCs are biased against femininity,” Balachandra says. “They don’t want to see particular behaviors, so if you’re overly emotional or expressive, you should consider practicing to avoid those things.”

The most important takeaway for entrepreneurs is this: You should approach the pitching process less as a formal presentation and more as an improvisational conversation in which attitude and mindset matter more than business fundamentals. Listen hard to the questions you’re asked, and be thoughtful in your responses. If you don’t know something, offer to find out—or ask the investor what he or she thinks. Don’t react defensively to critical questions. And instead of obsessing over the specifics of your pitch deck, Balachandra advises, “think about being calm, cool, and open to feedback.”

LOYALTY
WHEN CLIENTS ARE MOST LIKELY TO BOLT

STAFF TURNOVER CREATES particular headaches for professional services firms, because clients often follow departing employees to their new companies. In a novel study, a researcher used public records to determine when clients accompanied lobbyists who switched firms and when they stayed put.

One important factor is the length of the relationship with both the lobbyist and the firm. The chance that a client will follow a departing staffer rises by nearly 2%, on average, for each six months that the two have worked together. That effect is somewhat counterbalanced by the length of time the client has worked with the firm, with the risk that a client will follow a defecting staffer being about 1% lower for each six months that the client has employed the firm. The relative magnitude of the two effects is considerable: The chance that a client will jump ship with an employee doubles after three-and-a-half years. The structure of the relationship also matters. Clients served by teams are less likely to follow any one employee, especially when the teams consist of specialists; it’s hard for any single-issue lobbyist to replicate the services of an entire team.

Although the study targeted lobbyists, the results are relevant to professional services firms more broadly. “My findings provide initial evidence that can help managers identify which clients are most at risk of defecting as well as some advice on how to structure relationships to keep their loyalty,” the researcher says.


When product arrays are presented horizontally rather than vertically—for example, on store shelves—shoppers see more items, perceive greater variety, and buy a wider variety. Binocular vision facilitates horizontal eye movements, so those displays are easier to process.

“A ‘WIDE’ VARIETY: EFFECTS OF HORIZONTAL VERSUS VERTICAL DISPLAY ON ASSORTMENT PROCESSING, PERCEIVED VARIETY, AND CHOICE,” BY XIAOYAN DENG ET AL.
You found the right employee. I found a purpose.

— Emily, Solar Wrangler

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LUXURY SHOPPERS WANT A GOOD EXCUSE TO SPEND MORE

STUDIES SHOW THAT consumers often feel guilty about buying luxury products, because the excessive cost seems wasteful or frivolous. To overcome that guilt, marketers can emphasize what researchers call the functional alibi—a utilitarian feature that helps people justify the expense. (Examples include the off-road capabilities of high-end SUVs and the protective mobile-phone pockets in Louis Vuitton handbags.) Researchers analyzed online reviews to understand the importance of utilitarian attributes as prices increase and tested ads to learn how much more consumers would pay when a utilitarian feature was highlighted. (For instance, pregnant women said they’d pay 50% more for a Coach diaper bag after seeing an ad pointing out its insulated pouch for baby bottles.) They write: “Creative marketers can apply this strategy by designing products, promotions, and advertisements that appeal both to consumers’ desire for luxury and to their need for justification.”

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SALES
HOW SHORT-TERM QUOTAS AFFECT PROFITS

ONE OF THE big questions for sales force managers is what time period to use when setting quotas that will determine bonus and incentive payments. The issue is complicated by concerns that salespeople who have hit their quotas might reduce subsequent efforts—as might those who, having fallen behind, decide that the quota is out of reach. To test the effect of short-term quotas, researchers worked with a Swedish electronics retailer that shifted its incentive system from monthly quotas to daily ones.

As theory predicts, the change boosted performance among salespeople who were historically low performers, because with shorter periods of time, they were less likely to fall behind and give up. But most reps, regardless of past performance, focused on boosting incremental sales of low-priced merchandise. That caused a decrease in returned merchandise, but the drop in sales of more-expensive goods hurt profitability. (The company had worried that daily quotas might make the sales team too pushy, but the study found no evidence of that.) “Under a daily quota plan, every day is a fresh start,” the researchers write. “[But] firms need to be careful with the unintended consequences of such a move on the high performers.”

ABOUT THE RESEARCH “The Effects of Quota Frequency on Sales Force Performance: Evidence from a Field Experiment,” by Doug J. Chung and Das Narayandas (working paper)
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Retail
When Your Sales Staff Needs to Back Off

Store employees are generally encouraged to help customers—but their interventions can backfire. In a series of studies, researchers explored when employee-shopper encounters are helpful and when they are counterproductive. The key, they found, is giving customers sufficient privacy: When people perceive that they are being observed even though they don’t need or want help, they often move to another aisle, abandoning the item they had been considering. In one experiment, shoppers were 25% less likely to make an intended purchase when they felt their personal space was invaded, and unwanted eye contact was even worse, making them 37% less likely to buy. The need for privacy is greatest with “expressive” products (nail polish, hair dye) and embarrassing ones (family planning items, toilet paper).

The researchers suggest several strategies to ensure adequate privacy. Retailers can make shopping baskets readily available so that consumers can “hide” purchases; use “push for help” buttons and offer self-checkout; and place high-theft items in vending machines rather than locked cases (so that consumers can access them and complete their purchases on their own). “Privacy while shopping isn’t about creating an environment where employees and shoppers don’t interact at all,” they say. “It’s about giving shoppers control.”

About the Research
“Retail Space Invaders: When Employees’ Invasion of Customer Space Increases Purchase Intentions,” by Carol L. Esmark and Stephanie M. Noble (Journal of the Academy of Marketing Science, 2016); “I’ll Be Watching You: Shoppers’ Reactions to Perceptions of Being Watched by Employees,” by Carol L. Esmark, Stephanie M. Noble, and Michael J. Breazeale (working paper)

Operations
It Pays to Be a Digital Leader

A new study of 344 large U.S. companies designated some as digital “leaders” and some as “laggards” according to how well they harnessed real-time customer data and analytics, used demand forecasts and predictive modeling to make and deliver products, captured remote data on how customers use products, and used technology to improve employee performance. The research found that although leaders and laggards spend about the same percentage of revenue on IT, they achieve different results because leaders use their technology to do business in entirely new ways. For instance, the auto insurers Allstate, Progressive, and State Farm use connected devices to monitor customers’ driving patterns in ways that allow the firms to price policies more efficiently. “Leaders approach the digital opportunity with a different strategic mindset and execute on the opportunity with a different operating model,” the researchers say. The graphic below shows how leaders and laggards performed on three important measures from 2012 to 2014.

Source: Robert Bock, Marco Iansiti, and Karim R. Lakhani; S&P Capital IQ; Keystone Strategy
Smart answers to your most pressing work challenges.
**FEMALE ENTREPRENEURS ARE 15%**

"FAILURE OR VOLUNTARY EXIT? REASSESSING THE FEMALE UNDERPERFORMANCE HYPOTHESIS." BY RACHIDA JUSTO, DAWN R. DETIENNE, AND PHILIPP SIEGER

**BOARDs**

**DIRECTORS AREN’T DEALING WITH CYBERTHREATS**

Even as more large companies experience angry customers and negative publicity owing to cybersecurity lapses, board members fail to make the connection between the pervasiveness of the problem and their own companies’ vulnerabilities.

In a survey of more than 5,000 directors from more than 60 countries, just 38% reported a high level of concern about cyberthreats, and even fewer said they were prepared to deal with such risks.

In fact, when given a list of 23 board responsibilities and asked about the effectiveness of board processes, directors ranked cybersecurity preparedness last.

Two actions could correct this: Regularly including cybersecurity on board meeting agendas and asking management to bring in outside experts to conduct briefings.

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**LEADERSHIP**

**WHEN TECHNICAL SKILL BEATS EMOTIONAL INTELLIGENCE**

In many technical professions, people fear that promoting a strong individual performer to a managerial role will backfire, because technical proficiency isn’t a predictor of people skills. But a new study involving 35,000 employees in the United States and Britain shows that an employee’s job satisfaction is deeply influenced by whether the boss is a real expert in the core business of the organization. The researchers asked three questions: Could the supervisor do the employee’s job if necessary? Had the supervisor worked his or her way up in the company? How did the worker rate the supervisor’s technical competence? “We found that employees are far happier when they are led by people with deep expertise,” they say.

This study is another data point in the burgeoning field of “expert leadership” and adds to the growing recognition that although emotional intelligence and organizational skill are important, technical expertise can give a leader essential credibility. The researchers say the study suggests that hospitals should be led by doctors and universities by top researchers rather than the general administrators often heading those institutions. The data also shows that having a highly competent boss is by far the largest positive influence on a typical worker’s job satisfaction. “Even we were surprised by the size of the measured effect,” the researchers report.

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**ABOUT THE RESEARCH**

“Boss Competence and Worker Well-Being,” by Benjamin Artz, Amanda H. Goodall, and Andrew J. Oswald (Industrial and Labor Relations Review, forthcoming)

**SOURCE**

BORIS GROYSBERG AND J. YO-JUD CHENG, OF HARVARD BUSINESS SCHOOL; WOMENCORPORATEDIRECTORS FOUNDATION; SPENCER STUART; INDEPENDENT RESEARCHER DEBORAH BELL
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connection
noun / kəˈnek·shən/

“That moment I realized I was now part of a network that would truly empower me.”
City University of London professor Paolo Aversa and his colleagues documented every innovation on more than 300 Formula 1 race cars over 30 years and then cross-referenced that data with information on F1 race results. They discovered that in certain situations, more innovation led to poorer performance. Their conclusion:

**SOMETIMES, LESS INNOVATION IS BETTER**

**PROFESSOR AVERSA, DEFEND YOUR RESEARCH**

**AVERSA:** It started with the observation that in some races, no-frills cars, meaning those that didn’t innovate beyond F1’s minimum requirements, were doing well. My research partners—Alessandro Marino of LUISS University, Luiz Mesquita of Arizona State, and Jaideep Anand of Ohio State—and I then took it to a higher level and ran statistical models on 30 years’ worth of races. And it was clear that innovation didn’t always lead to better results. When we mapped the relationship between the two, we got an inverted U, showing that increases in innovation initially helped performance but after a point began to hurt it. But the real breakthrough was seeing that in certain circumstances, less innovative cars performed better. And average drivers were winning with average cars.

**HBR:** Why would less innovative cars perform better? We think it has to do with the environment around the innovation. If you have a complex product, like an F1 car, and are in a turbulent market, your instinct might be to innovate—to invest in getting ahead of all the change. But your chances of failing with an innovation in a dynamic, uncertain environment are very high. Often, it seems, it’s better to wait until things are more stable and let others who are busy innovating during times of turmoil fail.

**That’s what happens in F1?** Yes. Here’s an example. In 2009, F1 announced that teams could compete using hybrid technology. This was exciting but generated great uncertainty. No one had raced a hybrid at the F1 level before. But most teams dove into reengineering their cars to take advantage of hybrid technology. There was deep investment in innovation.

One team didn’t innovate—one owned by Ross Brawn, a legend in the business. Before he’d purchased the team, it had been failing, so it was short on cash. Instead of investing in the new technology, Brawn’s team just built a really solid, basic race car. With Jenson Button, a driver who had finished 18th the year before, it blew away everyone racing the superinnovative hybrid cars and won the championship.

**Maybe it was luck—or a good year for the driver?** The math we ran afterward suggests it wasn’t. Also, once the hybrid technology started to stabilize—once it wasn’t so uncertain—Brawn invested in it, and guess what? His team, rebranded as Mercedes, won again. He waited until the technology was better understood.

**But how do you know you’re in a turbulent environment?** A time of turbulence is mainly defined by three factors. One: the magnitude of change. How much is the industry changing compared with other times? Two: the frequency of change. How often are changes coming at you? And three: predictability. Can you see changes coming? The most important of these is predictability. You can absorb almost any change you can see coming. But if predictability is low, and either frequency is high or magnitude is large, you should scale back innovation until things get more stable. Certainly if all three are working against you, you should innovate less.

**F1 seems so specialized. Does this really apply to other businesses?** We already use this framework in other fields. Think of any complex product: a cell phone, a drug. We’ve seen that anytime exogenous forces or shocks to the system happen in their markets—for instance, a new set of regulations or a major political shift—in innovators tend to lose. Sudden changes create instability that seem to beg...
for innovation, but it’s probably better to sit tight and focus on execution and efficiency. We can apply these three factors to lots of industries. In fashion, magnitude is generally moderate—styles, materials, and so forth keep coming back in cycles. Frequency is steady, seasonal. But predictability—knowing what the next big thing will be—is wildly low. Think about music formats: The frequency of change is increasing, but it’s still not that often—vinyl was around for decades, CDs were around for years. But magnitude is massive when changes take you from something like a CD to a streaming service. And predictability is really low now.

We’ve applied these principles to everything from beer to finance and, of course, F1 racing.

Are executives surprised to hear you say, “Maybe you shouldn’t be innovating so much”? We wouldn’t put it that way. F1 teams really have one product, the race car, but most companies have a portfolio of products. So we look at their different markets and think about where they should be scaling back innovation because of uncertainty. I would never say stop innovating altogether. I would say maybe push the envelope in this stable market but scale back and focus on efficiency in that market.

Why did you study F1? I’m the son of an engineer. I’ve always loved Formula 1. I’ve driven race cars myself and helped design a car and build a team. Since I was a kid, I’ve watched the races with my father. It’s this amazing sport where it always seemed like the most cutting-edge cars would win. But I noticed that sometimes the lackluster cars with mediocre drivers and low budgets won. And we’d argue about why that was. My father thought it was luck, but I thought it was something else. I said to him, “Someday I’ll prove you wrong.”

So basically you’re settling a bet with your dad. It wasn’t easy, either. We had to amass blueprints to document data on six elements of the cars subject to innovation, like chassis, tires, and aerodynamics. We also had to find out if cars were updated each season. Then we graded each element’s innovativeness on a scale of 0 to 3, where 3 was radical innovation and 0 was little to none. And we vetted that with engineers.

You were really committed to proving your dad wrong. I showed him the paper. He liked it. He gave me credit for winning that argument. It only took me 20 years.

Where else do you want to take this research? We’re looking at other effects of turbulence. Specifically, we want to understand how it affects the likelihood that managers will create partnerships and alliances. There are lots of ways to look at what happens in times of instability. The chase goes on.
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State Street’s CEO on Creating Employment for At-Risk Youths

The key is a system to support kids as they move through school and into the workforce. by Joseph Hooley
n 2014 the Massachusetts governor’s office called and asked me to serve in a public/private partnership. The group hoped to improve the quality of community colleges in the Commonwealth. Workforce development is an issue I care about, and every CEO gets calls like this from time to time. I try to help out when I can, so I said yes.

I went to a few meetings, and I quickly became frustrated. This wasn’t my first experience with public/private partnerships, and although some have been very successful, too many have not worked well. It can be mind-numbing. As I sat in one meeting, I began daydreaming about how State Street might have the leverage to attack parts of the workforce development problem itself.

Our company has a large charitable foundation, so we were already spending millions of dollars a year in the areas of education and job training. State Street is one of Boston’s largest employers, and we hire thousands of entry-level employees each year. That’s important. The grand prize at the end of one’s education is a job and a career, and we can provide that in a way that nonprofits can’t. Furthermore, our company is loaded with Millennials who want to volunteer, and mentorship is a key part of helping young people run the gamut from an urban high school to college and then into a job. When it comes to finding someone at State Street to mentor a student, you don’t have to ask twice.

I began talking about this idea inside the company, and employees were enthusiastic. We wanted to go beyond spot solutions and put together a comprehensive, systematic, and scalable program—one aimed at producing measurable, sustained outcomes.

That’s how we came to develop Boston WINs, which stands for “workforce investment network.” We launched it in 2015, and we committed to investing $20 million and hiring 1,000 graduates of urban schools over the next four years. So far, the results are promising—we’ve hired more than 200 graduates, and they are proving to be an excellent fit with our culture. Outside the company, every business leader I’ve talked to has been intrigued by our model.

TO BE EFFECTIVE, WE NEEDED TO GO BEYOND WHAT HAPPENS IN URBAN CLASSROOMS.

Urban education is central

I think a lot about economic opportunity, because I come from a middle-class family. I grew up outside Boston, one of five siblings. When I was in college, I always had a part-time job, and I funded my education with loans and my own earnings. I was paying back student loans well into my thirties.

My dad worked at State Street for 32 years, but during most of his career here, the company was very different from what it is today. In the 1970s State Street was beginning to transform from a traditional bank into a technology-driven financial services company.

That shift made it attractive to me. After college I’d gone to work for AT&T, where I received extensive training in what we now call information technology. I met my wife during one of those classes. After the consent decree that broke up the old Bell system, I ended up working for American Bell, which was selling communications equipment to big organizations and competing against companies such as IBM. The technology bent stayed with me; I became focused on finding ways to use technology to enable services and create capabilities.

My father retired from State Street in December 1985, and I joined one month later. I spent 10 years running a State Street joint venture, initially in Kansas City. I returned to Boston in 2000 to lead our global investment services business and was eventually promoted to vice chairman and then president. In 2010 I became State Street’s CEO.

Along the way, I became involved in local philanthropy, particularly as an active supporter and a board member of the Boys & Girls Clubs of Boston. I was able to visit some of the clubs to see their good work. They provide after-school care, teach skills, organize sports teams, and help kids with homework. I saw how much good organizations like that can do. I also worked on some urban school initiatives in which State Street had become involved.

Through that work I became convinced that if I could help fix just one problem in the world, it would be urban education. Societal problems tend to be interconnected, and urban education touches many of them. Improving it creates economic growth, reduces crime, and lessens unemployment, social strife, and homelessness. I’ve visited a lot of schools over the years, and I’ve seen some excellent ones, but the solutions to providing good urban education tend to be spotty, and they don’t scale well.

WORKING LIKE A RELAY RACE

The more I thought about the problem, the more I recognized that to be effective, our approach needed to go beyond what happens in urban classrooms. Getting students through school, into college, and then into good jobs requires managing a series of handoffs and transitions, just as runners in a relay race have to pass the baton. For example, some nonprofits do a great job of coaching high school students to improve their study skills or to perform better on college admissions exams. But rarely do those same organizations help the students with the college search and application process, which is the logical next step. Other organizations do that, but many kids can’t navigate between the two. Then, when students get into college, they need mentoring...
and coaching to help them stay enrolled and succeed, which requires a different kind of support. After that they need help getting ready for a job and finding one. It’s similar to a hospital experience: The patient may be treated by several specialists, and they have to communicate well with one another to achieve overall success.

We wanted to create a program that would combine all the kinds of expertise necessary to support youths through high school and college and into the workforce. The key would be a coordinated system to pass students between these specialties, rather than relying on the students themselves to find what they needed when they needed it in a patchwork of organizations and solutions.

In short, we wanted to bring together a handful of nonprofits with a proven record of getting and keeping students on the path from the education system to employment, give those nonprofits funding to scale up, coordinate their efforts so that they were no longer working in isolation, and then commit to hiring a large number of those students after graduation.

THE FIVE PARTNERS
With that vision in place, the question became: How would we achieve it?

Through State Street’s charitable foundation, we already had relationships with organizations that excelled at addressing specific pieces of the larger problem. But we decided to open up the field. We created a request for proposals and then held a Shark Tank–like competition among nonprofits, with the goal of choosing five groups that would receive grants over four years. Nonprofits crave multiyear funding commitments, so we had no problem getting a number of them to compete.

Not until they got involved in our screening process did they realize how hard this would be. To become a part of Boston WINs, they’d need to start collaborating with other organizations, which isn’t necessarily their strength. Many of the highest-performing, most dynamic nonprofits have charismatic leaders; we were asking them to check their egos at the door and focus on ways to collaborate. That didn’t always come naturally. My primary feedback to everyone was that the groups needed to think bigger. I believe that’s part of a leader’s role—to force people to raise their level of ambition.

We ended up choosing four organizations we’d funded previously and one that was new to us. Year Up is a Boston-based national organization that provides intensive skills training for low-income young adults. UAstorage focuses on helping students find ways to finance college. The Boston Private Industry Council (PIC) helps students obtain workplace experience and find a path from school to work. College Advising Corps (CAC) assists students with the college search and application process. And Bottom Line helps low-income and first-generation students get to and through college.

Although the five organizations remain separate, we expect them to work closely—not unlike a group of manufacturing suppliers that need to cooperate so that parts fit together perfectly, deliveries are synchronized, and quality remains high. We call this coordinated action, and it refers to our intention to deliver these services in a complementary, reinforcing, and properly sequenced manner. We closely track what services each student is receiving; all five partners enter their data into a shared system every two weeks. We have 20 high schools participating this year; at each one we hold a monthly meeting where reps from the five organizations discuss individual students’ progress. All the students have a list of 12 milestones they must reach by certain dates—such as submitting college essays, completing financial aid forms, participating in a job shadow program, drafting a résumé, and doing a mock interview. Coordinated action allows us to confirm that students are staying on track, identify those who may have a gap in the support they’re receiving, and ensure that effective handoffs are taking place between the various organizations, especially when students make the big leap from high school into college.

THE BROAD REACH OF BOSTON WINs
After the five nonprofits were chosen, we brought them in for a daylong session that I attended. We made sure everybody was committed to the vision.
“IT WAS VITAL TO HAVE THAT SUPPORT”

When Alana Hans-Bodden was attending public school in the Boston neighborhood of Dorchester, she believed she was smart enough to become the first in her family to go to college. But the steps involved—from choosing the right school to applying to lining up financial aid—were overwhelming. Hans-Bodden, now a 24-year-old senior associate on State Street’s independent verification team, obtained help from a nonprofit called Bottom Line, which is part of the Boston WINs program. She explains how it helped her get ahead. Edited excerpts follow:

When did you begin working with Bottom Line? I started in high school. They worked with me on college applications, essays, interviews, and financial aid and scholarship applications. They try to make sure you find the best fit for college. I attended Bridgewater State University, and a Bottom Line counselor worked with me throughout my time there. We had formal meetings three times every semester—at the beginning, at midterms, and right before finals. Bottom Line also held career fairs and helped me write a résumé and prepare for job interviews.

Would you have made it to college without that assistance? I think so. But I probably would have taken a break from college when my mom passed. I was a 20-year-old sophomore, and I became responsible for my 12-year-old sister. Bottom Line helped streamline things for me—how to fill out the right forms, send the right e-mails to my professors, and notify people so that I could get through that semester and stay enrolled. It was vital to have that support.

How did you wind up at State Street? My first interaction with State Street was at a career fair, as a freshman in college. At the time, I was a political science major who wanted to go to law school, and finance wasn’t on my radar. But my mother was an accountant, and not long before she died, we had a conversation about how a finance or accounting major would benefit me in the long run, particularly since law school would be difficult to afford. I talked to my Bottom Line counselor, and she suggested I do a job shadow. I spent a day watching someone work at State Street. Late in my senior year, I was asked to give a speech at a dinner for Bottom Line. After I spoke, a State Street HR person approached me and began introducing me to executives. I interned there during the summer of 2015 and joined full-time that fall. My work is challenging—it’s not the same thing every day. I have to think about work processes and analyze data to find ways the company can reduce risk and increase compliance.

What’s your involvement with Boston WINs now? I keep in touch with my Bottom Line counselors, I go to events, and I network within State Street with other employees who’ve come through the programs that make up Boston WINs. Looking back, I see that I came away from my experience with more confidence, a better sense of what I wanted to do with my life, and a better ability to connect, to be myself, and to reach out for support when I need it.
They were all enthusiastic—after all, they’d just won in a competitive setting. The challenge was that these organizations are used to having control. We had to explain that this would be different—each organization would need to hand clients off to another organization, and the goal was to maximize the collective impact of all five.

I cannot overemphasize how hard that has proved to be. Each of these nonprofits had been operating in its own lane and had perfected a solution to a piece of the problem. We were trying to get them to think and work holistically and horizontally in ways they hadn’t before.

We launched the program in June 2015, at an event with Boston Mayor Marty Walsh and Massachusetts Governor Charlie Baker. It was a wonderful culmination of the first stage of the program. But it was just the beginning.

The beauty of Boston WINs is that it can reach any city youth who is involved with one of the five organizations, all of which had recruitment processes in place before they partnered with State Street. (Year Up and Bottom Line have a formal application system, whereas services provided by uAspire, PIC, and CAC are available to any eligible Boston public school student.) Because the existing system of each nonprofit was already working well, we decided not to interfere; instead, any student working with any of the five is automatically considered a Boston WINs youth. The new program connects the five nonprofits so that a student who receives assistance from College Advising Corps in searching for and applying to colleges will now also receive guidance on financing his or her education from uAspire. In its first year alone, Boston WINs served more than 19,430 youths, and State Street hired 216 Boston WINs graduates.

We opened a facility at the University of Massachusetts that allows students to work part-time, gaining job experience and giving us a look at how they work. We have more than 50 interns from Bunker Hill Community College at any given time. We give them a tryout, and we hire some of them permanently after they graduate. Once they’re on board, they can develop their skills and migrate through the organization.

We’ve committed to four years of funding, but we evaluate each nonprofit annually to see how well it’s contributing to the overall mission. We reserve the right to kick a group out if it’s not cooperating. We measure progress using metrics and dashboards. We want to see how many people are affected by these programs and how their trajectories have improved. When you’re looking at scale and return on investment, the metrics are important, but the individual results are important too. When you meet a kid whose trajectory was completely changed by a program like this, it’s inspiring. And those young people work hard as employees. They appreciate that the opportunity they’ve been given is something special.

NOT JUST FEEL-GOOD STUFF
As a CEO, I’m careful about how much time I devote to philanthropy. I report to our 11-person board of directors, and I’m responsible to shareholders, employees, clients, and the community. My greatest allocation of time is to the first three groups, as you’d expect. But the link between our community involvement and my own conscience is pretty tight. This is not just feel-good stuff. We’re competing for talent in this city, and all our employees—especially the younger ones—appreciate our community involvement. I meet every month for breakfast with groups of employees, and I always ask them two questions: What keeps you at State Street? and What would prevent you from staying at State Street? They usually cite flexible working conditions, career opportunities, and community involvement as their priorities. The connection between that community involvement and our employees translates directly into how well we serve our shareholders and clients.

We’re nearly halfway through our four-year commitment to Boston WINs, and I think we’ve established a pretty good rhythm. We’re already thinking about how to scale the program beyond Boston, to other parts of the country and the world. State Street has big operations in Kansas City, Singapore, Poland, Ireland, and elsewhere, and there’s no reason we can’t make it work in those places, too.

The program fits nicely with the evolution of our company’s strategy. As CEO, my two biggest priorities have been to transform State Street into a technology-enabled digital business and to make us less about processing and more about deriving success from data and analytics. That strategy shift has had an impact on our hiring. We need employees who are very comfortable with data and know how to analyze it. We need more IT workers. As a result of the Great Recession and the Troubled Asset Relief Program, companies like ours also face more regulation, so we’re hiring staffers in the compliance function as well. Boston WINs is helping us find great employees in these areas.

I believe that Boston WINs will be an important part of what State Street accomplishes during this decade. If we can crack the code on the problem of urban workforce development, we’ll create a diverse group of well-educated and highly motivated employees for our company while also filling a need for the entire community. Companies talk a lot about wanting new hires to be “job ready,” and Boston WINs achieves that. It’s a great example of how a program that benefits the city can simultaneously benefit our shareholders.
The HBR McKinsey Awards, judged by an independent panel of business and academic leaders, commend outstanding articles published each year in Harvard Business Review. The awards were established in 1959 to recognize practical and groundbreaking management thinking.

**FIRST PLACE**

**Why Diversity Programs Fail**
**JULY–AUGUST 2016**

Most firms try to check discrimination by controlling managers’ behavior—an approach that tends to activate bias. The most effective programs, argue Harvard University’s Frank Dobbin and Tel Aviv University’s Alexandra Kalev, engage people in working for diversity, increase their contact with women and minorities, and tap into their desire to look good.

**THE FINALISTS**

**Branding in the Age of Social Media**
**MARCH 2016**

Social networks have rewritten the rules for marketers: So-called crowdcultures produce their own content so effectively that companies can’t compete. Brands can win the battle for cultural relevance, writes Douglas Holt of the Cultural Strategy Group, by collaborating with crowdcultures and championing their ideologies in the marketplace.

**How to Build a Culture of Originality**
**MARCH 2016**

Innovative thinking isn’t confined to a few gifted “visionaries,” says the Wharton School’s Adam Grant. Leaders can develop this skill in their organizations by giving employees opportunities and incentives to generate new ideas, having the right people vet those ideas, and striking the proper balance between cohesion and dissent.

**THE JUDGES**

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THE ERROR AT THE HEART OF CORPORATE LEADERSHIP
Most CEOs and boards believe their main duty is to maximize shareholder value. It’s not.

THE CEO VIEW: DEFENDING A GOOD COMPANY FROM BAD INVESTORS
A conversation with former Allergan CEO David Pyott

THE BOARD VIEW: DIRECTORS MUST BALANCE ALL INTERESTS
A conversation with corporate governance expert Barbara Hackman Franklin

THE DATA: WHERE LONG-TERMISM PAYS OFF
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THE COMPANY’S HEALTH, NOT SHAREHOLDERS’ WEALTH, MUST BE MANAGEMENT’S PRIMARY CONCERN.

From “The Error at the Heart of Corporate Leadership,” page 50
In the fall of 2014, the hedge fund activist and Allergan shareholder Bill Ackman became increasingly frustrated with Allergan’s board of directors. In a letter to the board, he took the directors to task for their failure to do (in his words) “what you are paid $400,000 per year to do on behalf of the Company’s owners.” The board’s alleged failure: refusing to negotiate with Valeant Pharmaceuticals about its unsolicited bid to take over Allergan—a bid that Ackman himself had helped engineer in a novel alliance between a hedge fund and a would-be acquirer. In presentations promoting the deal, Ackman praised Valeant for its shareholder-friendly capital allocation, its shareholder-aligned executive compensation, and its avoidance of risky early-stage research. Using the same approach at Allergan, he told analysts, would create significant value for its shareholders. He cited Valeant’s plan to cut Allergan’s research budget by 90% as “really the opportunity.” Valeant CEO Mike
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Pearson assured analysts that “all we care about is shareholder value.”

These events illustrate a way of thinking about the governance and management of companies that is now pervasive in the financial community and much of the business world. It centers on the idea that management’s objective is, or should be, maximizing value for shareholders, but it addresses a wide range of topics—from performance measurement and executive compensation to shareholder rights, the role of directors, and corporate responsibility. This thought system has been embraced not only by hedge fund activists like Ackman but also by institutional investors more generally, along with many boards, managers, lawyers, academics, and even some regulators and lawmakers. Indeed, its precepts have come to be widely regarded as a model for “good governance” and for the brand of investor activism illustrated by the Allergan story.
Yet the idea that corporate managers should make maximizing shareholder value their goal—and that boards should ensure that they do—is relatively recent. It is rooted in what’s known as agency theory, which was put forth by academic economists in the 1970s. At the theory’s core is the assertion that shareholders own the corporation and, by virtue of their status as owners, have ultimate authority over its business and may legitimately demand that its activities be conducted in accordance with their wishes.

Attributing ownership of the corporation to shareholders sounds natural enough, but a closer look reveals that it is legally confused and, perhaps more important, involves a challenging problem of accountability. Keep in mind that shareholders have no legal duty to protect or serve the companies whose shares they own and are shielded by the doctrine of limited liability from legal responsibility for those companies’ debts and misdeeds. Moreover, they may generally buy and sell shares without restriction and are required to disclose their identities only in certain circumstances. In addition, they tend to be physically and psychologically distant from the activities of the companies they invest in. That is to say, public company shareholders have few incentives to consider, and are not generally viewed as responsible for, the effects of the actions they favor on the corporation, other parties, or society more broadly. Agency theory has yet to grapple with the implications of the accountability vacuum that results from accepting its central—and in our view, faulty—premise that shareholders own the corporation.

The effects of this omission are troubling. We are concerned that the agency-based model of governance and management is being practiced in ways that are weakening companies and—if applied even more widely, as experts predict—could be damaging to the broader economy. In particular we are concerned about the effects on corporate strategy and resource allocation. Over the past few decades the agency model has provided the rationale for a variety of changes in governance and management practices that, taken together, have increased the power and influence of certain types of shareholders over other types and further elevated the claims of shareholders over those of other important constituencies—without establishing any corresponding responsibility or accountability on the part of shareholders who exercise that power. As a result, managers are under increasing pressure to deliver ever faster and more predictable returns and to curtail riskier investments aimed at meeting future needs and finding creative solutions to the problems facing people around the world.

Don’t misunderstand: We are capitalists to the core. We believe that widespread participation in the economy through the ownership of stock in publicly traded companies is important to the social fabric, and that strong protections for shareholders are essential. But the health of the economic system depends on getting the role of shareholders right. The agency model’s extreme version of shareholder centrality is flawed in its assumptions, confused as a matter of law, and damaging in practice. A better model would recognize the critical role of shareholders but also take seriously the idea that corporations are independent entities serving multiple purposes and endowed by law with the potential to endure over time. And it would acknowledge accepted legal principles holding that directors and managers have duties to the corporation as well as to shareholders. In other words, a better model would be more company centered.

Before considering an alternative, let’s take a closer look at the agency-based model.

FOUNDATIONS OF THE MODEL
The ideas underlying the agency-based model can be found in Milton Friedman’s well-known *New York Times Magazine* article of 1970 denouncing corporate “social responsibility” as a socialist doctrine. Friedman takes shareholders’ ownership of the corporation as a given. He asserts that “the manager is the agent of the individuals who own the corporation” and, further, that the manager’s primary “responsibility is to conduct the business in accordance with [the owners’] desires.” He characterizes the executive as “an agent serving the interests of his principal.”

These ideas were further developed in the 1976 *Journal of Financial Economics* article “Theory of the Firm,” by Michael Jensen and William Meckling, who set forth the theory’s basic premises:

• Shareholders own the corporation and are “principals” with original authority to manage the corporation’s business and affairs.

• Managers are delegated decision-making authority by the corporation’s shareholders and are thus “agents” of the shareholders.

• As agents of the shareholders, managers are obliged to conduct the corporation’s business in accordance with shareholders’ desires.

• Shareholders want business to be conducted in a way that maximizes their own economic returns. (The assumption that shareholders are unanimous in this objective is implicit throughout the article.)

Jensen and Meckling do not discuss shareholders’ wishes regarding the ethical standards that managers should observe in conducting the business, but Friedman offers two views in his *Times* article. First he writes that shareholders generally want managers “to make as much money as possible while conforming to the basic rules of the society, both those embodied in law and those embodied in ethical custom.” Later he suggests that shareholders simply want managers to use resources and pursue profit by engaging “in open and free
competition without deception or fraud.” Jensen and Meckling agree with Friedman that companies should not engage in acts of “social responsibility.”

Much of the academic work on agency theory in the decades since has focused on ensuring that managers seek to maximize shareholder returns—primarily by aligning their interests with those of shareholders. These ideas have been further developed into a theory of organization whereby managers can (and should) instill concern for shareholders’ interests throughout a company by properly delegating “decision rights” and creating appropriate incentives. They have also given rise to a view of boards of directors as an organizational mechanism for controlling what’s known as “agency costs”—the costs to shareholders associated with delegating authority to managers. Hence the notion that a board’s principal role is (or should be) monitoring management, and that boards should design executive compensation to align management’s interests with those of shareholders.

**THE MODEL’S FLAWS**

Let’s look at where these ideas go astray.  

1 **Agency theory is at odds with corporate law:** Legally, shareholders do not have the rights of “owners” of the corporation, and managers are not shareholders’ “agents.” As other scholars and commentators have noted, the idea that shareholders own the corporation is at best confusing and at worst incorrect. From a legal perspective, shareholders are beneficiaries of the corporation’s activities, but they do not have “dominion” over a piece of property. Nor do they enjoy access to the corporate premises or use of the corporation’s assets. What shareholders do own is their shares. That generally gives them various rights and privileges, including the right to sell their shares and to vote on certain matters, such as the election of directors, amendments to the corporate charter, and the sale of substantially all the corporation’s assets.

Furthermore, under the law in Delaware—legal home to more than half the Fortune 500 and the benchmark for corporate law—the right to manage the business and affairs of the corporation is vested in a board of directors elected by the shareholders; the board delegates that authority to corporate managers. Within this legal framework, managers and directors are fiduciaries rather than agents—and not just for shareholders but also for the corporation. The difference is important. Agents are obliged to carry out the wishes of a principal, whereas a fiduciary’s obligation is to exercise independent judgment on behalf of a beneficiary. Put differently, an agent is an order taker, whereas a fiduciary is expected to make discretionary decisions. Legally, directors have a fiduciary duty to act in the best interests of the corporation, which is very different from simply doing the bidding of shareholders.

2 **The theory is out of step with ordinary usage:** Shareholders are not owners of the corporation in any traditional sense of the term, nor do they have owners’ traditional incentives to exercise care in managing it. This observation is even truer today than when it was famously made by Adolf Berle and Gardiner Means in their landmark 1932 study The Modern Corporation and Private Property. Some 70% of shares in U.S.-listed companies today are held by mutual funds, pension funds, insurance companies, sovereign funds, and other institutional investors, which manage them on behalf of beneficiaries such as households, pensioners, policy holders, and governments. In many instances the beneficiaries are anonymous to the company whose shares the institutions hold. The professionals who manage these investments are typically judged and rewarded each quarter on the basis of returns from the total basket of investments managed. A consequence is high turnover in shares (seen in the exhibit “Average Holding Period for Public Company Shares”), which also results from high-frequency trading by speculators.

The decisions of asset managers and speculators arise from expectations regarding share price over a relatively short period of time. As the economy passes through cycles, the shares of companies in entire industry sectors move in and out of favor. Although the shareholders of record at any given moment may vote on an issue brought before them, they need not know or care about the company whose shares they hold. Moreover, the fact that they can hedge or immediately sell their shares and avoid exposure to the longer-term effects of that vote makes it difficult to regard them as proprietors of the company in any customary sense.

The anonymity afforded the shares’ beneficial owners further attenuates their relationship to the companies whose shares they own. Some 85% of publicly traded shares in the United States are held in the name of an institution serving as an intermediary—the so-called street name—on behalf of itself or its customers. And of the ultimate owners of those shares, an estimated 75% have instructed their intermediaries not to divulge their identities to the issuing company.

3 **The theory is rife with moral hazard:** Shareholders are not accountable as owners for the company’s activities, nor do they have the responsibilities that officers and directors do to protect the company’s interests. The problem with treating shareholders as proprietors is exacerbated by the absence of another traditional feature of ownership: responsibility for the property owned and accountability—even legal liability, in

The health of the economic system depends on getting the role of shareholders right.
some cases—for injuries to third parties resulting from how that property is used. Shareholders bear no such responsibility. Under the doctrine of limited liability, they cannot be held personally liable for the corporation’s debts or for corporate acts and omissions that result in injury to others.

With a few exceptions, shareholders are entitled to act entirely in their own interest within the bounds of the securities laws. Unlike directors, who are expected to refrain from self-dealing, they are free to act on both sides of a transaction in which they have an interest. Consider the contest between Allergan and Valeant. A member of Allergan’s board who held shares in Valeant would have been expected to refrain from voting on the deal or promoting Valeant’s bid. But Allergan shareholders with a stake in both companies were free to buy, sell, and vote as they saw fit, with no obligation to act in the best interests of either company. Institutional investors holding shares in thousands of companies regularly act on deals in which they have significant interests on both sides.

In a well-ordered economy, rights and responsibilities go together. Giving shareholders the rights of ownership while exempting them from the responsibilities opens the door to opportunism, overreach, and misuse of corporate assets. The risk is less worrying when shareholders do not seek to influence major corporate decisions, but it is acute when they do. The problem is clearest when temporary holders of large blocks of shares intervene to reconstitute a company’s board, change its management, or restructure its finances in an effort to drive up its share price, only to sell out and move on to another target without ever having to answer for their intervention’s impact on the company or other parties.

The theory’s doctrine of alignment spreads moral hazard throughout a company and narrows management’s field of vision. Just as freedom from accountability has a tendency to make shareholders indifferent to broader and longer-term considerations, so agency theory’s recommended alignment between managers’ interests and those of shareholders can skew the perspective of the entire organization. When the interests of successive layers of management are “aligned” in this manner, the corporation may become so biased toward the narrow objectives and cannot be treated as a single “owner.” Agency theory assumes that all shareholders want the company to be run in a way that maximizes their own economic return. This simplifying assumption is useful for certain purposes, but it masks important differences. Shareholders have differing investment objectives, attitudes toward risk, and time horizons. Pension funds may seek current income and preservation of capital. Endowments may seek long-term growth. Young investors may accept considerably more risk than their elders will tolerate. Proxy voting records indicate that shareholders are divided on many of the resolutions put before them. They may also view strategic opportunities differently. In the months after Valeant announced its bid, Allergan officials met with a broad swath of institutional investors. According to Allergan’s lead independent director, Michael Gallagher, “The diversity of opinion was as wide as could possibly be”—from those who opposed the deal and absolutely did...
not want Valeant shares (the offer included both stock and cash) to those who saw it as the opportunity of a lifetime and could not understand why Allergan did not sit down with Valeant immediately.

**THE AGENCY-BASED MODEL IN PRACTICE**

Despite these problems, agency theory has attracted a wide following. Its tenets have provided the intellectual rationale for a variety of changes in practice that, taken together, have enhanced the power of shareholders and given rise to a model of governance and management that is unrelated in its shareholder centricty. Here are just a few of the arenas in which the theory’s influence can be seen:

**Executive compensation.** Agency theory ideas were instrumental in the shift from a largely cash-based system to one that relies predominantly on equity. Proponents of the shift argued that equity-based pay would better align the interests of executives with those of shareholders. The same argument was used to garner support for linking pay more closely to stock performance and for tax incentives to encourage such “pay for performance” arrangements. Following this logic, Congress adopted legislation in 1992 making executive pay above $1 million deductible only if it is “performance based.” Today some 62% of executive pay is in the form of equity, compared with 19% in 1980.

**Disclosure of executive pay.** Agency theory’s definition of performance and its doctrine of alignment undergird rules proposed by the SEC in 2015 requiring companies to expand the information on executive pay and shareholder returns provided in their annual proxy statements. The proposed rules call for companies to report their annual total shareholder return (TSR) over time, along with annual TSR figures for their peer group, and to describe the relationships between their TSR and their executive compensation and between their TSR and the TSR of their peers.

**Shareholders’ rights.** The idea that shareholders are owners has been central to the push to give them more say in the nomination and election of directors and to make it easier for them to call a special meeting, act by written consent, or remove a director. Data from FactSet and other sources indicates that the proportion of S&P 500 companies with majority voting for directors increased from about 16% in 2006 to 88% in 2015; the proportion with special meeting provisions rose from 41% in 2002 to 61% in 2015; and the proportion giving shareholders proxy access rights increased from less than half a percent in 2013 to some 39% by mid-2016.

**The power of boards.** Agency thinking has also propelled efforts to eliminate staggered boards in favor of annual election for all directors and to eliminate “poison pills” that would enable boards to slow down or prevent “owners” from voting on a premium offer for the company. From 2002 to 2015, the share of S&P 500 companies with staggered boards dropped from 61% to 10%, and the share with a standing poison pill fell from 60% to 4%. (Companies without a standing pill may still adopt a pill in response to an unsolicited offer— as was done by the Allergan board in response to Valeant’s bid.)

**Management attitudes.** Agency theory’s conception of management responsibility has been widely adopted. In 1997 the Business Roundtable issued a statement declaring that “the paramount duty of management and of boards of directors is to the corporation’s stockholders” and that “the principal objective of a business enterprise is to generate economic returns to its owners.” Issued in response to pressure from institutional investors, the statement in effect revised the Roundtable’s earlier position that “the shareholder must receive a good return but the legitimate concerns of other constituencies also must have the appropriate attention.” Various studies suggest ways in which managers have become more responsive to shareholders. Research indicates, for instance, that companies with majorities (rather than pluralities) voting for directors are more apt to adopt shareholder proposals that garner majority support, and that many chief financial officers are willing to forgo investments in projects expected to be profitable in the longer term in order to meet analysts’ quarterly earnings estimates. According to surveys by the Aspen Institute, many business school graduates regard maximizing shareholder value as their top responsibility.

**Investor behavior.** Agency theory ideas have facilitated a rise in investor activism and legitimized the playbook of hedge funds that mobilize capital for the express purpose of buying company shares and using their position as “owners” to effect changes aimed at creating shareholder value. (The sidebar “The Activist’s Playbook” illustrates how agency theory ideas have been put into practice.) These investors are intervening more frequently and reshaping how companies allocate resources. In the process they are reshaping the strategic context in which all companies and their boards make decisions.

Taken individually, a change such as majority voting for directors may have merit. As a group, however, these changes have helped create an environment in which managers are under increasing pressure to deliver short-term financial results, and boards are being urged to “think like activists.”

**IMPLICATIONS FOR COMPANIES**

To appreciate the strategic implications of a typical activist program, it is instructive to use a tool developed in the 1960s by the Boston Consulting Group to guide the resource-allocation process. Called the growth share matrix, the tool helped managers see their company as a portfolio of businesses with differing characteristics. One group of businesses might be mature and require investment only for purposes of modest expansion and incremental improvement. Assuming they have strong market share relative to their nearest competitors, these businesses are likely to be profitable and generate cash. Another group might also have leading positions but be in fast-growing markets; they, too, are profitable, but they require heavy investment to maintain or improve market share. A third group might have weak competitive positions in mature markets; these businesses require cash for survival but have no prospects for growth or increased profits. A final group might be in rapidly growing new markets where several companies are competitive and prospects are bright but risky.

The developers of the matrix called these four groups cash cows, stars, dogs, and bright prospects, respectively. The segmentation was meant to ensure that cash cows were maintained, stars fully funded, dogs pruned, and a limited number of bright prospects chosen for their longer-term potential to become stars. (See the exhibit “The Growth Share Matrix.”) When companies don’t manage a portfolio in this holistic fashion, funds tend to get spread evenly...
across businesses on the basis of individual projects’ forecasted returns.

It’s a simple tool—but using it well is not simple at all. Managing a cash cow so that it remains healthy, nurturing star businesses in the face of emerging competition, fixing or divesting unpromising businesses, and selecting one or two bright prospects to grow—all this takes talented executives who can function effectively as a team. Companies that succeed in managing this ongoing resource-allocation challenge can grow and reinvent themselves continually over time.

The growth share matrix illuminates the strategic choices managers face as they seek to create value indefinitely into the future. It’s also useful for showing how to drive up a company’s share price in the short term. Suppose a corporation were to sell off the dogs, defend the bright prospects, and cut expenses such as marketing and R&D from the stars. That’s a recipe for dramatically increased earnings, which would, in turn, drive up the share price. But the corporation might lose bright prospects that could have been developed into stars and cash cows of the future.

The activist investor Nelson Peltz’s 2014 proposal for DuPont provides an example of this idea. At the core of his three-year plan for increasing returns to shareholders was splitting the company into three autonomous businesses and eliminating its central research function. One of the new companies, “GrowthCo,” was to consist of DuPont’s agriculture, nutrition and health, and industrial biosciences businesses. A second, “CyclicalCo/CashCo,” was to include the low-growth but highly cash-generative performance materials, safety, and electronics businesses. The third was the performance chemicals unit, Chemours, which DuPont had already decided to spin off. In growth-share-matrix terms, Peltz’s plan was, in essence, to break up DuPont into a cash cow, a star, and a dog—and to eliminate some number of the bright prospects that might have been developed from innovations produced by centralized research.

Peltz also proposed cutting other “excess” costs, adding debt, adopting a more shareholder-friendly policy for distributing cash from CyclicalCo/CashCo, prioritizing high returns on invested capital for initiatives at GrowthCo, and introducing more shareholder-friendly governance, including tighter alignment between executive compensation and returns to shareholders. The plan would effectively dismantle DuPont and cap its future in return for an anticipated doubling in share price.

**VALUE CREATION OR VALUE TRANSFER?**

The question of whether shareholders benefit from such activism beyond an initial bump in stock price is likely to remain unresolved, given the methodological problems plaguing studies on the subject. No doubt in some cases activists have played a useful role in waking up a sleepy board or driving a long-overdue change in strategy or management. However, it is important to note that much of what activists call value creation is more accurately described as value transfer. When cash is paid out to shareholders rather than used to fund research, launch new ventures, or grow existing businesses, value has not been created. Nothing has been created. Rather, cash that would have been invested to generate future returns is simply being paid out to current shareholders. The lag time between when such decisions are taken and when their effect on earnings is evident exceeds the time frames of standard financial models, so the potential for damage to the company and future shareholders, not to mention society more broadly, can easily go unnoticed.

Given how long it takes to see the fruits of any significant research effort (Apple’s latest iPhone chip was eight years in the making), the risk to research and innovation from activists who force deep cuts to drive up the share price and then sell out before the pipeline dries up is obvious. It doesn’t help that financial models and capital markets are notoriously poor at valuing innovation. After Allergan was put into play by the offer from Valeant and Ackman’s Pershing Square Capital Management, the company’s share price rose by 30% as other hedge funds bought the stock. Some institutions sold to reap the immediate gain, and Allergan’s management was soon facing pressure from the remaining institutions to accelerate cash flow and “bring earnings forward.” In an attempt to hold on to those shareholders, the company made deeper cuts in the workforce than previously planned and curtailed early-stage research programs. Academic studies have found that a significant proportion of hedge fund interventions involve large increases in leverage and large decreases in investment, particularly in research and development.

The activists’ claim of value creation is further clouded by indications that some of the value purportedly created for shareholders is actually value transferred from other parties or from the general public. Large-sample research on this question is limited, but one study suggests that the positive abnormal returns associated with the announcement of a hedge fund intervention are, in part, a transfer of wealth from workers to shareholders. The study found that workers’ hours decreased and their wages stagnated in the three years after an intervention. Other studies have found that some of the gains for shareholders come at the expense of bondholders. Still other academic work links aggressive pay-for-stock-performance arrangements to various misdeeds involving harm to consumers, damage to the environment, and irregularities in accounting and financial reporting.

We are not aware of any studies that examine the total impact of hedge fund interventions on all stakeholders or society.
at large. Still, it appears self-evident that shareholders’ gains are sometimes simply transfers from the public purse, such as when management improves earnings by shifting a company’s tax domicile to a lower-tax jurisdiction—a move often favored by activists, and one of Valeant’s proposals for Allergan. Similarly, budget cuts that eliminate exploratory research aimed at addressing some of society’s most vexing challenges may enhance current earnings but at a cost to society as well as to the company’s prospects for the future.

Hedge fund activism points to some of the risks inherent in giving too much power to unaccountable “owners.” As our analysis of agency theory’s premises suggests, the problem of moral hazard is real—and the consequences are serious. Yet practitioners continue to embrace the theory’s doctrines; regulators continue to embed them in policy; boards and managers are under increasing pressure to deliver short-term returns; and legal experts forecast that the trend toward greater shareholder empowerment will persist. To us, the prospect that public companies will be run even more strictly according to the agency-based model is alarming. Rigid adherence to the model by companies uniformly across the economy could easily result in even more pressure for current earnings, less investment in R&D and in people, fewer transformational strategies and innovative business models, and further wealth flowing to sophisticated investors at the expense of ordinary investors and everyone else.

**TOWARD A COMPANY-CENTERED MODEL**

A better model, we submit, would have at its core the health of the enterprise rather than near-term returns to its shareholders. Such a model would start by recognizing that corporations are independent entities endowed by law with the potential for indefinite life. With the right leadership, they can be managed to serve markets and society over long periods of time. Agency theory largely ignores these distinctive and socially valuable features of the corporation, and the associated challenges of managing for the long term, on the grounds that corporations are “legal fictions.” In their seminal 1976 article, Jensen and Meckling warn against “falling into the trap” of asking what a company’s objective should be or whether the company has a social responsibility. Such questions, they argue, mistakenly imply that a corporation is an “individual” rather than merely a convenient legal construct. In a similar vein, Friedman asserts that it cannot have responsibilities because it is an “artificial person.”

In fact, of course, corporations are legal constructs, but that in no way makes them artificial. They are economic and social organisms whose creation is authorized by governments to accomplish objectives that cannot be achieved by more-limited organizational forms such as partnerships and proprietorships. Their nearly 400-year history of development speaks to the important role they play in society. Originally a corporation’s objectives were set in its charter—build and operate a canal, for example—but eventually the form became generic so that corporations could be used to accomplish a wide variety of objectives chosen by their management and governing bodies. As their scale and scope grew, so did their power. The choices made by corporate decision makers today can transform societies and touch the lives of millions, if not billions, of people across the globe.

The model we envision would acknowledge the realities of managing these organizations over time and would be responsive to the needs of all shareholders—not just those who are most vocal at a given moment. Here we offer eight propositions that together provide a radically different and, we believe, more realistic foundation for corporate governance and shareholder engagement.

1 **Corporations are complex organizations whose effective functioning depends on talented leaders and managers.** The

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**THE ACTIVIST’S PLAYBOOK**

For an understanding of the agency-based model in practice, there is no better place to look than an activist campaign. As a first step, the activist acquires shares in the targeted company—typically somewhere between 5% and 10%, but sometimes less than 1%. Shares in hand, he then claims the right to issue directives. (To leverage that power, he will often alert other hedge funds to his actions.) The language of ownership typically plays a prominent role. For example, in 2014, to advance a takeover of Allergan by Valeant Pharmaceuticals, Bill Ackman, of Pershing Square Capital Management, attacked Allergan’s board for failing to do what the directors were paid to do “on behalf of the Company’s owners.” The activist may challenge the board’s professionalism by appealing to agency theory norms of directorship. In one letter to the Allergan board, Ackman declared: “Your actions have wasted corporate resources, delayed enormous potential value creation for shareholders, and are professionally and personally embarrassing for you.” Although campaigns differ in their particulars, the activist’s playbook for increasing shareholder value is fairly standard. As our colleagues Ian Gow and Suraj Srinivasan (with others) have documented in their study of nearly 800 campaigns at U.S. companies from 2004 to 2012, activists tend to focus on capital structure, strategy, and governance.

They typically call for some combination of cutting costs, adding debt, buying back shares, issuing special dividends, spinning off businesses, reconstituting the board, replacing the CEO, changing the strategy, and selling the company or its main asset. Tax reduction is another element of many activist programs.

An activist whose demands go unheeded may initiate a proxy fight in an attempt to replace incumbent board members with directors more willing to do the activist’s bidding. In a few instances, activists have even offered their chosen nominees special bonuses to stand for election or additional incentives for increasing shareholder value in their role as directors.

By most indications, hedge fund activists have been quite successful in effecting the changes they’ve sought. As reported by the industry, more companies are being targeted—473 worldwide in the first half of 2016 (including 306 in the United States), up from 136 worldwide in all of 2010—and activists’ demands are frequently being met. In the United States in 2015, 69% of demands were at least partially satisfied, the highest proportion since 2010. Activists are also gaining clout in the boardroom, where they won 397 seats at U.S. companies in 2014 and 2015. Although activist hedge funds saw outflows of some $7.4 billion in the first three quarters of 2016, assets under management were estimated at more than $116 billion in late 2016, up from $2.7 billion in 2000.
success of a leader has more to do with intrinsic motivation, skills, capabilities, and character than with whether his or her pay is tied to shareholder returns. If leaders are poorly equipped for the job, giving them more “skin in the game” will not improve the situation and may even make it worse. (Part of the problem with equity-based pay is that it conflates executive skill and luck.) The challenges of corporate leadership—crafting strategy, building a strong organization, developing and motivating talented executives, and allocating resources among the corporation’s various businesses for present and future returns—are significant. In focusing on incentives as the key to ensuring effective leadership, agency theory diminishes these challenges and the importance of developing individuals who can meet them.

2 Corporations can prosper over the long term only if they’re able to learn, adapt, and regularly transform themselves. In some industries today, companies may need reinvention every five years to keep up with changes in markets, competition, or technology. Changes of this sort, already difficult, are made more so by the idea that management is about assigning individuals fixed decision rights, giving them clear goals, offering them incentives to achieve those goals, and then paying them (or not) depending on whether the goals are met. This approach presupposes a degree of predictability, hierarchy, and task independence that is rare in today’s organizations. Most tasks involve cooperation across organizational lines, making it difficult to establish clear links between individual contributions and specific outcomes.

3 Corporations perform many functions in society. One of them is providing investment opportunities and generating wealth, but corporations also produce goods and services, provide employment, develop technologies, pay taxes, and make other contributions to the communities in which they operate. Singling out any one of these as “the purpose of the corporation” may say more about the commentator than about the corporation. Agency economists, it seems, gravitate toward maximizing shareholder wealth as the central purpose.

Marketers tend to favor serving customers. Engineers lean toward innovation and excellence in product performance. From a societal perspective, the most important feature of the corporation may be that it performs all these functions simultaneously over time. As a historical matter, the original purpose of the corporation—reflected in debates about limited liability and general incorporation statutes—was to facilitate economic growth by enabling projects that required large-scale, long-term investment.

4 Corporations have differing objectives and differing strategies for achieving them. The purpose of the (generic) corporation from a societal perspective is not the same as the purpose of a (particular) corporation as seen by its founders, managers, or governing authorities. Just as the purposes and strategies of individual companies vary widely, so must their performance measures. Moreover, companies’ strategies are almost always in transition as markets change. An overemphasis on TSR for assessing and comparing corporate performance can distort the allocation of resources and undermine a company’s ability to deliver on its chosen strategy.

5 Corporations must create value for multiple constituencies. In a free market system, companies succeed only if customers want their products, employees want to work for them, suppliers want them as partners, shareholders want to buy their stock, and communities want their presence. Figuring out how to maintain these relationships and deciding when trade-offs are necessary among the interests of these various groups are central challenges of corporate leadership. Agency theory’s implied decision rule—that managers should always maximize value for shareholders—oversimplifies this challenge and leads eventually to systematic underinvestment in other important relationships.

6 Corporations must have ethical standards to guide interactions with all their constituencies, including shareholders and society at large. Adherence to these standards, which go beyond forbearance from fraud and collusion, is essential for earning the trust companies need to function effectively over time. Agency theory’s ambivalence regarding corporate ethics can set companies up for destructive and even criminal behavior—which generates a need for the costly regulations that agency theory proponents are quick to decry.

7 Corporations are embedded in a political and socioeconomic system whose health is vital to their sustainability. Elsewhere we have written about the damaging and often self-destructive consequences of companies’ indifference to negative externalities produced by their activities. We have also found that societal and systemwide problems can be a source of both risk and opportunity for companies. Consider Ecomagination, the business GE built around environmental challenges, or China Mobile’s rural communications strategy, which helped narrow the digital divide between China’s urban and rural populations and fueled the company’s growth for nearly half a decade. Agency theory’s insistence that corporations (because they are legal fictions) cannot have social responsibilities and that societal problems are beyond the purview of business (and should be left to governments) results in a narrowness of vision that prevents corporate leaders from seeing, let alone acting on, many risks and opportunities.
The interests of the corporation are distinct from the interests of any particular shareholder or constituency group. As early as 1610, the directors of the Dutch East India Company recognized that shareholders with a 10-year time horizon would be unenthusiastic about the company’s investing resources in longer-term projects that were likely to pay off only in the second of two 10-year periods allowed by the original charter. The solution, suggested one official, was to focus not on the initial 10-year investors but on the strategic goals of the enterprise, which in this case meant investing in those longer-term projects to maintain the company’s position in Asia. The notion that all shareholders have the same interests and that those interests are the same as the corporation’s masks such fundamental differences. It also provides intellectual cover for powerful shareholders who seek to divert the corporation to their own purposes while claiming to act on behalf of all shareholders.

These propositions underscore the need for an approach to governance that takes the corporation seriously as an institution in society and centers on the sustained performance of the enterprise. They also point to a stronger role for boards and a system of accountability for boards and executives that includes but is broader than accountability to shareholders. In the model implied by these propositions, boards and business leaders would take a fundamentally different approach to such basic tasks as strategy development, resource allocation, performance evaluation, and shareholder engagement. For instance, managers would be expected to take a longer view in formulating strategy and allocating resources.

The new model has yet to be fully developed, but its conceptual foundations can be outlined. As shown in the exhibit “Contrasting Approaches to Corporate Governance,” the company-centered model we envision tracks basic corporate law in holding that a corporation is an independent entity, that management’s authority comes from the corporation’s governing body and ultimately from the law, and that managers are fiduciaries (rather than agents) and are thus obliged to act in the best interests of the corporation and its shareholders (which is not the same as carrying out the wishes of even a majority of shareholders). This model recognizes the diversity of shareholders’ goals and the varied roles played by corporations in society. We believe that it aligns better than the agency-based model does with the realities of managing a corporation for success over time and is thus more consistent with corporations’ original purpose and unique potential as vehicles for projects involving large-scale, long-term investment.

The practical implications of company-centered governance are far-reaching. In boardrooms adopting this approach, we would expect to see some or all of these features:

- greater likelihood of a staggered board to facilitate continuity and the transfer of institutional knowledge
- more board-level attention to succession planning and leadership development
- more board time devoted to strategies for the company’s continuing growth and renewal
- closer links between executive compensation and achieving the company’s strategic goals
- more attention to risk analysis and political and environmental uncertainty
- a strategic (rather than narrowly financial) approach to resource allocation
- a stronger focus on investments in new capabilities and innovation
- more-conservative use of leverage as a cushion against market volatility
- concern with corporate citizenship and ethical issues that goes beyond legal compliance

A company-centered model of governance would not relieve corporations of the need to provide a return over time that reflected the cost of capital. But they would be open to a wider range of strategic positions and time horizons and would more easily attract investors who shared their goals. Speculators will always seek to exploit changes in share price—but it’s not inevitable that they will color all corporate governance. It’s just that agency theory, in combination with other doctrines of modern economics, has erased the distinctions among investors and converted all of us into speculators.

If our model were accepted, speculators would have less opportunity to profit by transforming long-term players into sources of higher earnings and share prices in the short term. The legitimizing argument for attacks by unaccountable parties with opaque holdings would lose its force. We can even imagine a new breed of investors and asset managers who would focus explicitly on long-term investing. They might develop new valuation models that take a...
broader view of companies’ prospects or make a specialty of valuing the hard-to-value innovations and intangibles—and also the costly externalities—that are often ignored in today’s models. They might want to hold shares in companies that promise a solid and continuing return and that behave as decent corporate citizens. Proxy advisers might emerge to serve such investors.

We would also expect to find more support for measures to enhance shareholders’ accountability. For instance, activist shareholders seeking significant influence or control might be treated as fiduciaries for the corporation or restricted in their ability to sell or hedge the value of their shares. Regulators might be inclined to call for greater transparency regarding the beneficial ownership of shares. In particular, activist funds might be required to disclose the identities of their investors and to provide additional information about the nature of their own governance. Regulators might close the 10-day window currently afforded between the time a hedge fund acquires a disclosable stake and the time the holding must actually be disclosed. To date, efforts to close the window have met resistance from agency theory proponents who argue that it is needed to give hedge funds sufficient incentive to engage in costly efforts to dislodge poorly performing managers.

**THE TIME HAS** come to challenge the agency-based model of corporate governance. Its mantra of maximizing shareholder value is distracting companies and their leaders from the innovation, strategic renewal, and investment in the future that require their attention. History has shown that with enlightened management and sensible regulation, companies can play a useful role in helping society adapt to constant change. But that can happen only if directors and managers have sufficient discretion to take a longer, broader view of the company and its business. As long as they face the prospect of a surprise attack by unaccountable “owners,” today’s business leaders have little choice but to focus on the here and now.

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**JOSEPH L. BOWER** is the Donald K. David Professor Emeritus at Harvard Business School. **LYNN S. PAINE** is the John G. McLean Professor of Business Administration at HBS. They are coauthors (with Herman B. Leonard) of *Capitalism at Risk: Rethinking the Role of Business* (Harvard Business Review Press, 2011).

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### CONTRASTING APPROACHES TO CORPORATE GOVERNANCE

<table>
<thead>
<tr>
<th>THEORY</th>
<th>SHAREHOLDER CENTERED</th>
<th>COMPANY CENTERED</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONCEPTION OF THE CORPORATION</td>
<td>Legal fiction; nexus of contracts; pool of capital</td>
<td>Legal entity; social and economic organism; purposeful organization</td>
</tr>
<tr>
<td>ORIGINS OF THE CORPORATION</td>
<td>Private agreement among property owners to pool and increase capital</td>
<td>Created by lawmakers to encourage investment in long-term, large-scale projects needed by society</td>
</tr>
<tr>
<td>FUNCTIONS OF THE CORPORATION</td>
<td>Maximize wealth for shareholders</td>
<td>Provide goods and services; provide employment; create opportunities for investment; drive innovation</td>
</tr>
<tr>
<td>PURPOSE OF SPECIFIC CORPORATIONS</td>
<td>Maximize shareholder value</td>
<td>Business purpose set by the particular company’s board</td>
</tr>
<tr>
<td>RESPONSIBILITIES TO SOCIETY</td>
<td>None (fictional entities can’t have responsibilities)</td>
<td>Fulfill business purpose and act as a good corporate citizen</td>
</tr>
<tr>
<td>ETHICAL STANDARDS</td>
<td>Unclear: whatever shareholders want, or obey law and avoid fraud or collusion</td>
<td>Obey law and follow generally accepted ethical standards</td>
</tr>
<tr>
<td>ROLE OF SHAREHOLDERS</td>
<td>Principals/owners of the corporation with authority over its business</td>
<td>Owners of shares; suppliers of capital with defined rights and responsibilities</td>
</tr>
<tr>
<td>NATURE OF SHAREHOLDERS</td>
<td>Undifferentiated, self-interested wealth maximizers</td>
<td>Diverse, with differing objectives, incentives, time horizons, and preferences</td>
</tr>
<tr>
<td>ROLE OF DIRECTORS</td>
<td>Shareholders’ agents, delegates, or representatives</td>
<td>Fiduciaries for the corporation and its shareholders</td>
</tr>
<tr>
<td>ROLE OF MANAGEMENT</td>
<td>Shareholders’ agents</td>
<td>Leaders of the organization; fiduciaries for the corporation and its shareholders</td>
</tr>
<tr>
<td>MANAGEMENT’S OBJECTIVE</td>
<td>Maximize returns to shareholders</td>
<td>Sustain performance of the enterprise</td>
</tr>
<tr>
<td>MANAGEMENT’S TIME FRAME</td>
<td>Present/near term (theory assumes the current share price captures all available knowledge about the company’s future)</td>
<td>Established by the board; potentially indefinite, requiring attention to near, medium, and long term</td>
</tr>
<tr>
<td>MANAGEMENT PERFORMANCE METRICS</td>
<td>Single: returns to shareholders</td>
<td>Multiple: returns to shareholders; company value; achievement of strategic goals; quality of goods and services; employee well-being</td>
</tr>
<tr>
<td>STRENGTH</td>
<td>Simple structure permits clear economic argument</td>
<td>Consistent with law, history, and the realities facing managers</td>
</tr>
<tr>
<td>WEAKNESS</td>
<td>Principles do not accord with law or good management; shareholders have power without accountability</td>
<td>Principles describe complex relationships and responsibilities; success is difficult to assess</td>
</tr>
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The CEO View: Defending a Good Company from Bad Investors

A CONVERSATION WITH FORMER ALLERGAN CEO DAVID PYOTT

BY SARAH CLIFFE

David Pyott had been the CEO of Allergan for nearly 17 years in April 2014, when Valeant Pharmaceuticals and Pershing Square Capital Management initiated the hostile takeover bid described in the accompanying article “The Error at the Heart of Corporate Leadership.” He was the company’s sole representative during the takeover discussions. When it became clear that the bid could not be fended off indefinitely, Pyott, with his board’s blessing, negotiated a deal whereby Allergan would be acquired by Actavis (a company whose business model, like Allergan’s, was growth oriented).

HBR: Would you describe Allergan’s trajectory in the years leading up to the takeover bid?
PYOTT: We’d experienced huge growth since 1998, when I joined as just the third CEO of Allergan and the first outsider in that role. We restructured when I came in and again 10 years later, during the recession. Those cuts gave us some firepower for investing back into the economic recovery. After the recession we were telling the market to expect double-digit growth in sales revenue and around the mid-teens in earnings per share.

Your investor relations must have been excellent.
They were. I am extremely proud to say that we literally never missed our numbers, not once in 17 years. We also won lots of awards from investor-relations magazines. You don’t run a business with that in mind, but it’s nice to be recognized.

In their article, Joseph Bower and Lynn Paine describe how difficult it is for any company to manage the pressure from investors who want higher short-term returns. You seem to have managed that well—until Valeant showed up. How?
Both buy-side and sell-side investors are like any other customer group. You should listen to what they say and respond when...
permit me a naive question: since Allergan was going strong, why did it make sense to Valeant/Pershing Square to take you over and strip you down? I get that they’d make a lot of money, but wouldn’t fostering continued growth make more in the long run? Different business models. Valeant was a roll-up company; it wasn’t interested in organic growth. Michael Pearson [Valeant’s CEO] liked our assets—and he needed to keep feeding the beast. If he didn’t keep on buying the next target, then the fact that he was stripping all the assets out of companies he’d already bought would have become painfully obvious.

He couldn’t do it alone, given his already weak balance sheet, so he brought Ackman in—and Pershing Square acquired 9.7% of our stock without our knowledge. This was meant to act as a catalyst to create a “wolf pack.” Once the hedge funds and arbitrageurs get too big a position, you lose control of your company.

I still thought we had a strong story to tell—and I hoped I could get long-term-oriented shareholders to buy new stock and water down the hedge funds’ holdings. But almost nobody was willing to up their position. They all had different reasons—some perfectly good ones. It was a lesson to me.

That must have been disappointing. Yes. It’s poignant—some of those same people say to me now, “We miss the old Allergan. We’re looking for high-growth, high-innovation stocks and not finding them.” I just say, “I heartily agree with you.”

Another thing that surprised and disappointed me was that I couldn’t get people who supported what we were doing—who understood why we were not accepting the bid, which grossly undervalued the company—to talk to the press. Several people said they would, but then folks at the top of their companies said no. And the reporters who cover M&A don’t know the companies well. The people who cover pharma are deeply knowledgeable—but once a company is in play, those guys are off about saving water and energy and about recycling: “Look, I’m Scottish, OK? I don’t like waste, and it saves the company money.” That’s a positive for employees.

Did that sense of purpose pay off when you were going through the takeover bid? Absolutely. I left day-to-day operations to our president, Doug Ingram, that year. And we grew the top line 17%—more than $1 billion—the best operating year in our 62-year history. I remember an R&D team leader who came up to me in the parking lot and said, “Are you OK? Is there anything I can do?” I answered him, “Just do your job better than ever, and don’t be distracted by the rubbish you read in the media.” Employees all over the world outdid themselves, because they believed in the company.

What changes in government rules and regulations would improve outcomes for the full range of stakeholders? My favorite fix is changing the tax rates. Thirty-five percent is woefully high relative to the rest of the world. If we got it down to 20%, we’d be amazed at how much investment and job creation happened in this country. The high rates mean that we’re vulnerable to takeovers that have tax inversion as a motivator. We were paying 26%, and Valeant [headquartered in Canada] paid 3%. I think the capital gains taxes could be changed—in a revenue-neutral way—to incentivize holding on to stocks longer.

Shifting gears again: If a company wants to reorient itself toward long-term growth, what has to happen? I think it’s hard for a CEO to change his or her spots. Some can, but most can’t. So in most cases you’re going to need a new leader. And the board of directors really has to buy into it, because not only are you changing your strategy, you’re changing your numbers. You must have a story to tell, for example: “For the next three years, we’re not going to deliver 10% EPS growth. It’s going to be 5% while we invest in the future. And that’s not going to pay off until after three years, so you’ll have to be patient.” You have to be very, very clear about it.

And then everyone—the board, the investors, the lab technicians, the salespeople—will watch you to see if you’re serious. It will take a lot of fortitude and determination. It’s not impossible, but it’s extremely difficult.
The Board View: Directors Must Balance All Interests

A CONVERSATION WITH CORPORATE GOVERNANCE EXPERT BARBARA HACKMAN FRANKLIN BY SARAH CLIFFE

The 29th U.S. secretary of commerce and chair emerita of the National Association of Corporate Directors, Barbara Hackman Franklin has served on the boards of 14 public and four private companies. She has been cited by the American Management Association as one of the 50 most influential corporate directors in America. She is the president and CEO of Barbara Franklin Enterprises, a consulting firm that advises American companies doing business in international markets.

Hedge fund activists have affected how other investors behave.

HBR: Do you agree that an excessive focus on shareholders has become a problem?
FRANKLIN: The short answer is yes. But let me first tell you how I think about corporate governance. I have always viewed it as a tripartite system of checks and balances. Shareholders own shares and elect the board of directors. The board of directors sets policies and hires and fires the CEO. The CEO and management run the company. The power balance among those three parties ebbs and flows over time, but there’s always some balance. When I first joined boards of large public companies, three decades ago, CEOs were dominant. Then boards began to assert themselves, and the balance shifted toward them, particularly after Sarbanes-Oxley was passed, in 2002. The balance has shifted again in the past five or six years, toward shareholders.

But there’s an added complication, which is activist shareholders, and their increased presence seems to me different from the normal ebb and flow among the three parties. Different and more worrying. This has been a new thing over the past few years. So I agree that the power should now shift back from shareholders and more toward boards and management.

What impact do you see?
The hedge fund activists have affected how other investors behave. I see an increase in
pressure from the investment community generally for quarterly earnings, for pushing up the stock price. There’s some impact perhaps on strategy development and how resources are being allocated. The idea that we should “think like an activist” pops up from time to time in boardroom conversations.

When Joseph Bower and Lynn Paine sent their article around for comments, one person said that corporate centricty wouldn’t be possible unless boards made some substantive changes in how they do their job. Does that sound right to you? If so, what changes?

One thing I like about that article: It defines some of the things that boards should have been doing all along. And some boards are doing them, but maybe not enough. (It’s hard to do them if you’re experiencing unrelenting pressure for short-term performance.) For example, boards need to have strategy discussions with management and the CEO all year long. It can’t be a “once and done” event—strategy needs to be discussed at literally every meeting.

If strategy is on the docket every time, then you can discuss all aspects of it—short-term versus long-term decisions, of course, and whether any decisions need to be revisited. Resource allocation is a part of that. Risk management is a part of that. And underlying the ability to tackle those questions is how the culture in the boardroom works. Is there respect for all voices? Is the CEO willing to listen, interact, and respond? Is there just one agenda: the future well-being of the corporation and its stakeholders, always with an eye to how that will create value for shareholders?

A focus on the short term has led some boards to neglect core responsibilities, such as succession planning. That, too, needs to happen continuously. Board members need to be sure there’s a viable bench of CEO candidates, and that means knowing them really well. That way, when you need to make a decision about the next leader, you can match the right candidate to the strategic direction.

Another piece that gets neglected—but is hugely important to this discussion—is good communication. The board and the company need to give shareholders and other stakeholders accurate, timely information. Some shareholders get unnerved when they don’t know enough about what’s really going on or about the thought process that led to a collective decision. A lot of times when things come unglued, it’s the result of poor communication.

Compensation is another big part of the board’s job. How should the thinking on that change, if at all?

People talk a lot about “pay for performance.” But what does that mean? I think boards need to develop a balanced scorecard for assessing performance, which will then help to determine compensation. If you have a performance scorecard that covers an array of issues, both long term and short term, it’s another hedge against short-termism.

Regardless of whether there’s a shift away from shareholder centricty, I think boards are going to have to step up because of changes in the business environment that are happening now, as often occurs when we have a new administration and a new Congress.

Bower and Paine believe that extreme shareholder centricty turns boards and executives into order takers rather than fiduciaries and that boards and CEOs must keep the health of the organization—rather than wealth maximization—front and center.

Yes, I agree with that. I have always believed that my fiduciary responsibility was to the corporation, and that includes its stakeholders. The article calls them constituencies, but we’re talking about the same thing. You have to include stakeholders as well as shareholders.

There are interesting variations among state-level statutes. In the first place, most state corporation statutes do not require directors to put shareholders first. Rather, it is the body of case law accumulated over several decades that has caused the focus on maximizing shareholder value. And it’s worth noting that there are now 28 states whose statutes allow directors to consider the interests of “other constituencies.” I believe this is a good thing.

What do you hear CEOs saying about how they balance pressures from various constituencies?

I think there is concern about balancing longer term and short term. Some of us have signed on to these pronouncements claiming that there’s too much emphasis on short-termism, whether it’s a focus on stock price or on TSR. Too much focus on any single measure is really detrimental to the long-term purposes of a company. Finding the right balance is on all our minds—CEOs as well as board members.

But it’s the global business environment that is keeping us up at night.

You’ve spent a lot of time in boardrooms—is there anything big that you wish Bower and Paine had addressed?

For me, what’s missing is a discussion of the appropriate power balance between management and the board. That’s easy to define on paper but really difficult in practice. A topic for another day.

Maybe once we get the problem of activist investors sorted out, the authors can tackle that.
The Data: Where Long-Termism Pays Off

BY DOMINIC BARTON, JAMES MANYIKA, AND SARAH KEOHANE WILLIAMSON

Does short-termism destroy value? The question is increasingly debated by leaders in business, government, and academia. But little hard evidence has been presented on either side of the issue, in part because the phenomenon involves many complex factors and is hard to measure.

Seeking to quantify the effects of short-termism at the company level and to assess its cumulative impact on the nation’s economy, we tracked data on 615 nonfinancial U.S. companies from 2001 to 2014 (representing 60% to 65% of total U.S. market cap). We used several standard metrics as proxies for long-term behavior, including the ratio of capital expenditures to depreciation (a measure of investment), accruals as a share of revenue (an indicator of earnings quality), and margin growth. To ensure valid results and avoid bias in our sample, we compared companies only to industry peers with similar opportunity sets and market conditions. Adjusting for company size and industry, we identified 167 companies (about 27% of the total set) that had a long-term orientation.

Then we examined how all 615 companies performed. The results were clear: As these graphs show, the long-term-focused companies surpassed their short-term-focused peers on several important financial measures and created significantly more jobs. They also delivered above-average returns to shareholders and had a 50% greater likelihood of being in the top quartile or decile at the end of the period we measured. (One caveat: We’ve uncovered a correlation between managing for the long term and better financial performance; we haven’t shown that such management caused that superior performance.)

What if all U.S. companies had taken a similarly long-term approach? Extrapolating from the differences above, we estimate that public equity markets could have added more than $1 trillion in asset value, increasing total U.S. market cap by about 4%. And companies could have created five million more jobs in the United States—unlocking as much as $1 trillion in additional GDP.

DOMINIC BARTON is the global managing partner of McKinsey & Company and a trustee of the Brookings Institution. JAMES MANYIKA is a director of the McKinsey Global Institute. SARAH KEOHANE WILLIAMSON is the CEO of FCLT Global.

A longer discussion of these research findings appeared on HBR.org.
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From "What Sets Successful CEOs Apart," page 70
WHAT SETS SUCCESSFUL CEOS APART
THE FOUR ESSENTIAL BEHAVIORS THAT HELP THEM WIN THE TOP JOB AND THRIVE ONCE THEY GET IT
BY ELENA LYTKINA BOTELHO, KIM ROSENKOETTER POWELL, STEPHEN KINCAID, AND DINA WANG
The chief executive role is a tough one to fill. From 2000 to 2013, about a quarter of the CEO departures in the Fortune 500 were involuntary, according to the Conference Board. The fallout from these dismissals can be staggering: Forced turnover at the top costs shareholders an estimated $112 billion in lost market value annually, a 2014 PwC study of the world’s 2,500 largest companies showed. Those figures are discouraging for directors who have the hard task of anointing CEOs—and daunting to any leader aspiring to the C-suite. Clearly, many otherwise capable leaders and boards are getting something wrong. The question is, what?
In the more than two decades we’ve spent advising boards, investors, and chief executives themselves on CEO transitions, we have seen a fundamental disconnect between what boards think makes for an ideal CEO and what actually leads to high performance. That disconnect starts with an unrealistic yet pervasive stereotype, which is shaped in large part by the official bios of Fortune 500 leaders. It holds that a successful CEO is a charismatic six-foot-tall white man with a degree from a top university, who is a strategic visionary with a seemingly direct-to-the-top career path and the ability to make perfect decisions under pressure.

Yet we’ve been struck by how few of the successful leaders we’ve encountered fit this profile. That realization led us to embark on a 10-year study, the CEO Genome Project. Its goal is to identify the specific attributes that differentiate high-performing CEOs (whom we define as executives meeting or exceeding expectations in the role, according to interviews with board members and majority investors deeply familiar with the CEOs’ performance). Partnering with economists at the University of Chicago and Copenhagen Business School and with analysts at SAS Inc., we tapped into a database created by our leadership advisory firm, ghSmart, containing more than 17,000 assessments of C-suite executives, including 2,000 CEOs. The database has in-depth information on each leader’s career history, business results, and behavioral patterns. We sifted through that information, looking for what distinguished candidates who got hired as CEOs from those who didn’t, and those who excelled in the role from those who underperformed. (For more details, see the sidebar “About the Research.”)

Our findings challenged many widely held assumptions. For example, our analysis revealed that while boards often gravitate toward charismatic extroverts, introverts are slightly more likely to surpass the expectations of their boards and investors. We were also surprised to learn that virtually all CEO candidates had made material mistakes in the past, and 45% of them had had at least one major career blowup that ended a job or was extremely costly to the business. Yet more than 78% of that subgroup of candidates ultimately won the top job. In addition, we found that educational pedigree (or lack thereof) in no way correlated to performance: Only 7% of the high-performing CEOs we studied had an undergraduate Ivy League education, and 8% of them didn’t graduate from college at all.

And when we compared the qualities that boards respond well to in candidate interviews with those that help leaders perform better, the overlap was vanishingly small. For example, high confidence more than doubles a candidate’s chances of being chosen as CEO but provides no advantage in performance on the job. In other words, what makes candidates look good to boards has little connection to what makes them succeed in the role.

But our most important discovery was that successful chief executives tend to demonstrate four specific behaviors that prove critical to their performance. We also found that when boards focus on those behaviors in their selection and development processes, they significantly increase their chances of hiring the right CEO. And our research and experience suggest that when leaders who aspire to the CEO’s office—87% of executives, according to a 2014 survey from Korn Ferry—deliberately develop those behaviors, they dramatically raise the odds that they’ll become high-performing chief executives.

THE FOUR BEHAVIORS
It’s rare for successful leaders to excel at all four behaviors. However, when we dug through our data, looking at the ratings our consultants had given candidates when evaluating them on fit for a CEO job and performance on 30 management competencies (for example, holding people accountable and the ability to motivate a team), we found an interesting connection. Roughly half the strong candidates (who had earned an A overall on a scale of A, B, or C) had distinguished themselves in more than one of the four essential behaviors, while only 5% of the weak candidates (who earned a B or C) had.

The behaviors we’re about to describe sound deceptively simple. But the key is to practice them with maniacal consistency, which our work reveals is a great challenge for many leaders.

DECIDING WITH SPEED AND CONVICTION.
Legends about CEOs who always seem to know exactly how to steer their companies to wild success seem to abound in business. But we discovered that high-performing CEOs do not necessarily stand out for making great decisions all the time; rather, they stand out for being more decisive. They make decisions earlier, faster, and with greater conviction. They do so consistently—even amid ambiguity, with incomplete information, and in unfamiliar domains. In our data, people who were described as “decisive” were 12 times more likely to be high-performing CEOs.

Interestingly, the highest-IQ executives we coach, those who relish intellectual complexity, sometimes struggle the most with decisiveness. While the quality of their decisions is often good, because of their pursuit of the perfect answer, they can take too long to make choices or set clear priorities—and their teams pay a high price. These smart but slow decision makers become bottlenecks, and their teams either grow frustrated (which can lead to the attrition of valuable talent) or become overcautious themselves, stalling the entire enterprise. So it’s no surprise that when
we looked more closely at the executives who were rated poor on decisiveness, we found that only 6% received low marks because they made decisions too quickly. The vast majority—94%—scored low because they decided too little, too late.

High-performing CEOs understand that a wrong decision is often better than no decision at all. As former Greyhound CEO Stephen Gorman, who led the bus operator through a turnaround, told us, “A bad decision was better than a lack of direction. Most decisions can be undone, but you have to learn to move with the right amount of speed.”

Decisive CEOs recognize that they can’t wait for perfect information. “Once I have 65% certainty around the answer, I have to make a call,” says Jerry Bowe, CEO of the private-label manufacturer Vi-Jon. But they do work actively to solicit multiple points of view and often poll a relatively small, carefully cultivated “kitchen cabinet” of trusted advisers who can be counted on for unvarnished opinions and sound judgment.

Bowe motivates himself to act on decisions by framing things this way: “I ask myself two questions: First, what’s the impact if I get it wrong? And second, how much will it hold other things up if I don’t move on this?” That approach, he says, also inspires his team members to trust their own judgment on operational decisions—which is critical to freeing the CEO up to home in on fewer but more important decisions.

To that end, successful CEOs also know when not to decide. Stephen Kaufman, former CEO of Arrow Electronics, suggests that it is all too easy to get caught up in a volley of decision making. He advises pausing briefly to consider whether a decision should actually be made lower down in the organization and if delaying it a week or a month would allow important information to emerge without causing irreparable harm.

But once a path is chosen, high-performing CEOs press ahead without wavering. Art Collins, former chairman and CEO of Medtronic, told us: “Employees and other key constituencies will quickly lose faith in leaders who waffle or backtrack once a decision is made.” And if decisions don’t turn out well? Our analysis suggests that while every CEO makes mistakes, most of them are not lethal. We found that among CEOs who were fired over issues related to decision making, only one-third lost their jobs because they’d made bad calls; the rest were ousted for being indecisive.
the skilled CEOs gain the support of their colleagues by instilling confidence that they will lead the team to success, even if that means making uncomfortable or unpopular moves. These CEOs do not shy away from conflict in the pursuit of business goals; in fact, in our analysis two-thirds of the CEOs who excelled at engagement were rated as strong in conflict management. The ability to handle clashing viewpoints also seems to help candidates advance to the CEO’s office. When we analyzed leaders who’d made it there significantly faster than average, one of the qualities that stood out was their willingness to engage in conflict.

When tackling contentious issues, leaders who are good at engagement give everyone a voice but not a vote. They listen and solicit views but do not default to consensus-driven decision making. “Consensus is good, but it’s too slow, and sometimes you end up with the lowest common denominator,” says Christophe Weber, CEO of Takeda Pharmaceutical. Weber makes a habit of having unstructured meetings with 20 to 30 of the company’s high potentials before making key decisions. The goal of those meetings is to challenge him and present him with new perspectives, but he is careful not to create the illusion of democracy.

None of this means that CEOs should behave as autocrats or lone wolves. Typically we see “take no prisoners” CEOs last only as long as the company has no choice but to submit to shock therapy. These CEOs often get ousted as soon as the business emerges from crisis mode—they lose the support of their teams or of board members who’ve grown tired of the collateral damage. It’s no coincidence that the careers of turn-around CEOs are frequently a series of lucrative two-to three-year stints; they put out the fires and then move on to the next assignment.

ADAPTING PROACTIVELY. For evidence of how important it is for businesses and leaders to adjust to a rapidly changing environment, we need look no further than the aftermath of Brexit and the recent U.S. presidential election. Our analysis shows that CEOs who excel at adapting are 6.7 times more likely to succeed. CEOs themselves told us over and over that this skill was critical. When asked what differentiates effective CEOs, Dominic Barton, global managing partner of McKinsey & Company, immediately offered: “It’s dealing with situations that are not in the playbook. As a CEO you are constantly faced with situations where a playbook simply cannot exist. You’d better be ready to adapt.”

Most CEOs know they have to divide their attention among short-, medium-, and long-term perspectives, but the adaptable CEOs spent significantly more of their time—as much as 50%—thinking about the long term. Other executives, by contrast, devoted an average of 30% of their time to long-term thinking. We believe a long-term focus helps because it makes CEOs more likely to pick up on early signals. Highly adaptable CEOs regularly plug into broad information flows: They scan wide networks and diverse sources of data, finding relevance in information that may at first seem unrelated to their businesses. As a result, they sense change earlier and make strategic moves to take advantage of it.
Adaptable CEOs also recognize that setbacks are an integral part of changing course and treat their mistakes as opportunities to learn and grow. In our sample, CEOs who considered setbacks to be failures had 50% less chance of thriving. Successful CEOs, on the other hand, would offer unashamedly matter-of-fact accounts of where and why they had come up short and give specific examples of how they tweaked their approach to do better next time. Similarly, aspiring CEOs who demonstrated this kind of attitude (what Stanford’s Carol Dweck calls a “growth mindset”) were more likely to make it to the top of the pyramid: Nearly 90% of the strong CEO candidates we reviewed scored high on dealing with setbacks.

4 DELIVERING RELIABLY. Mundane as it may sound, the ability to reliably produce results was possibly the most powerful of the four essential CEO behaviors. In our sample, CEO candidates who scored high on reliability were twice as likely to be picked for the role and 15 times more likely to succeed in it. Boards and investors love a steady hand, and employees trust predictable leaders.

Leaders ignore the importance of reliability at their peril. Simon—a high-potential executive we were asked to coach—was known as a miracle worker at his company. In a culture where exceeding plan by 2% was seen as a win, he had just delivered 150% of his revenue target. While he’d had some misses in the past, he was now successfully running the company’s largest business unit—its crown jewel. When Simon threw his hat into the ring for a promotion to CEO, the directors were impressed with his recent exceptional performance, but they didn’t fully understand how he’d achieved it, and as a result they doubted it was replicable. So the board opted instead for a “safer” candidate who was known for delivering steady, predictable results year after year.

Our data supports the paramount importance of reliability. A stunning 94% of the strong CEO candidates we analyzed scored high on consistently following through on their commitments.

A key practice here is setting realistic expectations up front. In their first weeks on the job reliable CEOs resist the temptation to jump into execution mode. They dig into budgets and plans, and engage with board members, employees, and customers to understand expectations. At the same time, they rapidly assess the business to develop their own point of view on what’s realistic and work to align expectations with that.

In 2012, when Scott Clawson took the helm of Culligan, the water treatment company, he inherited a struggling business that everyone believed had an EBITDA of $60 million. After completing his own due diligence, he had to break the news to investors that the real run rate was closer to $45 million. Though he got pushback about the lower target at first, he went on to revamp the firm’s business system and talent and delivered above expectations—to the delight of his board and investors.

CEOs who ranked high on reliability employed several other tactics as well. Three-quarters of them were rated strong on organization and planning skills. They established business management systems that included a cadence of meetings, dashboards of metrics, clear accountability, and multiple channels for monitoring performance and making rapid course corrections. Most important, they surrounded themselves with strong teams.

Unfortunately, this was not true of all CEOs: The single most common mistake among first-time CEOs—committed by a surprisingly high 60% of them—was not getting the right team in place quickly enough. For CEOs choosing talent, the stakes are high and the misses obvious. The successful ones move decisively to upgrade talent. They set a high bar and focus on performance relevant to the role rather than personal comfort or loyalty—two criteria that often lead to bad calls.

TO BE CLEAR, there’s no perfect mix of the four behaviors that works for every CEO position. The industry and the company context determine which behaviors and skills are most important in any particular situation. A CEO in a rapidly evolving industry—for example, technology—will surely need to excel in adapting proactively, but that behavior may matter less in stable sectors.

You might wonder, what about integrity and other “table stakes” qualities? Those are critical in screening out clearly unsuitable candidates, but they will not help you separate the best from the rest. Consider that 100% of low-performing CEOs in our sample scored high on integrity, and 97% scored high on work ethic.

In the end, our research shows, leadership success is not a function of unalterable traits or unattainable pedigree. Nor is there anything exotic about the key ingredients: decisiveness, the ability to engage stakeholders, adaptability, and reliability. While there is certainly no “one size fits all” approach, focusing on these essential behaviors will improve both a board’s likelihood of choosing the right CEO—and an individual leader’s chances of succeeding in the role.
ONBOARDING ISN’T ENOUGH
An executive we’ll call Lucas Jacobsen was ready for a new challenge. So after more than a decade at a Fortune 100 diversified manufacturing firm, where he had risen to lead product development in the power systems division, he decided to move on. He accepted an offer to head up R&D at Energix, a rapidly growing manufacturer of power system instruments. But his previous experience had not prepared him to operate in this much smaller business with its consensus-driven culture. Furthermore, Energix provided virtually no onboarding and integration support. After HR and IT set him up in their systems and his boss introduced him to the team and gave a brief overview of the role, Jacobsen was expected to figure out how things “really worked” on his own. That was a struggle. His hard-driving style—combined with some misconceptions that others had about his mandate—led to difficulties with his new peers and ultimately to his departure.
Many businesses think they are doing a good job of bringing newly hired executives like Jacobsen into the fold when they actually aren’t. Nearly all large companies are competent at the administrative basics of signing leaders up, but that level of onboarding does little to prevent the problems that can arise when these people start working with new colleagues and grappling with unfamiliar cultural norms and expectations. Companies vary widely when it comes to how much effort they put into integration, with major consequences in terms of time to performance, derailment (through termination or resignation), and talent retention.

To help companies understand what executives must do to become effective in their new roles and how to help them accomplish that more quickly, we developed an assessment framework. In this model the “what” is a set of core transition tasks for new hires. The “how” is broken down into distinct levels of support that companies can provide. But before we get into those details, let’s take a closer look at where most organizations fall short in their onboarding efforts and the benefits they can gain by changing their practices.

FROM ONBOARDING TO INTEGRATION

“Onboarding” is an apt term for the way many companies support new leaders’ transitions, because not much more is involved than bringing the executive safely on deck. After that, he or she is expected to know what to do or to sort things out with little or no guidance. For this reason we no longer use the word “onboarding” to describe the work we do with companies seeking to support their new hires; we use “integration” instead.

“Integration” suggests a more aspirational goal—doing what it takes to make the new person a fully functioning member of the team as quickly and smoothly as possible. That’s not common practice, unfortunately, as we saw in Egon Zehnder’s online survey of 588 executives at the VP level and above who had joined new companies in the past few years. The participants represented both publicly traded and privately owned companies across Europe, North America, Latin America, and Asia. One-third of them were in the C-suite. Almost 60% reported that it took them six months—and close to 20% said it took more than nine months—to have a full impact in their new roles. Less than a third said they had received any meaningful support during their transitions—a big problem when you consider that more than 80% of this fortunate minority thought such support had made a major difference in their early impact. (For more detail on this study and others, see the exhibits “The Biggest Stumbling Blocks for New Leaders” and “Where Companies Provide Support—and Where They Don’t.”)

THE BIGGEST STUMBLING BLOCKS FOR NEW LEADERS

According to a global survey of 588 senior executives who had recently transitioned into new roles, organizational culture and politics, not lack of competence or managerial skill, were the primary reasons for failure. Almost 70% of respondents pointed to a lack of understanding about norms and practices—and poor cultural fit was close behind. When asked what would reduce failure rates, they emphasized constructive feedback and help with navigating internal networks and gaining insight into organizational and team dynamics.

WHERE COMPANIES PROVIDE SUPPORT— AND WHERE THEY DON’T

In a global survey, 198 HR executives assessed their organizations’ onboarding efforts. Most thought their companies did a good job with basic orientation and the legal and procedural formalities of signing up new hires. But only about half said their organizations were effective at facilitating alignment between leaders and their teams, and fewer than a third said they actively helped executives adapt to the cultural and political climate.

SOURCE EGON ZEHNDER/GENESIS ADVISERS
In Brief

The “What”
Newly hired leaders must tackle five core transition tasks in their first few months: assuming operational leadership, taking charge of the team, aligning with stakeholders, engaging with the culture, and defining strategic intent.

The “How”
Companies can use the framework in this article to gauge and adjust how much support they offer for each task. Approaches vary widely, ranging from “sink or swim” to accelerated integration through deep discussions, workshops, and other customized experiences.

Well-integrated executives can build momentum early on rather than struggle up learning curves. Our studies show that the average amount of time to reach full performance (making critical decisions with the right information in hand and having the right people in place to help execute) can be reduced by a third, from six months to four.

A sink-or-swim approach leaves too much to chance. In strategically vital executive roles throughout a company, sluggish transitions are expensive. And financial costs aside, the new executive’s “brand” and followership take a significant hit. (For insights on the challenges of CEO succession in particular, see “After the Handshake,” by Dan Ciampa, HBR, December 2016.)

Most organizations—even those that set the bar pretty low—believe they are integrating executives effectively. When we asked HR leaders at global companies if they had an onboarding system, the answer was inevitably yes. However, when we asked what they did to accelerate the integration of executives into their roles, we found that actual support varied dramatically, from extensive to essentially none. It doesn’t help that the term “onboarding” is not well defined or understood. In many companies it refers mainly to completing the required documents, allocating space and resources, and providing mandatory training, usually in technical areas such as compliance. These things involve little or no time investment from senior management and do nothing to help leaders clear the biggest hurdles they will face in their new roles: cultural and political challenges.

Consider, in contrast, those companies that devote substantial resources to helping new executives become fully integrated. For example, at a major global communications and digital services company that develops general managers through frequent country rotations, all new subsidiary leaders are strongly encouraged to go through a structured integration program. Almost everyone accepts this support, and that’s telling: Leaders feel more comfortable receiving help in an organization that emphasizes learning at all levels. Sometimes the program is preceded by an appraisal of the critical “soft” skills that most executives say are the hardest to master at first. One tool used is a culture questionnaire, which compares work practices in the executive’s previous company (or unit or country) with those in the new setting, flagging potential problems.

Here’s an issue that often emerges: Many of the communications company’s subsidiaries have an entrepreneurial culture, but recruits often come from large, heavily matrixed competitors. What their previous colleagues might have seen as thoughtful consultation with key stakeholders may be perceived in the new setting as slow decision making or a lack of conviction and initiative. Of course, differences in regional culture, too, are significant for executives transferring to other countries. Systematically examining such differences and their possible impact has greatly reduced derailment risks and decreased the amount of time it takes leaders to become effective in their new environments.

Stakeholders are listed and discussed—who should be prioritized for early meetings, how certain individuals should be approached, and so on. Executives are encouraged to prepare an elevator speech before starting in their new roles, summing up why they are joining and what they hope to contribute to the company. New leaders say that this exercise gives them a powerful way to crystallize their key messages, which they can begin sharing the moment they walk through the door; the company has found that this enables them to communicate their intentions more clearly to their teams and peers in their first weeks on the job.

Focused integration efforts in this organization have helped executives avoid common pitfalls and accomplish more early on, and the individual gains have created a significant collective benefit. Having

“Onboarding” is an apt term for the way many companies support a leader’s transition, because not much more is involved than bringing the executive safely on deck.
fewer transition failures has increased employees’ confidence in the company’s ability to plan succession moves, making it easier to persuade internal candidates to agree to them. As a result, the ambitious rotational program described above (essential to the company’s growth plans) has been successful—and new leaders have acclimated to their roles much faster.

The communications company has also discovered that its integration work with general management candidates has increased employees’ awareness of transition risks. It’s now doing more to address the needs of new managers below the top two tiers—using less-expensive, more-standardized tools to invest in their development. Integration support is thus becoming part of the company’s culture.

THE FIVE TASKS
In our research and decades of experience working with executives, we have identified five major tasks that leaders must undertake in their first few critical months. These are the areas in which they need the greatest integration support:

1. **Assuming operational leadership.** Even with the best possible exchange of information during the recruiting process, any leader in a new role (especially an outsider) will have an incomplete picture of the business—its strengths, weaknesses, opportunities, and threats. A new leader builds his or her credibility by demonstrating awareness of important operational issues, swiftly solving urgent problems, and identifying and achieving quick wins. Good early decisions on the ground have a material impact on his or her reputation as an effective leader.

2. **Taking charge of the team.** New leaders naturally focus on their direct reports at the outset—they know they must quickly confirm or adjust the team’s composition and goals. It is often easier to decide toward the beginning whether or not to retain people, because the team’s makeup is not then seen as the new leader’s choice. However, this window closes soon, and focus and discipline are needed to efficiently gather information for smart decisions. It’s valuable to allow a new leader to take a fresh look at the talent without coloring his or her view in advance; but it’s equally valuable to share insights about individual team members’ performance and development. Striking the right balance requires careful planning and coordination with HR and, typically, one or more facilitated sessions between the executive and the team during the first few weeks. The goal is to create a safe environment for both to give timely, constructive feedback and to ask what may seem like awkward questions when relationships are just beginning to form. In this way any misperceptions about the leader’s words, actions, or initial decisions can be identified and clarified before mistrust or doubt about his or her values or capabilities takes hold. Building trust early with the team enables the new leader to make key decisions with confidence that people will follow through on them.

3. **Aligning with stakeholders.** New leaders also need to gain the support of people over whom they have no direct authority, including their bosses, their peers, and other colleagues. Because they arrive with little or no relationship capital, they have to invest energy in building connections—and clearly signal that they know it’s a priority. After identifying the most important stakeholders outside their teams, they must take time to understand their colleagues’ expectations and develop a plan for how and when to connect with people. That means learning how decision making works in the organization, who has influence over it, and where the centers of power reside.

4. **Engaging with the culture.** It’s also critical to get up to speed on the values, norms, and guiding assumptions that define acceptable behavior in the new organization. Missing cues early on can negatively affect how others perceive a new leader’s intentions and capabilities. The executive must also walk a fine line between working within the culture and seeking to change it.

5. **Defining strategic intent.** Finally, the new leader must start to shape strategy. Sometimes executives are hired for their expertise in a particular approach; other times they are chosen for their ability to develop and implement an entirely new strategy. If a new strategy is required, corresponding elements of the organization—its structure and its talent management and performance measurement processes—must be transformed to execute it. Either way, the new leader must be clear about the path ahead.

Together these five transition tasks present a daunting challenge. Stumbles in any area can lead
### ASSESSING YOUR COMPANY’S ONBOARDING EFFECTIVENESS

This tool will help you evaluate your organization on its commitment to **basic orientation** (signing up new hires and explaining roles and organizational structure), **active assimilation** (making modest efforts to help people understand organizational culture and politics), and **accelerated integration** (investing resources in bringing people up to speed quickly).

### HERE’S HOW IT WORKS:

1. In each column, check off the elements that are part of your onboarding process.
2. Add up the check marks in each column to see your company’s scores for basic orientation, active assimilation, and accelerated integration. Compare your scores with the averages among the companies we studied.
3. Now add up the check marks in each row to determine your company’s score for supporting each of the five major tasks, and compare those totals with the averages from our research.
4. Combine the row totals to calculate your company’s total score. (Because you are adding values in a matrix, the sum of the rows will be the same as the sum of the columns.)
5. If you have few or no check marks across the board, your organization is taking a *sink-or-swim* approach to onboarding.

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<th><strong>ACTIVE ASSIMILATION</strong></th>
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<td>□ Opportunity to sit in on critical business meeting before day one</td>
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<td>□ Structured introduction to key business areas</td>
<td>□ Introductory visit to key company locations</td>
<td>□ Immersive experiences in unfamiliar areas of the business</td>
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<td><strong>TAKING CHARGE OF THE TEAM</strong></td>
<td>□ Career histories for key team members</td>
<td>□ Briefings on team dynamics and history</td>
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<td>□ Performance and/or assessment data on team members</td>
<td>□ Briefings to provide confidential insight on team members</td>
<td>□ Facilitated workshop with the team (e.g., new leader assimilation)</td>
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<td>□ Briefings on stakeholders (e.g., new leader assimilation)</td>
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<td><strong>ALIGNING WITH STAKEHOLDERS</strong></td>
<td>□ Relevant organizational charts</td>
<td>□ List of key internal stakeholders</td>
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<td>□ List of key external stakeholders</td>
<td>□ Introductory meetings with internal stakeholders</td>
<td>□ Briefings on stakeholders (e.g., their agendas)</td>
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<td>□ List of key external stakeholders</td>
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<td><strong>ENGAGING WITH THE CULTURE</strong></td>
<td>□ Statement of company philosophy and values</td>
<td>□ Briefing on culture and ways of “getting things done”</td>
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<td>□ Briefing on culture and ways of “getting things done”</td>
<td>□ Structured events to attend in order to understand culture</td>
<td>□ A “cultural interpreter” to provide insight</td>
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<td>□ Assessment to highlight differences between current and former cultures</td>
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<td><strong>DEFINING STRATEGIC INTENT</strong></td>
<td>□ Business plans</td>
<td>□ Strategic plans for the business (e.g., vision and long-term priorities)</td>
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<td>□ Strategic plans for the business (e.g., vision and long-term priorities)</td>
<td>□ Conversations with key stakeholders on strategic challenges</td>
<td>□ Opportunity to participate in an off-site strategic meeting</td>
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<td>□ Conversations with key stakeholders on strategic challenges</td>
<td>□ Dedicated workshop on strategy and existing plans</td>
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<td><strong>TOTAL SCORE</strong></td>
<td>Average 4.2 out of 5</td>
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to serious problems or even outright derailment. Effective integration is much more likely when leaders understand—before they start in their new roles—how much progress they’ll need to demonstrate in each area during the first few months. That way they can prioritize their time effectively.

THE SPECTRUM OF SUPPORT

Given how critical the five tasks are to a new leader’s success, you will want to assess your company’s integration program by looking at how effectively you support executives in each area. Support comes in four levels:

**Sink or swim.** Companies at this level—we call it level 0—do little more than provide a new executive with space and basic resources such as technology and assistants. Our research shows that about 5% of global companies offer such minimal support.

**Basic orientation.** This is level 1 in our model. It involves sharing information about company policies, team member evaluations, organizational structure, strategy, and business results. Essentially, the company provides raw data, and the new leader studies and interprets it independently. If the executive is given anything more qualitative, there is no support to ensure that its significance is well understood. Our research shows that about two-thirds of all global companies still take this approach.

**Active assimilation.** Here, at level 2, the company organizes meetings with key stakeholders to accelerate a transfer of deeper knowledge about the business, the team, the culture, and strategic priorities. At most, our research suggests, 25% of global companies have invested in this level of support. Although it goes beyond the bare minimum, without a shared understanding of major differences between an executive’s former context and the new one, it can be difficult to know how much meeting time will be needed. And without prior briefing, the executive may neglect organizationally sensitive issues that he or she should address.

**Accelerated integration.** At level 3—the ideal—the company orchestrates custom-designed experiences that enable a new leader to integrate more fully and rapidly. These might include team-building workshops and deep-dive discussions about strategy. The organization helps the new executive identify specific cultural challenges to be overcome, as the global communications company does with its questionnaire about previous ways of working. Despite the clear value to be gained, our research suggests that no more than 2% of global companies address integration this systematically.

We find that in practice, support tends to vary from one transition task to another. For example, a company might organize meetings (level 2) to help a new executive assume operational leadership and align with stakeholders, but provide only basic information to support taking charge of the team (level 1) and do virtually nothing (level 0) to help the executive engage with the culture or define strategic intent. A thorough assessment reveals strengths and weaknesses across the five major tasks. (See the exhibit “Assessing Your Company’s Onboarding Effectiveness.”)

WHAT PROGRESS LOOKS LIKE

When companies start integrating their executives more effectively, it’s often because they’ve been compelled to do so by a combination of external and internal factors. Consider this example:

Over the past seven years a consumer goods company that operates across Europe, Asia, and Africa has deliberately intensified its integration efforts, in the process moving from level 1 to level 2 or 3 in most areas. For many years before the 2008 financial downturn, senior management had defined and nurtured a culture that prioritized internal talent development. The company used cross-functional work to strengthen people’s capabilities so that leaders could be promoted from within. Consequently, most executives who became general managers had built their careers at the company. Given the diversity of the markets in which they were operating (both developed and developing economies) and the organization’s consensus-driven approach to decision making, HR and line managers had seen a need for basic orientation. The baseline had been to acclimate newly appointed executives by sharing information about the local businesses and identifying key stakeholders—including team members—so that leaders could schedule meetings in the early days (level 1).
But after the 2008 crisis hit, senior management embraced a new operating model that entailed a much more matrixed organization. Recognizing the need for new capabilities to run it effectively, the company redesigned its talent programs. At the same time, the CEO and the executive team decided they had to quickly make a number of strategic external hires to bring in general managers with the requisite skills.

It soon became clear how difficult it was for outsiders to instantly grasp when they were empowered to make decisions locally and when it was important to reach consensus with the head office. So the company began to provide coaching on decision making and stakeholder management and asked line managers to play an active role in this effort. When the CEO hired a direct report from outside the company (which was still a relatively rare occurrence), he invested significantly in that executive's integration support and challenged others on the senior team to raise their game in this area. He worked closely with the new leader and a third party to identify potential problems and address them openly.

That was certainly a critical milestone: Support for certain transition tasks reached level 2 as a result of the push from the top. More new leaders were encouraged to run team workshops early on and were briefed on stakeholders’ priorities and constraints in the matrixed organization. But efforts still varied quite a bit throughout the company, and results were mixed. Some new external hires were extremely successful, but others were not—even though they’d made effective moves elsewhere.

In response to that wake-up call, HR and senior management examined the difficulties that new hires faced—particularly the new-market challenges—and decided to adopt much more broadly the best practices that the CEO had established. They offered thorough integration support to new general managers, including those transferring internally from one market to another. They also reviewed successful individual cases—in which 360-degree feedback indicated that the executive had reached full effectiveness in half the usual time—to see how integration risks and challenges had been mitigated. The systematic support was an investment, but the payback was pretty much immediate. So the company strengthened its internal programs even more, bringing in expert coaches from the outside.

Together these programs address all five transition tasks at the company. The intensity of support is adjusted in each area to level 2 or 3, depending on the needs of the executive in question. Each new leader is assisted in developing an individual learning plan and hosting a team workshop in the first four to eight weeks and is furnished with confidential insights about specific stakeholders and potentially challenging aspects of the corporate culture.

Today integration support is standard practice in the organization. With HR’s help, the executive committee determines which level of support should be brought to each case. Every other month the committee reviews an average of 30 cases, examining reports on leaders’ progress (based on input from coaches and other observers) and identifying actions to take.

These efforts have been embraced internally; both new and aspiring leaders can clearly see their value, and so can the people who work with and rely on the executives. And stakeholders understand the roles they must play in new leaders’ transitions. Despite continuing pressure on budgets, senior management sees integration support as a necessary investment in talent development that yields tangible results, both for the business and for individual executives.

Though the benefits of integration support are clear at this company and others we’ve studied, such success stories are all too rare. Perhaps that’s because organizations focus so much on securing the right leaders for key roles that they overlook the need to help them with their transitions—or don’t set aside the necessary resources. But by treating integration as fundamental to their talent strategy, they can harness leaders’ potential more rapidly and reap the rewards that much sooner.
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THE TALENT CURSE

WHY HIGH POTENTIALS STRUGGLE—AND HOW THEY CAN GROW THROUGH IT

BY JENNIFER PETRIGLIERI & GIANPIERO PETRIGLIERI
professionals have been accurately identified as star good fortune. In most cases, these managers and people who struggle with what appears to be their with “future leaders” like Thomas, we’ve met many the right place to realize his leadership ambitions. underutilized, and concluded that this firm was not or asking for support. He felt both overwhelmed and endorsement kept him from challenging the culture tations, but his desire to prove deserving of his bosses’ slow down. “Thomas felt trapped by his firm’s expec- “I did not want to step off the fast track, so I could not when we spoke, he had fallen victim to a vicious cycle: strong and his prospects bright as ever, but as he put it on the firm’s fast track to partnership. Dawn was breaking, and he had no memory of the past six hours, even though his e-mail and phone logs chronicled a busy all-nighter. A neurologist later ran some tests and warned him of the dangers of sleep deprivation. “I would go to bed at five, wake up at seven with pal- pitations, and go to work,” Thomas recalled. “I never stopped to think that it was wrong. It’s how it works, I told myself. Everyone does it.” Thomas slowed down briefly after the doctor’s warning but soon came back full throttle. His talent and drive were intact, though somehow he’d lost his sense of purpose. He created an opportunity for the firm to do a $1.3 billion deal, and then surprised his bosses by suddenly quitting. His performance was strong and his prospects bright as ever, but as he put it when we spoke, he had fallen victim to a vicious cycle: “I did not want to step off the fast track, so I could not slow down.” Thomas felt trapped by his firm’s expec- tations, but his desire to prove deserving of his bosses’ endorsement kept him from challenging the culture or asking for support. He felt both overwhelmed and underutilized, and concluded that this firm was not the right place to realize his leadership ambitions. In our two decades of studying and working with “future leaders” like Thomas, we’ve met many people who struggle with what appears to be their good fortune. In most cases, these managers and professionals have been accurately identified as star performers and fast learners. But often, placement on a fast track doesn’t speed up their growth as leaders in the organization, as it’s meant to do. Instead, it either pushes them out the door or slows them down—thwarting their development, decreasing their engagement, and hurting their performance.

In an age when companies wage wars for talent, it is hard to acknowledge that for some people, being rec- ognized as talented turns out to be a curse. But it does. Aspiring leaders work hard to live up to others’ expect- tations, and so the qualities that made them special to begin with—those that helped them excel and feel engaged—tend to get buried. They behave more like everyone else, which saps their energy and ambition. They may start simply going through the motions at work—or, like Thomas, look for an escape hatch.

This curse strikes the talented even in companies that invest heavily in their development—places where executives are sincerely dedicated to helping people thrive. We began to notice it long ago, when one of us (Jennifer) worked in various multinationals and the other (Gianpiero) practiced as a psychotherapist in a global MBA program. Since then, we’ve studied hundreds of managers and professionals from various sectors and parts of the world—many of whom we have followed over time—and met thousands more in our teaching, consulting, and coaching engagements. Through that work with high potentials, we’ve exam- ined talent development from their perspective and identified common psychological dynamics, signs of trouble, and ways of breaking the curse.

THE PSYCHOLOGY BEHIND THE CURSE

Often, the curse begins when an organization gives an employee a platform to hone his or her skills in hopes of earning some reward, such as partnership, a senior leadership position, or just a broader range of career options. Although that person is flattered and grateful at first, a resentful angst eventually sets in—a feeling that’s difficult to explain or justify. It’s not gardenvariety uncertainty, which you’d expect of anyone facing new challenges; the roots reach much deeper, into the self.

Two psychological mechanisms, idealization and identification, turn out to be a destructive combination for high potentials: Others idealize their talent as a de- fense against the company’s uncertain future, and then the high potentials identify with that image, shoulder- ing the uncertainty themselves. That’s what happened to Thomas. After his early successes brokering deals, his bosses and colleagues began to see him as a rain- maker the firm could rely on in the volatile PE world. The combination of idealization and identification is evident in many workplaces where people praise the promise of the talented, and the talented feel the burden of their promise. If the future isn’t as bright as everyone hoped, it will be they who have failed.
As their talent increasingly defines them, high potentials sense that their own future is at stake too. They fixate on what they should do to ensure their place in the organization. Though these expectations might be amplified in their minds, they aren't simply self-imposed. They’re spelled out in lists of company values and competencies, which up-and-coming leaders are meant to model, and reinforced through performance feedback and informal interactions.

Lars, a rising star at a manufacturing company, explained it like this at a leadership workshop: “One day I’m told that those like me must transform the way we do business; the next day, that I must make sure that the executives whose business I must transform appreciate me.”

We often hear this sort of thing. In companies whose executives want strong cultures and rapid change, talented managers feel pressured both to be revolutionaries and to win the establishment’s approval. The inherent tension between those pursuits wears them down. Their sensitivity to cultural and political cues—part of the reason they’ve been flagged as future leaders—makes them especially vulnerable once they’re on that track.

Every opportunity becomes an obligation; every challenge, a test. The high potential strives to be a perfect manager, now suppressing the very talents—the passions and idiosyncrasies—that made her stand out in the first place. And so the curse twists talent management against its intent. Rather than empowering those who deserve to lead, it increases their insecurity and pushes them to conform, like a protection racket of sorts—a company’s costly demands in exchange for safety from the threats that working there presents. “Future leader” becomes a synonym for “exceptional follower.”

IN BRIEF

THE PROBLEM
When people are groomed as future leaders, they often feel trapped by others’ expectations and fixate on proving themselves worthy. Sometimes they end up blindly conforming to their organization’s established leadership ideal and losing their edge. Sometimes they leave altogether, depriving themselves of an opportunity and the organization of their talent.

THE REMEDY
High potentials struggle with this “talent curse” again and again as they take on new roles and challenges. But they can grow from the experience by accepting the help they need to thrive, bringing all facets of themselves to the job (not just those that say “leadership material”), and treating the present like a final destination.

THREE SIGNS OF TROUBLE
You must have high standards for yourself and be ready for extra scrutiny—no aspiring leader can ignore others’ expectations. But you can shine only so long under the spotlight of opportunity and the magnifying glass of expectations before burning out—unless you put some protections in place. That requires learning to spot and deal with three signs of trouble.

1 A shift from simply using your talent to proving it. After being placed in a high-potential pool, you may find that your excitement about the recognition soon fades, whereas the new expectations create ongoing pressure. That’s what typically happens. Caught between the acknowledgment of their past achievements and the possibility of future opportunities, aspiring leaders often view the present as a time to prove that they deserve both. In an effort to ensure that they fulfill their promise, they become more calculating about where and how they apply themselves.

Companies with a formal high-potential track aren’t the only places where this happens. In some organizations, senior executives just take an interest in certain employees, and things snowball from there. Take Laura, who left halfway through a PhD program in artificial intelligence to try her hand in the business world. Laura joined a consultancy and then moved on to a role in the strategy function of a consumer goods company. About a year into that new job, her boss’s boss recognized her skills in data analytics. So he brokered an introduction that led Laura into a role managing digital marketing for one of the company’s floundering products.

“It was as if everything came together in that moment,” Laura told us. Her understanding of data analytics and her experience in business strategy made her a great fit for the job. All she had to do now was deliver. Succeeding in her new role, the hiring executive assured her, would “open every door in this industry.” The pressure was on.

Laura then fell into a spiral of overwork, anxious to show others—and herself—that she could handle the challenge. Although sales grew, she felt that no one noticed her dedication and results. Perhaps, she thought, her work wasn’t impressive enough. “I feared that people were nice to me,” she said, “but didn’t have the guts to tell me that maybe I had plateaued, that my time was up.” This was hardly what others thought. Accustomed to her competent and composed demeanor, her bosses and colleagues assumed that she needed little help. And they were more than happy to let her carry on, praising her independence and initiative without realizing the struggle beneath both.

In her seminal research, Stanford psychologist Carol Dweck has drawn a distinction between a performance orientation and a learning orientation. When children believe that their intelligence is a fixed quantity, she found, they tend to become easily discouraged by tough school assignments and give up quickly on the problems they cannot easily solve. Children who sense that their intelligence is malleable, conversely, stay on those problems longer, seeing them as a way to keep improving. Those with a performance orientation are embarrassed by failure, whereas those with a learning orientation are spurred on by it—they work harder. The same is true for adults at work, Dweck found.
The amplified expectations that high potentials internalize are a classic circumstance that, Dweck’s research predicts, will elicit a performance orientation. Though Laura and many others we have studied didn’t give up on hard challenges or stop striving to develop their skills, their learning itself became a performance of sorts—a way of affirming their talent. As a result, extra experiments and side projects—which could further expand their skills but also reveal their flaws—began to feel like risks they could not afford.

This is how special people become ordinary. After being placed on the partnership track at a global firm, one consultant recalled, “I knew I could succeed, so I focused on where I knew my talents shone. It was great in the short term, but over time I began to lose my edge.”

The pressure is even stronger for minorities, who may also feel obligated to serve as role models and advocates for those whose talent often goes unseen. Consider how a female junior partner in a male-dominated elite law firm changed her mindset after finding out she was in the running to become an equity partner. “I have no doubt that I deserve a place at the table,” she told us, “but I feel totally paralyzed. I am being very conservative because I feel that if I fail at anything, I will let everyone down.” She knew she was a role model for other women, which raised the stakes even more. Rather than expand her expertise, she stuck to areas where she knew she would perform well and to clients with whom she had established relationships. When she was not able to bring in the number of new clients expected from an equity partner, her career progress slowed.

2 A preoccupation with image despite a yearning for authenticity. An investment banker who ended up leaving his firm told us, “I was always in the spotlight, always performing, always trying to be the leader they expected me to be.” Though he had worked very hard to get to that visible position, once on the fast track, he felt strangely invisible. It was as if the firm had hijacked his identity along with his ambition. As he put it, “No one saw the real me.”

The preoccupation with image is a natural consequence of the pressure to prove one’s talent—and it’s a common problem, our INSEAD colleague Herminia Ibarra has found in her research on leadership transitions. At most firms, the promise of future leadership is bestowed on those who conform to the desired organizational culture—the values and vision established by those at the top. So while many companies invite employees to “bring themselves” to work, people on a high-potential track often bring only those aspects that say “leadership material”—and this makes them feel inauthentic.

This isn’t a problem just for those uncomfortable with “faking it” until they acquire new leadership skills—which, as Ibarra argues, can actually help people discover new facets of themselves. It can also happen to people who take on roles that seem like a natural fit. Laura, the data scientist, could easily put forward the problem-solving, data-driven self that her company valued. But there was more to her than that. No matter how fitting the role, when people continually display just one aspect of themselves, it flattens and limits them. That happened to Laura. By being true to just part of her identity—on demand—she lost her sense of ownership and spontaneity.

Like many others caught in this position, Laura considered leaving and fantasized about getting a job where she would be “free to be myself.” In one study we conducted with CEIBS professor Jack Wood, in which we followed a cohort of MBAs for a year, nearly half the participants said that they sought a similar escape. They hoped business school would provide a retreat—a space where they could discover and recover who they really were.

In her classic research, psychologist Alice Miller examined what she provocatively labeled “the drama of the gifted child.” She described how inquisitive and intelligent children often learn to hide their feelings and needs to meet their doting parents’ expectations. They do this so well that over time they no longer know what they feel and need. The sense of
emptiness and alienation that Miller chronicled resembles what we have encountered among high-potential managers: Paradoxically, being recognized as talented robs them of their talents. Their talents still exist but are no longer their own; they belong to a distant and demanding organizational “parent.”

3 Postponement of meaningful work. When people feel trapped by their organization’s expectations and anticipate great rewards for enduring that captivity with dignity, the present loses meaning for them. They begin to locate their dreams for recovering and expressing themselves in the future—when they will finally, they hope, be free to say what they mean, relate to others openly, fulfill their true calling, and lead as they have wanted to all along.

Some just wait for the numbness to dissipate. Others harbor flourishing images of what they will do once they’ve quit the rat race—goals they share with only a few trusted friends for fear that those dreams, too, might be hijacked. This amounts to what Jungian analyst H.G. Baynes labeled, long ago, the “neurosis of the provisional life”: While developing leaders view their current work as instrumental to future opportunities, they imagine that their future work will be much more meaningful. Who they will be becomes more important than who they are. The present loses value, so they stop giving their best.

By the time the engaged self escapes to the future, the talent curse has taken hold. While the high potential might appear immersed in her work, she is sealed off from it. And if she continues to view her present work as empty, not even leaving the organization will help. In the study we mentioned earlier, people who had begun an MBA program in search of a retreat found themselves caught in the same spiral of striving to meet expectations that they resented, and dreaming of other escapes. “Every day I woke up and wanted to leave,” one participant recalled. “I wanted to go and tell no one.”

Another explained how he began to second-guess his past choices. “When I finished my undergraduate degree,” he recalled, “I got arguably the most enviable job in my class, and of course I took it. It was the prestigious thing to do. I never really sat back and thought, Do I really want to do this?” He was hoping to transition out—somehow. He didn’t know where he’d go, but he imagined that almost any option must be better than where he was.

When Laura told us her story, she talked about maybe returning to finish her PhD—immediately after wondering if she could be a COO one day. It was as if the thought of another step in her career progression demanded a counterthought of escape, a way out for the self from a job she excelled at and an organization that valued her work.

**BREAKING THE TALENT CURSE**

Though the curse can hamper the personal growth, engagement, and career progress of the most gifted high potentials, it can be broken. We recommend three steps:

1 Own your talent—don’t be possessed by it. Once your talent becomes your identity, every challenge to it (there will be plenty if you are stretching to learn) feels like a challenge to the self. As Laura put it when one peer questioned her ability, “It struck me to my core.” Slavishly bowing to everyone’s expectations, including your own, is no solution; you’ll just become a follower of what you believe others want. Nor is ignoring those expectations; at best, you will be seen as a rebel. Instead, remain mindful of what you need and what others want—without allowing either to consume you.

Striking that balance often involves learning how to accept help, even when you don’t think you need it, rather than going it alone. This is something that Michael Sanson, an executive coach at INSEAD, emphasizes with his clients. “A key shift occurs,” he says, “when a high potential realizes that his or her role is not to deliver more than others, but to deliver more with others.” People sometimes resist feedback and coaching, he explains, because they view both as vehicles for more expectations. When they begin to see the input not as judgment but as a source of support, they become great listeners and fast learners—which helps them perform better and grow as leaders.

2 Bring your whole self, not just your best self, to work. It’s tempting to show only the shiny, polished facets of ourselves—especially when we value them and others appreciate them. But our greatest talents often spring from wounds and quirks, from the rougher, less conformist sides of ourselves. Much resolve flows from restlessness, creativity from angst, and resilience from having faced challenges we’d rather not share. Managers who are empathetic (and thus great with people) sometimes get overwhelmed by emotions. Don’t fight these darker sources of your talent. Learn to channel them.

The last time we spoke to Thomas, the former private equity associate, he was transitioning into the field of talent management. He brought his business acumen to it, but also a deep personal understanding...
of how organizations can boost or hinder employees’ growth, and vice versa. His firsthand struggle to develop and thrive at his old firm gave him insight that allowed him to help others develop and thrive. He was no longer just gifted. He was purposeful and revitalized.

3 Value the present. This is the most important step in breaking the curse. Ask yourself: What if this is it? What if my current work is not a stepping-stone, but a destination? You must invest in the work you’re doing now—make it matter—in order to grow from the experience.

Look at the expectations, the pressures, and the doubts you face as challenges that all leaders face. They aren’t tests for leadership; they are features of leading. They won’t go away once you prove yourself worthy—they’ll only intensify. So now is the time to muster the resources you’ll need to manage them over the long run. And accept that even with plenty of resources, leading will always require courage. As Mette Stuhr, a former head of talent management at a multinational corporation who has taught and coached scores of high potentials all over the world, puts it: “If you wait for it to be safe to speak up, you never will.”

A RITE OF PASSAGE

For all the pain it causes and the risks it entails, the talent curse is a rite of passage. Breaking the curse is an important part of learning how to lead. And it’s an ongoing process—high potentials must do this again and again as they grow into new roles.

Let’s return to Laura’s example: During a team retreat, she finally took the plunge and confessed that she was thinking about leaving. In a well-rehearsed argument, she explained how the structure of her department was creating friction between her and two peers. Much to her surprise, what she thought might become a farewell speech was very well received. Voicing her concerns paid off. The structure changed. She stayed.

Soon after that, Laura was offered a bigger role leading a team of five managers, with 52 people below them. She felt energized at first, because she could have an impact on the whole company. But then new doubts started gnawing at her—and again, she asked for no support. Six months into the new role, she had not yet negotiated her package. “I got a great job,” she said. “What would they think if I worried about the contract, the salary, and things like that?” Upholding her image as a passionate go-getter prevented her from making arrangements to succeed. “I have not yet proved myself,” she said. “How can I ask for more? I should be grateful.”

Once more, an opportunity turned into a burden, and Laura became sad and frustrated. Neither her boss nor her organization had intended any of this. They had been happy to give a stretch assignment to an ambitious and responsible young manager. They did not maliciously withdraw support, but they didn’t encourage her to seek it, either. They never invited her to take it a little easier or told her that she shouldn’t expect to get everything right. And so they reinforced her modus operandi.

That brings us to our final point: Organizations should do their part to break the curse too. They should stop referring to talented young managers as “future leaders,” since it encourages bland conformity, risk-averse thinking, and stilted behavior. They should stop offering responsibility in the present with the promise of authority later on. And they should allow people room to deviate from the image of leadership that others have drawn. That will ease the pressure for managers to prove their talent, freeing them to simply use it—to engage with their work and grow into better leaders.

The best way to develop leaders, in the end, is to help them lead. The best way to learn to lead is to accept that help in the here and now.
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NEURODIVERSITY AS A COMPETITIVE ADVANTAGE

BY ROBERT D. AUSTIN AND GARY P. PISANO
VERSATILE

WHY YOU SHOULD EMBRACE IT IN YOUR WORKFORCE
Meet John. He’s a wizard at data analytics. His combination of mathematical ability and software development skill is highly unusual. His CV features two master’s degrees, both with honors. An obvious guy for a tech company to scoop up, right? Until recently, no. Before John ran across a firm that had begun experimenting with alternative approaches to talent, he was unemployed for more than two years. Other companies he had talked with badly needed the skills he possessed. But he couldn’t make it through the hiring process.

If you watched John for a while, you’d start to see why. He seems, well, different. He wears headphones all the time, and when people talk to him, he doesn’t look right at them. He leans over every 10 minutes or so to tighten his shoelaces; he can’t concentrate when they’re loose. When they’re tight, though, John is the department’s most productive employee. He is hardworking and never wants to take breaks. Although his assigned workplace “buddy” has finally persuaded him to do so, he doesn’t enjoy them.

“John” is a composite of people whose privacy we wanted to protect—people with autism spectrum disorder. He is representative of participants in the programs of pioneering companies that have begun seeking out “neurodiverse” talent.

The incidence of autism in the United States is now 1 in 42 among boys and 1 in 189 among girls, according to the Centers for Disease Control and Prevention. And although corporate programs have so far focused primarily on autistic people, it should be possible to extend them to people affected...
WHY NEURODIVERSITY PRESENTS OPPORTUNITIES

“Neurodiversity is the idea that neurological differences like autism and ADHD are the result of normal, natural variation in the human genome,” John Elder Robison, a scholar in residence and a cochair of the Neurodiversity Working Group at the College of William & Mary, writes in a blog on Psychology Today’s website. Robison, who himself has Asperger’s syndrome, adds, “Indeed, many individuals who embrace the concept of neurodiversity believe that people with differences do not need to be cured; they need help and accommodation instead.” We couldn’t agree more.

Everyone is to some extent differently abled (an expression favored by many neurodiverse people), because we are all born different and raised differently. Our ways of thinking result from both our inherent “machinery” and the experiences that have “programmed” us.

Most managers are familiar with the advantages organizations can gain from diversity in the backgrounds, disciplinary training, gender, culture, and other individual qualities of employees. Benefits from neurodiversity are similar but more direct. Because neurodiverse people are wired differently from “neurotypical” people, they may bring new perspectives to a company’s efforts to create or recognize value. At HPE, neurodiverse software testers observed that one client’s projects always seemed to go into crisis mode before a launch. Intolerant of disorder, they strenuously questioned the company’s apparent acceptance of the chaos. This led the client company to realize that it had indeed become too tolerant of these crises and, with the help of the testers, to successfully redesign the launch process. At SAP, a neurodiverse customer-support analyst spotted an opportunity to let customers help solve a common problem themselves; thousands of them subsequently used the resources he created.

Nevertheless, the neurodiverse population remains a largely untapped talent pool. Unemployment runs as high as 80% (this figure includes people with more-severe disorders, who are not candidates for neurodiversity programs). When they are working, even highly capable neurodiverse people are often underemployed. Program participants told us story after story of how, despite having solid credentials, they had previously had to settle for the kinds of jobs many people leave behind in high school. When SAP began its Autism at Work program, applicants included people with master’s degrees in electrical engineering, biostatistics, economic statistics, and anthropology and bachelor’s degrees in computer science, applied and computational mathematics, electrical engineering, and engineering physics. Some had dual degrees. Many had earned very high grades and graduated with honors or other distinctions. One held a patent.

Not surprisingly, when autistic people with those sorts of credentials do manage to get hired, many turn out to be capable, and some are really great. Over the past two years HPE’s program has placed more than 30 participants in software-testing roles at Australia’s Department of Human Services (DHS). Preliminary results suggest that the organization’s neurodiverse testing teams are 30% more productive than the others.

by dyspraxia (a neurologically based physical disorder), dyslexia, ADHD, social anxiety disorders, and other conditions. Many people with these disorders have higher-than-average abilities; research shows that some conditions, including autism and dyslexia, can bestow special skills in pattern recognition, memory, or mathematics. Yet those affected often struggle to fit the profiles sought by prospective employers.

Neurodiverse people frequently need workplace accommodations, such as headphones to prevent auditory overstimulation, to activate or maximally leverage their abilities. Sometimes they exhibit challenging eccentricities. In many cases the accommodations and challenges are manageable and the potential returns are great. But to realize the benefits, most companies would have to adjust their recruitment, selection, and career development policies to reflect a broader definition of talent.

A growing number of prominent companies have reformed their HR processes in order to access neurodiverse talent; among them are SAP, Hewlett Packard Enterprise (HPE), Microsoft, Willis Towers Watson, Ford, and EY. Many others, including Caterpillar, Dell Technologies, Deloitte, IBM, JP Morgan Chase, and UBS, have start-up or exploratory efforts under way. We have had extensive access to the neurodiversity programs at SAP, HPE, and Specialisterne (the Danish consulting company that originated such programs) and have also interacted with people at Microsoft, Willis Towers Watson, and EY.

Although the programs are still in early days—SAP’s, the longest running among major companies, is just four years old—managers say they are already paying off in ways far beyond reputational enhancement. Those ways include productivity gains, quality improvement, boosts in innovative capabilities, and broad increases in employee engagement. Nick Wilson, the managing director of HPE South Pacific—an organization with one of the largest such programs—says that no other initiative in his company delivers benefits at so many levels.

Perhaps the most surprising benefit is that managers have begun thinking more deeply about leveraging the talents of all employees through greater sensitivity to individual needs. SAP’s program “forces you to get to know the person better, so you know how to manage them,” says Silvio Bessa, the senior vice president of digital business services. “It’s made me a better manager, without a doubt.”
Inspired by the successes at DHS, the Australian Defense Department is now working with HPE to develop a neurodiversity program in cybersecurity; participants will apply their superior pattern-detection abilities to tasks such as examining logs and other sources of messy data for signs of intrusion or attack. Using assessment methods borrowed from the Israeli Defense Forces (IDF), it has found candidates whose relevant abilities are “off the charts.” (The IDF’s Special Intelligence Unit 9900, which is responsible for analyzing aerial and satellite imagery, has a group staffed primarily with people on the autism spectrum. It has proved that they can spot patterns others do not see.)

The case for neurodiverse hiring is especially compelling given the skills shortages that increasingly afflict technology and other industries. For example, the European Union faces a shortage of 800,000 IT workers by 2020, according to a European Commission study. The biggest deficits are expected to be in strategically important and rapidly expanding areas such as data analytics and IT services implementation, whose tasks are a good match with the abilities of some neurodiverse people.

WHY COMPANIES DON’T TAP NEURODIVERSE TALENT
What has kept so many companies from taking on people with the skills they badly need? It comes down to the way they find and recruit talent and decide whom to hire (and promote).

Especially in large companies, HR processes are developed with an eye toward wide application across the organization. But there is a conflict between scalability and the goal of acquiring neurodiverse talent. “SAP focuses on having scalable HR processes; however, if we were to use the same processes for everyone, we would miss people with autism,” says Anka Wittenberg, the company’s chief diversity and inclusion officer.

In addition, the behaviors of many neurodiverse people run counter to common notions of what makes a good employee—solid communication skills, being a team player, emotional intelligence, persuasiveness, salesperson-type personalities, the ability to network, the ability to conform to standard practices without special accommodations, and so on. These criteria systematically screen out neurodiverse people.

But they are not the only way to provide value. In fact, in recent decades the ability to compete on the basis of innovation has become more crucial for many companies. Innovation calls on firms to add variety to the mix—to include people and ideas from “the edges,” as SAP put it in the press release announcing its program. Having people who see things differently and who may be don’t fit in seamlessly “helps offset our tendency, as a big company, to all look in the same direction,” Bessa says.

You might think that organizations could simply seek more variety in prospective employees while retaining their traditional recruiting, hiring, and development practices. Many have taken that approach: Their managers still work top down from strategies to capabilities needed, translating those into organizational roles, job descriptions, and recruiting checklists. But two big problems cause them to miss neurodiverse talent.

The first involves a practice that is almost universal under the traditional approach: interviewing. Although neurodiverse people may excel in important areas, many don’t interview well. For example, autistic people often don’t make good eye contact, are prone to conversational tangents, and can be overly honest about their weaknesses. Some have confidence problems arising from difficulties they experienced in previous interview situations. Neurodiverse people more broadly are unlikely to earn higher scores in interviews than less-talented neurotypical candidates. SAP and HPE have found that it can take weeks or months to discover how good some program participants are (or, equally important, where their limitations lie). Fortunately, as we’ll see, interviews are not the only way to assess a candidate’s suitability.

The second problem, especially common in large companies, derives from the assumption that scalable processes require absolute conformity to standardized approaches. As mentioned, employees in neurodiversity programs typically need to be allowed to deviate from established practices. This shifts a manager’s orientation from assuring compliance through standardization to adjusting individual work contexts. Most accommodations, such as installing different lighting and providing noise-canceling headphones, are not very expensive. But they do require managers to tailor individual work settings more than they otherwise might.

HOW PIONEERS ARE CHANGING THE TALENT MANAGEMENT GAME
The tech industry has a history of hiring oddballs. The talented nerd who lacks social graces has become a cultural icon, as much a part of the industry mythos as the company that starts in a garage. In his book NeuroTribes, Steve Silberman points out that the incidence of autism is particularly high in places like Silicon Valley (for reasons not completely understood). He and others have hypothesized that many of the industry’s “oddballs” and “nerds” might well have been “on the spectrum,” although undiagnosed. Hiring for neurodiversity, then, could be seen as an extension of the tendencies of a culture that recognizes the value of nerds.

In recent years a few pioneering companies have formalized and professionalized those tendencies. Although their programs vary, they have elements
in common, not least because they draw on the body of knowledge developed at Specialisterne. Thorkil Sonne founded the firm in 2004, motivated by the autism diagnosis of his third child. Over the next several years it developed and refined noninterview methods for assessing, training, and managing neurodiverse talent and demonstrated the viability of its model by running a successful for-profit company focused on software testing.

Dissatisfied with the rate at which his own company could create jobs, Sonne established the Specialist People Foundation (recently renamed the Specialisterne Foundation) in 2008 to spread his company’s know-how to others and persuade multinationals to start neurodiversity programs. Most companies that have done so have worked with the foundation to deploy some version of the Specialisterne approach. It has seven major elements:

**Team with “social partners” for expertise you lack.** Managers in, say, a tech company know a lot about many things but usually are not experts in autism or other categories of neurodiversity. Also, for many good reasons, companies hesitate to extend their activities into employees’ private lives, where neurodiverse people may need extra help.

To fill these gaps, the companies we studied entered into relationships with “social partners”—government or nonprofit organizations committed to helping people with disabilities obtain jobs. SAP has worked with California’s Department of Rehabilitation, Pennsylvania’s Office of Vocational Rehabilitation, the U.S. nonprofits EXPANDability and the Arc, and overseas agencies such as EnAble India, while HPE has worked with Autism SA (South Australia). Such groups help companies navigate local employment regulations that apply to people with disabilities, suggest candidates from lists of neurodiverse people seeking employment, assist in prescreening, help arrange public funding for training, sometimes administer training, and provide the mentorship and ongoing support (especially outside work hours) needed to ensure that neurodiverse employees will succeed. In Germany, recognition of the benefits of moving people off public assistance and into jobs that generate tax revenue has led to publicly funded positions to support the retention of neurodiverse employees. Although estimates of the benefits a government gains by turning such people into tax-paying tech workers vary, they often are on the order of $50,000 per person a year.

**Use nontraditional, noninterview-based assessment and training processes.** To this end, Specialisterne created “hangouts”—comfortable gatherings, usually lasting half a day, in which neurodiverse job candidates can demonstrate their abilities in casual interactions with company managers. At the end of a hangout, some candidates are selected for two to six weeks of further assessment and training (the duration varies by company). During this time they use Lego Mindstorms robotic construction and programming kits to work on assigned projects—first individually and then in groups, with the projects becoming more like actual work as the process continues. Some companies have additional sessions. SAP, for example, established a “soft skills” module to help candidates who have never worked in a professional environment become familiar with the norms of such a setting. These efforts are typically funded by the government or nonprofits. Trainees are usually paid.

Despite the social difficulties experienced by many neurodiverse people, candidates often display complex collaborative and support behaviors during the project-based assessment period. At HPE, for example, groups were asked to devise a reliable robotic pill-dispensing system. During the presentation of solutions, one candidate froze. “I’m sorry, I can’t do it,” he said. “The words are all jumbled up in my head.” His neurodiverse teammates rushed to his rescue, surrounding and reassuring him, and he was able to finish.

By extending the assessment process, such programs allow time for candidates’ capabilities to surface. There are, of course, other ways to do this. HPE has begun using internships that include similar elements.

**Train other workers and managers.** Short (some are just half a day), low-key training sessions help existing employees understand what to expect from their new colleagues—for example, that they might need accommodations and might seem different. Managers get somewhat more-extensive training to familiarize them with sources of support for program employees.

**Set up a support ecosystem.** Companies with neurodiverse programs design and maintain simple support systems for their new employees. SAP defines two “support circles”—one for the workplace, the other for an employee’s personal life. The workplace
support circle includes a team manager, a team buddy, a job and life skills coach, a work mentor, and an “HR business partner,” who oversees a group of program participants. Buddies are staff members on the same team who provide assistance with daily tasks, workload management, and prioritization. Job and life skills coaches are usually from social partner organizations. Other social partner roles include vocational rehab counselor and personal counselor. Usually, families of employees also provide support.

HPE takes a different approach. It places new neurodiverse employees in “pods” of about 15 people, where they work alongside neurotypical colleagues in a roughly 4:1 ratio while two managers and a consultant are tasked with addressing neurodiversity-related issues.

Tailor methods for managing careers. Employees hired through these programs need long-term career paths, just as other workers do. This requires serious thought about ongoing assessment and development that will take the special circumstances of neurodiverse employment into account. Fortunately, over time supervisors usually get a good sense of program employees’ talents and limitations. Participants undergo the same performance evaluations that other employees do, but managers work within those processes to set specific goals. Although some goals may relate to participants’ conditions, no allowances are made for unsatisfactory performance. If anything, neurodiverse employees must meet more requirements than others, because they must meet program objectives in addition to the performance objectives expected of anyone in their role.

Some participants quickly demonstrate potential to become integrated into the mainstream organization and go further in their careers. HPE’s pods are designed to provide a safe environment in which participants can build skills that will allow them to perform well and eventually to transition out of their pods into more-mainstream jobs.

Scale the program. SAP has announced an intention to make 1% of its workforce neurodiverse by 2020—a number chosen because it roughly corresponds to the percentage of autistic people in the general population. Microsoft, HPE, and others are also working to enlarge their programs, although they have declined to set numerical targets. It’s easiest to expand employment in those areas, such as software testing, business analytics, and cybersecurity, in which tasks are a good fit with neurodiverse talent. SAP, however, has placed its more than 100 program employees in 18 roles. “The original expectation, as I understood it, was that these colleagues would be mostly focused on repetitive work, such as software testing,” one manager told us. “But in practice they have been able to add value in a much broader range of tasks.” Those include product management, which involves coordinating the development of new SAP offerings; HR service associate, which entails organizing and planning HR activities; associate consultant, which requires helping customers apply SAP solutions to business problems; and customer support, which means working with customers on the phone to help them use SAP software. The latter two defy the assumption that people with autism can’t hold jobs that require social skills.

HPE is deploying neurodiverse specialists nine at a time, in pods, to client organizations—in effect, selling packages of the advanced capabilities derived from neurodiversity. The model has intriguing scale possibilities, both because many workers are placed at once and because client demand enlarges the domain of possible placements.

Mainstream the program. The success of neurodiversity programs has prompted some companies to think about how ordinary HR processes may be excluding high-quality talent. SAP is conducting a review to determine how recruiting, hiring, and development could take a broader view. Its stated goal is to make its mainstream talent processes so “neurodiversity friendly” that it can ultimately close its neurodiversity program. Microsoft has similar ambitions.

Companies have experienced a surprising array of benefits from neurodiversity programs. Some are straightforward: Firms have become more successful at finding and hiring good and even great talent in tough-to-fill skills categories. Products, services, and bottom lines have profited from lower defect rates and higher productivity. Both SAP and HPE report examples of neurodiverse employees’ participating on teams that generated significant innovations (one, at SAP, helped develop a technical fix worth an estimated $40 million in savings).

Other benefits are subtler. One executive told us that efforts to make corporate communications more
direct, in order to account for the difficulties autistic employees have with nuance, irony, and other fine points of language, have improved communication overall. The perfectionist tendencies of some HPE software-testing pods have caused client organizations to raise their game and stop viewing certain common problems as inevitable. In addition, employee engagement has risen in areas the programs touch: Neurotypical people report that involvement makes their work more meaningful and their morale higher. And early indications suggest that program employees, appreciative of having been given a chance, are very loyal and have low rates of turnover.

Last but not least, the programs confer reputational benefits. The companies that pioneered them have been recognized by the United Nations as exemplars of responsible management and have won global corporate citizenship awards.

CHALLENGES OF A NEURODIVERSE WORKFORCE

To be sure, companies implementing neurodiversity programs have encountered challenges. Although there are plenty of potential candidates, many are hard to identify, because universities—sensitive to issues of discrimination—do not classify students in neurodiversity terms, and potential candidates do not necessarily self-identify. In response, HPE is helping colleges and high schools set up nontraditional “work experience” programs for neurodiverse populations. These involve video gaming, robotic programming, and other activities. Microsoft, too, is working with universities to improve methods of identifying and accessing neurodiverse talent.

Another common difficulty involves the dashed hopes of candidates who are not chosen for placement—an inevitable circumstance that must be handled carefully. At one company, parents whose son did not qualify for a job wrote to the CEO; the program had raised their hopes that he would finally achieve meaningful employment, and they were understandably disappointed. Executives fretted about a potential PR problem. In the end, compassionate discussions between the parents and managers of the program—some of whom had families that had experienced similar issues—calmed the situation.

Issues related to fairness and norms of interaction might arise as well. In one case we encountered, a program participant who had overstimulation difficulties was given his own office while four people in a nearby department were crowded into a similar space, generating complaints. Those subsided after an explanation was offered. We also heard of instances in which the excessive honesty typical of autistic people raised hackles. One concerned a program employee who told a colleague, “You stink at your job.” Coaching by managers and mentors can help address such situations.

Some supervisors reported that the program generated extra work for them. For instance, the perfectionist tendencies of some participants made it difficult for those employees to judge which defects were worth fixing, which were not, and which required them to seek additional direction.

Managing neurodiverse employees’ stress presents another challenge. We heard reports that unexpected and uncontrollable events, such as systems outages that interfered with work routines, caused unusually high levels of anxiety among participants. Many people we interviewed emphasized the need to be sensitive to program employees’ stress. To keep it under control, some participants work only part-time—a limitation that may create problems, especially when deadlines loom.

To handle such situations, organizations need people in place who can spot and address issues before they escalate. Many managers said that with these and other supports, they could perform their jobs in a fairly normal fashion. And contrary to their initial assumptions, SAP managers found they could even supervise program participants remotely, as long as buddies and mentors provided support locally.

A MAJOR SHIFT IN MANAGING PEOPLE

Neurodiversity programs induce companies and their leaders to adopt a style of management that emphasizes placing each person in a context that maximizes her or his contributions.

SAP uses a metaphor to communicate this idea across the organization: People are like puzzle pieces, irregularly shaped. Historically, companies have asked employees to trim away their irregularities, because it’s easier to fit people together if they are all perfect rectangles. But that requires employees to leave their differences at home—differences firms need in order to innovate. “The corporate world has mostly missed out on this [benefit],” Anka Wittenberg observes.

This suggests that companies must embrace an alternative philosophy, one that calls on managers to do the hard work of fitting irregular puzzle pieces together—to treat people not as containers of fungible human resources but as unique individual assets. The work for managers will be harder. But the payoff for companies will be considerable: access to more of their employees’ talents along with diverse perspectives that may help them compete more effectively.

“Innovation,” Wittenberg notes, “is most likely to come from parts of us that we don’t all share.”


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THE PROBLEM WITH PRODUCT PROLIFERATION

UNMANAGED INNOVATION LEADS TO EXCESSIVE OPERATIONAL COMPLEXITY. WHAT’S NEEDED IS PRODUCT INTEGRATION.

BY MARTIN MOCKER AND JEANNE W. ROSS
Royal Philips, the Netherlands’ most valuable brand, has long been a leader in product innovation. But in the first 10 years of the new millennium, the company’s revenue plunged 40%, profits for the decade were wiped out, and its market capitalization fell significantly. What went wrong?

The problem, it turned out, was excessive innovation. In the early 2000s, executives expanded the company’s product portfolio, through in-house development and acquisitions, to encompass an extraordinary array of new products and services. In 2003, Philips was the top patent filer in Europe and among the top 10 in the United States. Innovations included energy-efficient light bulbs, medical scanners, web-enabled cameras, chipsets for in-car entertainment systems, software offerings, and product-related services. By 2011, Philips was active in more than 60 product categories.

But because Philips had allowed business leaders in various product lines and geographies to design stand-alone systems to support their products and customers, business complexity—in supply chain, sales and marketing, product development, and administrative processes—increased significantly, leading to much higher expenses. Complexity also led, not surprisingly, to greater customer and employee difficulties. For example, health care customers buying medical scanners and related software and services had to work with multiple account managers and received multiple invoices. Employees struggled to navigate the more than 10,000 IT applications, including 60 enterprise resource planning systems, that had sprung up. With customer data spread across all of them, it was nearly impossible for frontline employees to get a view of a customer’s needs or to provide a consistent level of service.

Welcome to the dark side of innovation. Every time customers have to enter the same data twice, have inconsistent experiences when interacting with different parts of the business, or are forced to contact multiple people to get something done, it hurts the company. Every time employees can’t access important customer information or have to wait for decisions and approvals by multiple people in multiple departments, it hurts the company. It can even destroy a business, as almost happened with Royal Philips.

Customers and frontline employees are well aware of the problems that product variety can introduce. Leaders, however, tend to focus exclusively on the potential benefits. The top team at one large financial services company we studied admitted to being “addicted to innovation.” Even when executives recognize that some of their innovations generate little value and that their company has become difficult to do business with, they don’t see the connection. The desire to be first to market with a new product—or to quickly replicate a competitor’s offering—blinds companies to the potential downside of adding to the product portfolio. Most companies do assess the potential for cannibalization of other products, but few consider the costs of added complexity.

To examine this problem, we surveyed 255 senior executives and studied seven companies in depth through interviews with 72 executives. (The companies were DHL Express, IBM, ING Direct Spain, the LEGO Group, Principal Financial Group, Royal Philips, and USAA.) We found that on average, product variety is not correlated with company profitability—but it is correlated with customer and employee difficulties. The bottom line: The more potentially value-generating innovations you add to your company’s product portfolio, the more value-destroying complexity you are likely to embed in your business. We offer three guidelines for addressing this problem: Focus on product integration rather than proliferation. Make sure your product developers work closely with customer-facing and operational employees. And settle on a high-level purpose that can guide decision making.

**IN BRIEF**

**THE PROBLEM**

Companies create problems for customers and employees when product innovation goes unmanaged. Eventually, excessive operational complexity hurts the bottom line.

**THREE SOLUTIONS**

Focus on product integration, not product proliferation. Make sure your product developers work closely with customer-facing and operational employees. And settle on a high-level purpose that can guide decision making.

**FACING THE DARK SIDE OF INNOVATION**

When Philips set out to address the problems that unmanaged innovation had created, it soon realized it needed to transform both its operations and its portfolio of businesses. In 2011, as part of an ongoing business transformation program, the company began
building a “greenfield” platform of globally standardized systems and processes that spanned three areas: from idea to market (all processes relating to innovation), from market to order (processes related to marketing and sales), and from order to cash (those related to finance and back-office fulfillment).

The goal of the platform was to significantly reduce employee and customer difficulties, but Philips management realized that with the current portfolio of products it would take years to implement. So the company also reduced product variety—dramatically. In 2000, it was doing business in six areas: lighting, consumer electronics, domestic appliances and personal care, components, semiconductors, and medical systems. The company gradually sold off low-margin businesses until it was down to just two units: HealthTech (health care and consumer lifestyle) and Lighting. In 2016, Philips sold off its lighting business so that it could focus exclusively on its HealthTech business. To be sure, the decision to focus on only one business sector was not motivated solely by the difficulties that operational complexity presented—but that was one of the biggest factors, according to executives we spoke with.

Philips’s transformation achieved its midterm goal of increasing EBITA margins to more than 10%, and its share price has doubled since 2011. But its journey to reduce complexity—like that of many companies—has been long and painful.

You don’t have to be as diversified as Philips to experience the dark side of innovation. In the 1990s, the LEGO Group reacted to the expiration of the patent on its iconic brick—and the growing popularity of computer games—with an all-out effort to innovate. The company doubled the number of unique bricks to more than 12,000 from 1997 to 2004. It also moved into new areas, such as computer games, children’s clothing, and theme parks. As product variety grew, complexity crept into LEGO’s operational processes. Customers and employees began to struggle with a lack of transparency in its supply chain. LEGO’s popular sets began to experience out-of-stock issues, sometimes because just one brick in a set of more than 500 was not available. Retailers were frustrated by the company’s inability to respond to a shortage in one country by moving excess inventory from another country. In 2004, LEGO found itself on the brink of bankruptcy.

Like Philips, the LEGO Group addressed its value-destroying complexity by initiating a major business transformation. Starting in 2004, it sold off theme parks and standardized its global supply chain and product-life-cycle management processes. It also reduced the number of unique bricks, although it continued to innovate around the way bricks were combined into sets. These efforts have paid off in profitability and growth. And they have made LEGO easier for customers and employees to deal with.

But to ensure that innovations do more good than harm, companies must minimize customer and employee difficulties. We have found that successful innovators follow three principles to help them recover from—or avoid altogether—the downside of innovation.

Focus on integration, not variety. Our research shows that product integration, unlike product variety, is related to better performance and does not create challenges for customers and employees. There are many ways to integrate products: Cross-selling and bundling are obvious options. Companies can also integrate by enriching products with information and offering services that help solve customers’ problems. We found that efforts to provide integrated customer service had the potential to limit complexity.

USAA, a financial services company supporting members of the U.S. military and their families,
provides easy-to-use products and services focused on life events. These are major decisions and actions that have significant financial implications—such as getting married, buying a house, having a baby, or leaving the military. By integrating products around life events, USAA allows its members to reach out for help in addressing a financial need rather than seek a specific financial product that may or may not be appropriate.

For example, USAA’s Auto Circle helps members who want to buy a car. The service guides a member through the process of buying, financing, and insuring a car in what can be a single interaction on the phone or online. Before Auto Circle was introduced, in 2010, a member would discuss prices with USAA’s buying service, arrange financing with USAA’s retail bank, and purchase insurance through USAA’s property and casualty insurance business. Now Auto Circle addresses all aspects of the process while offering prenegotiated prices at USAA-certified car dealers. In addition, it recommends how much members should spend on a car given their financial situation and offers online tools for configuring the desired car. The company has some of the highest Net Promoter Scores in the world—even higher than Amazon’s and Apple’s.

Emphasizing product integration over product variety is a strategic choice—but it can mean walking away from new revenue in the short term. At USAA, leaders sometimes decide against introducing an otherwise desirable new product because it would be too hard to integrate into the company’s offerings. Another company we studied, ING Direct Spain, delayed introducing a new product for a year because the systems for supporting it were still too messy. First it fixed the systems, and then it introduced the product.

Integration-focused innovation demands more internal coordination than siloed approaches do, but when systems and processes are designed to ease customer difficulties, they usually benefit employees too. Principal Financial Group offers retirement (pensions and 401(k)s) and insurance benefits packages to the employees of small and midsize organizations. Because small businesses don’t have the resources to manage complex benefits administration, Principal emphasizes easy-to-use processes and high service over product variety. Simplifying and standardizing its business processes allowed Principal to automate more of them, which resulted in a consistent experience across interactions and significantly reduced employee difficulties. Customer service employees see the same integrated picture the customer does, facilitating efficient and effective customer interactions. Principal’s competitors tend to offer more products, but their complexity often drives customers to Principal.

Although innovation through integration might seem like a narrow focus for companies, bringing products together may create more—and more-valuable—opportunities than it eliminates. In the past, Philips’s health care business sold big machines such as CT scanners. Its innovation efforts focused on new features or new machines, which took a long time to test and roll out. Philips’s HealthTech business aligns its machines with services such as clinical decision-support software and workflow management to help hospitals and doctors increase efficiency and lower costs. While Philips is closing the door on some innovations that it would have welcomed in earlier days, it is exploring ways that new technologies and data sharing can help make and keep people well. This focus on integrated products can actually accelerate innovation. Despite all the changes in Philips’s approach, the company was again the top patent filer in Europe in 2015. But now it can innovate without creating difficulties for customers.

**IS YOUR BUSINESS TOO COMPLEX?**

The dark side of innovation may not be immediately reflected in financial performance indicators. So we recommend that you track difficulties your customers and employees face as a leading indicator of financial performance.

To gauge the level of complexity in your business, ask yourself the following questions. “Yes” answers signal brewing problems.

**Employees**

- Do employees have to access several systems or use manual work-arounds to accomplish a task?
- Do they have to contact multiple people to get their jobs done?
- Do they have trouble identifying the appropriate in-house experts when needed?
- Do they frequently have to stop tasks to wait for decisions or seek approval?

**Customers**

- Do customers have to contact multiple people or call centers for each product and service?
- Are different log-ins required to access different products and services online?
- Do customers have to provide the same data multiple times during interactions or when switching channels?
- Is the customer experience inconsistent from one part of the enterprise to another?
division of labor allows complexity to penetrate the business unchecked.

To avoid that trap, companies should create cross-functional teams that break down the wall between the developers of products and the employees whose work is affected by them. ING Direct Spain positions IT architects and customer service representatives alongside product managers from the very beginning of a product introduction. In fact, according to Daniel Llano, ING’s former executive vice president of products and strategy, “Nobody comes into my office saying ‘This is a product I want to launch’ without understanding what will be the impact on the whole bank.” IT, operations, and customer service people take responsibility for adjusting product requirements and features so that the company reaps the upside of the innovation (such as revenue increases) without adding undue complexity.

For cross-functional teams to work effectively, though, leaders need to ensure that everyone in the company understands the purpose of their innovations. Commit to a vision to direct innovation. USAA’s mission is to “facilitate the financial security” of its members and employees. LEGO wants to “inspire and develop the builders of tomorrow.” Intuit articulates a vision to “simplify the business of life.” Although very broad, these mission statements are more than slogans. They establish the purpose of innovations and are thus essential to innovation and, over time, to the success of the business.

If a company embraces innovation but lacks a clear vision, it runs the risk of becoming addicted to innovation for its own sake. Any and all innovations look good. By contrast, a clear mission inspires people to innovate for a purpose.

Consider again USAA. In the past, the company offered financial products in a fragmented way—40% of its revenues were generated by auto insurance, for example, signing up new customers involved sending out separate mailings—welcome packages, debit cards, PIN codes—over the course of several weeks. (To the frustration of many, this is still how it works with most banks today.) An IT employee on the cross-functional team suggested displaying the PIN code to users online after they authenticated themselves for the first time on the website. This tweak eliminated the need for multiple mailings.

Cross-functional teams also provide insights into end-to-end processes, which can greatly ease customer and employee difficulties. When the LEGO Group committed to attacking its business complexity, it created a set of process expert networks (PENs) consisting of leaders from key functional units such as order to cash, manufacturing, finance support, and innovation and development. They met regularly to discuss interdependencies and help design optimized processes. PENs ensured knowledge sharing across the organization and helped bridge the functional and organizational gaps within and across business units. These efforts initially produced greater operational efficiency. More recently, LEGO’s integrated processes have proved essential to digital innovation.

Executives may fear that using cross-functional teams will slow down innovation. LEGO’s leaders are convinced, however, that their investment in cross-functional collaboration—from their 20-person management team to their PENs—generates clear benefits. The CIO told us, “We talk about a decision or change for a long time, but when we finish with that and everybody nods and says, ‘I am on board,’ we execute in a flash of a second!”

Similarly, Philips now employs agile methodologies with teams of engineering, sales, and IT people. This helps the company ensure that as it designs new digital offerings, it is capable of manufacturing, selling, and supporting them in ways that limit complexity. Because digital innovations come to market much faster than traditional products do, early assessment of potential impacts on complexity are essential. Cross-functional teams can warn of problems on the horizon and avert product introductions that don’t add value. And once digital offerings are developed, they go live with a much shorter time to market because all the relevant functions have been involved.

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Consider again USAA. In the past, the company offered financial products in a fragmented way—40% of its revenues were generated by auto insurance, for
example—but those individual products did not increase members’ financial security as much as they could. Once corporate leaders reconsidered their mission, they realized that the decision to buy a car has far more impact on members’ finances—and their financial security—than does the choice of auto insurance. If USAA wanted to advise members on which car to buy—or whether to buy a car at all—it needed to be part of the entire auto-acquisition cycle.

Mission statements can also clarify the types of innovation that are not desirable and help to establish priorities. When in doubt about whether resources should be directed to introducing a homeowner’s insurance product or to making the overall home-buying process simpler, for example, USAA decision makers apply the imperative of “doing what is best for members’ financial security.” USAA expects employees to debate which of the two investments will benefit more members in a bigger way—and thus have more impact on achieving its mission.

A clear mission statement not only guides individual product innovations, it also influences decisions about infrastructure investments. Philips is investing heavily in its HealthSuite Digital Platform, which enables devices such as health watches, internet-connected scales, and smart thermometers to feed data into the same repository that holds clinical data on blood pressure, heart rate, temperature, and weight. The platform can integrate all the data with readings from CT scanners and other machines to give patients and their health care providers a holistic picture of their health.

The litmus test for an innovation vision is whether employees can use it to differentiate between a truly valuable innovation and one that creates more complexity than value.

HOW THEY DID IT
Companies with a history of growing—or even an inclination to grow—by introducing innovative new products need to take stock of their operational difficulties. How hard is it for your employees to get things done? How hard is it for your customers to deal with your company? In particular, our research suggests, companies should focus on the challenges employees face. Great employees work hard to shield customers from negative impacts of complexity, but those efforts can wear down employees and may cause them to leave. Even if they stay, ever-increasing complexity could well mean that their best efforts will prove futile over time. To gauge the effects of complexity on your business, you may need to do some internal research to find out the answers. (See the exhibit “Is Your Business Too Complex?”)

The bad news is that if you conclude that you need to reduce variety and increase integration, doing so is not easy and, for most companies, requires tough organizational choices. Royal Philips rationalized several of its most important internal processes—and then radically simplified its business portfolio. USAA created a Member Experience unit and required that all 12,000 customer-facing employees work in this unit for several years. Service representatives had to be retrained, and IT systems supporting separate lines of business had to be integrated. In addition, USAA adapted its incentive system to emphasize enterprise-wide performance. The LEGO Group took a different approach. To facilitate integration, it reorganized the company into three areas: Marketing, Operations, and a corporate functions group called Business Enabling. Enterprise architects and other IT leaders introduced disciplined architecture and governance processes to ensure that LEGO coordinates across areas as needed.

As with most organizational changes, companies need to take an experimental, learning-focused approach; they probably won’t get everything right on the first go. For example, when USAA introduced the Member Experience unit, an overwhelming number of decisions were initially pushed up to the executive committee, because issues involving integrated services crossed business unit borders and required companywide decisions. Adapting its decision-making forums eventually reduced the load on the executive committee and accelerated decision making.

Although the process is arduous, there’s good case evidence that conquering the dark side of innovation is worth the effort. USAA, Principal, the LEGO Group, and ING Direct Spain are all growing profitably. In fact, their profits exceed industry averages. And because their growth has not introduced significant complexity, it appears to be sustainable. USAA grew from 8 million to 10.7 million members over four years while introducing a succession of integrated services. At the same time, its profit margin grew from 11.2% to 14.2%. The LEGO Group’s innovations following its near-demise in the early 2000s allowed it to regain profitability and battle Mattel to become the world’s largest toy company.

THE DIGITAL ECONOMY offers unlimited opportunities for innovation. Some companies are innovating in ways that improve customers’ and employees’ lives and offer sustainable business benefits. Others are frittering away their resources on innovations that in the long run do more harm than good to the company. An honest assessment of your customer and employee difficulties will indicate which way you’re headed. HBR Reprint R1703G

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WHAT’S YOUR DATA STRATEGY?

The key is to balance offense and defense.

By Leandro DalleMule and Thomas H. Davenport
MORE THAN EVER, the ability to manage torrents of data is critical to a company’s success. But even with the emergence of data-management functions and chief data officers (CDOs), most companies remain badly behind the curve. Cross-industry studies show that on average, less than half of an organization’s structured data is actively used in making decisions—and less than 1% of its unstructured data is analyzed or used at all. More than 70% of employees have access to data they should not, and 80% of analysts’ time is spent simply discovering and preparing data. Data breaches are common, rogue data sets propagate in silos, and companies’ data technology often isn’t up to the demands put on it.

Having a CDO and a data-management function is a start, but neither can be fully effective in the absence of a coherent strategy for organizing, governing, analyzing, and deploying an organization’s information assets. Indeed, without such strategic management many companies struggle to protect and leverage their data—and CDOs’ tenures are often difficult and short (just 2.4 years on average, according to Gartner). In this article we describe a new framework for building a robust data strategy that can be applied across industries and levels of data maturity. The framework draws on our implementation experience at the global insurer AIG (where DalleMule is the CDO) and our study of half a dozen other large companies where its elements have been applied. The strategy enables superior data management and analytics—essential capabilities that support managerial decision making and ultimately enhance financial performance.

The “plumbing” aspects of data management may not be as sexy as the predictive models and colorful dashboards they produce, but they’re vital to high performance. As such, they’re not just the concern of the CIO and the CDO; ensuring smart data management is the responsibility of all C-suite executives, starting with the CEO.

DEFENSE VERSUS OFFENSE
Our framework addresses two key issues: It helps companies clarify the primary purpose of their data, and it guides them in strategic data management. Unlike other approaches we’ve seen, ours requires companies to make considered trade-offs between “defensive” and “offensive” uses of data and between control and flexibility in its use, as we describe below. Although information on enterprise data management is abundant, much of it is technical and focused on governance, best practices, tools, and the like. Few if any data-management frameworks are as business-focused as ours: It not only promotes the efficient use of data and allocation of resources but also helps companies design their data-management activities to support their overall strategy.

Data defense and offense are differentiated by distinct business objectives and the activities designed to address them. Data defense is about minimizing downside risk. Activities include ensuring compliance with regulations (such as rules governing data privacy and the integrity of financial reports), using analytics to detect and limit fraud, and building systems to prevent theft. Defensive efforts also ensure the integrity of data flowing through a company’s internal systems...
by identifying, standardizing, and governing authoritative data sources, such as fundamental customer and supplier information or sales data, in a “single source of truth.” Data offense focuses on supporting business objectives such as increasing revenue, profitability, and customer satisfaction. It typically includes activities that generate customer insights (data analysis and modeling, for example) or integrate disparate customer and market data to support managerial decision making through, for instance, interactive dashboards.

Offensive activities tend to be most relevant for customer-focused business functions such as sales and marketing and are often more real-time than is defensive work, with its concentration on legal, financial, compliance, and IT concerns. (An exception would be data fraud protection, in which seconds count and real-time analytics smarts are critical.) Every company needs both offense and defense to succeed, but getting the balance right is tricky. In every organization we’ve talked with, the two compete fiercely for finite resources, funding, and people. As we shall see, putting equal emphasis on the two is optimal for some companies. But for many others it’s wiser to favor one or the other.

Some company or environmental factors may influence the direction of data strategy: Strong regulation in an industry (financial services or health care, for example) would move the organization toward defense; strong competition for customers would shift it toward offense. The challenge for CDOs and the rest of the C-suite is to establish the appropriate trade-offs between defense and offense and to ensure the best balance in support of the company’s overall strategy.

Decisions about these trade-offs are rooted in the fundamental dichotomy between standardizing data and keeping it more flexible. The more uniform data is, the easier it becomes to execute defensive processes, such as complying with regulatory requirements and implementing data-access controls. The more flexible data is—that is, the more readily it can be transformed or interpreted to meet specific business needs—the more useful it is in offense. Balancing offense and defense, then, requires balancing data control and flexibility, as we will describe.

SINGLE SOURCE, MULTIPLE VERSIONS
Before we explore the framework, it’s important to distinguish between information and data and to differentiate information architecture from data architecture. According to Peter Drucker, information is “data endowed with relevance and purpose.” Raw data, such as customer retention rates, sales figures, and supply costs, is of limited value until it has been integrated with other data and transformed into information that can guide decision making. Sales figures put into a historical or a market context suddenly have meaning—they may be climbing or falling relative to benchmarks or in response to a specific strategy.

A company’s data architecture describes how data is collected, stored, transformed, distributed, and consumed. It includes the rules governing structured formats, such as databases and file systems, and the systems for connecting data with the business processes that consume it. Information architecture governs the processes and rules that convert data into useful information. For example, data architecture
might feed raw daily advertising and sales data into information architecture systems, such as marketing dashboards, where it is integrated and analyzed to reveal relationships between ad spend and sales by channel and region.

Many organizations have attempted to create highly centralized, control-oriented approaches to data and information architectures. Previously known as information engineering and now as master data management, these top-down approaches are often not well suited to supporting a broad data strategy. Although they are effective for standardizing enterprise data, they can inhibit flexibility, making it harder to customize data or transform it into information that can be applied strategically. In our experience, a more flexible and realistic approach to data and information architectures involves both a single source of truth (SSOT) and multiple versions of the truth (MVOTs). The SSOT works at the data level; MVOTs support the management of information.

In the organizations we’ve studied, the concept of a single version of truth—for example, one inviolable primary source of revenue data—is fully grasped and accepted by IT and across the business. However, the idea that a single source can feed multiple versions of the truth (such as revenue figures that differ according to users’ needs) is not well understood, commonly articulated, or, in general, properly executed.

The key innovation of our framework is this: It requires flexible data and information architectures that permit both single and multiple versions of the truth to support a defensive-offensive approach to data strategy.

OK. Let’s parse that.

The SSOT is a logical, often virtual and cloud-based repository that contains one authoritative copy of all crucial data, such as customer, supplier, and product details. It must have robust data provenance and governance controls to ensure that the data can be relied on in defensive and offensive activities, and it must use a common language—not one that is specific to a particular business unit or function. Thus, for example, revenue is reported, customers are defined, and products are classified in a single, unchanging, agreed-upon way within the SSOT.

Not having an SSOT can lead to chaos. One large industrial company we studied had more than a dozen data sources containing similar supplier information, such as name and address. But the content was slightly different in each source. For example, one source identified a supplier as Acme; another called it Acme, Inc.; and a third labeled it ACME Corp. Meanwhile, various functions within the company were relying on differing data sources; often the functions weren’t even aware that alternative sources existed. Human beings might be able to untangle such
problems (though it would be labor-intensive), but traditional IT systems can't, so the company couldn't truly understand its relationship with the supplier. Fortunately, artificial intelligence tools that can sift through such data chaos to assemble an SSOT are becoming available. The industrial company ultimately tapped one and saved substantial IT costs by shutting down redundant systems. The SSOT allowed managers to identify suppliers that were selling to multiple business units within the company and to negotiate discounts. In the first year, having an SSOT yielded $75 million in benefits.

An SSOT is the source from which multiple versions of the truth are developed. MVOTs result from the business-specific transformation of data into information—data imbued with “relevance and purpose.” Thus, as various groups within units or functions transform, label, and report data, they create distinct, controlled versions of the truth that, when queried, yield consistent, customized responses according to the groups’ predetermined requirements.

Consider how a supplier might classify its clients Bayer and Apple according to industry. At the SSOT level these companies belong, respectively, to chemicals/pharmaceuticals and consumer electronics, and all data about the supplier’s relationship with them, such as commercial transactions and market information, would be mapped accordingly. In the absence of MVOTs, the same would be true for all organizational purposes. But such broad industry classifications may be of little use to sales, for example, where a more practical version of the truth would classify Apple as a mobile phone or a laptop company, depending on which division sales was interacting with. Similarly, Bayer might be more usefully classified as a drug or a pesticide company for the purposes of competitive analysis. In short, multiple versions of the truth, derived from a common SSOT, support superior decision making.

At a global asset management company we studied, the marketing and finance departments both produced monthly reports on television ad spending—MVOTs derived from a common SSOT. Marketing, interested in analyzing advertising effectiveness, reported on spending after ads had aired. Finance, focusing on cash flow, captured spending when invoices were paid. The reports therefore contained different numbers, but each represented an accurate version of the truth.

Procter & Gamble has adopted a similar approach to data management. The company long had a centralized SSOT for all product and customer data, and other versions of data weren’t allowed. But CDO Guy Peri and his team realized that the various business
units had valid needs for customized interpretations of the data. The units are now permitted to create controlled data transformations for reporting that can be reliably mapped back to the SSOT. Thus the MVOTs diverge from the SSOT in consistent ways, and their provenance is clear.

In its application of the SSOT-MVOTs model, the Canadian Imperial Bank of Commerce (CIBC) automated processes to ensure that enterprise source data and data transformations remained aligned. CIBC’s CDO, Jose Ribau, explains that the company’s SSOT contains all basic client profile and preference data; MVOTs for loan origination and customer relationship management transform the source data into information that supports regulatory reporting and improved customer experience. Automated synchronization programs connect SSOT and MVOTs data, with nightly “exception handling” to identify and address data-integrity issues such as inconsistent customer profiles.

Although the SSOT-MVOTs model is conceptually straightforward, it requires robust data controls, standards, governance, and technology. Ideally, senior executives will actively participate on data governance boards and committees. But data governance isn’t particularly fun. Typically, enterprise CDOs and CTOs lead data and technology governance processes, and business and technology managers in functions and units are the primary participants. What’s critical is that single sources of the truth remain unique and valid, and that multiple versions of the truth diverge from the original source only in carefully controlled ways. (For more on data governance and technology, see the sidebars “Good Governance, Good Data” and “A Lake of Data.”)

**EQUAL ATTENTION TO OFFENSE AND DEFENSE IS SOMETIMES OPTIMAL, BUT IT’S UNWISE TO DEFAULT TO A 50/50 SPLIT.**

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**GOOD GOVERNANCE, GOOD DATA**

A sound data strategy requires that the data contained in a company’s single source of truth (SSOT) is of high quality, granular, and standardized, and that multiple versions of the truth (MVOTs) are carefully controlled and derived from the same SSOT. This necessitates good governance for both data and technology. In the absence of proper governance, some common problems arise:

- **Data definitions may be ambiguous and mutable.** With no concrete definition at the outset of what constitutes the “truth” (whether an SSOT or MVOTs), stakeholders will squander time and resources as they try to manage nonstandardized data.

- **Data rules are vague or inconsistently applied.** If rules for aggregating, integrating, and transforming data are unclear, misunderstood, or simply not followed—particularly when data transformation involves multiple poorly defined steps—it’s difficult to reliably replicate transformations and leverage information across the organization.

- **Feedback loops for improving data transformation are absent.** Complex data analyses such as predictive modeling may be undertaken by one group but prove useful across an organization. Without mechanisms for making these outputs available to others (by, for example, integrating them into appropriate MVOTs), stakeholders may needlessly duplicate work or miss opportunities.

Strong data governance usually involves standing committees or review boards composed of business and technology executives, but it relies heavily on robust technology oversight. If technology rules prevent a marketing executive from buying a server on his or her corporate purchasing card, it’s much less likely that marketing will, for instance, create unregulated “shadow” MVOTs or a marketing analytic that duplicates an existing one.

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**STRIKING A BALANCE**

Let’s return now to data strategy—striking the best balance between defense and offense and between control and flexibility. Whereas the CEO—often with the CIO—is ultimately responsible for a company’s data strategy, the CDO commonly conceives it and leads its development and execution. The CDO must determine the right trade-offs while dynamically adjusting the balance by leveraging the SSOT and MVOTs architectures.

It’s rare to find an organization—especially a large, complex one—in which data is both tightly controlled and flexibly used. With few exceptions, CDOs find that their best data strategy emphasizes either defense and control (which depends on a robust SSOT) or offense and flexibility (enabled by MVOTs). Devoting equal attention to offense and defense is sometimes optimal, but in general it’s unwise to default to a 50/50
A LAKE OF DATA

Until a few years ago, technological limitations made it hard to build the SSOT-MVOTs data architecture needed to support a robust data strategy. Companies depended on traditional data warehouses that stored structured enterprise data in hierarchical files and folders, but these were not always suited to managing vast and growing volumes of data and new formats. To meet the need for a cheaper, more agile and scalable architecture, Silicon Valley engineers devised the “data lake,” which can store virtually unlimited amounts of structured and unstructured data, from databases to spreadsheets to free text and image files. Data lakes are an ideal platform for SSOT-MVOTs architecture. A lake can house the SSOT, extracting, storing, and providing access to the organization’s most granular data down to the level of individual transactions. And it can support the aggregation of SSOT data in nearly infinite ways in MVOTs that also reside in the lake. Data warehouses still have their uses: They store data for production applications (such as general ledger and order-management systems) that require tight security and access controls, which few data lakes can do. Many companies have both data lakes and warehouses, but the trend is for more and more data to reside in a lake.
Hospitals operate in highly regulated environments where data quality and protection are paramount. They emphasize defense over offense.

We find that companies with the most-advanced data strategies started at one point and gradually migrated to a new, stable position. For example, they may have shifted their focus from defense and data control toward offense as their data defense matured or competition heated up. The opposite path—from offense toward defense, and from flexible toward controlled—is possible but usually more difficult.

Consider how data strategy has shifted at CIBC. The bank established the chief data officer role a few years ago and for the first 18 months maintained a 90% defensive orientation, focusing on governance, data standardization, and building new data-storage capabilities. When Jose Ribau took over as CDO, in 2015, he determined that CIBC’s defense was sufficiently solid that he could shift toward offense, including more advanced data modeling and data science work. Today CIBC’s data strategy strikes a 50/50 balance. Ribau expects that the new attention to offense will drive increased ROI from data products and services and nurture analytical talent for the future.

Regardless of what industry a company is in, its position on the offense-defense spectrum is rarely...
static. As competitive pressure mounts, an insurer may decide to increase its focus on offensive activities. A hedge fund may find itself in a tougher regulatory environment that requires rebalancing its data strategy toward defense. How a company’s data strategy changes in direction and velocity will be a function of its overall strategy, culture, competition, and market.

ORGANIZING DATA MANAGEMENT
As with most organizational design, data-management functions can be built centrally or decentralized by function or business unit. The optimal design will depend on a company’s position on the offense-defense spectrum. A centralized data function typically has a single CDO with accountability across the entire organization, ensuring that data policies, governance, and standards are applied consistently. This design is most suitable for businesses that focus on data defense.

Conversely, several companies we studied found that data offense can be better executed through decentralized data management, typically with a CDO for each business unit and most corporate functions. “Unit CDOs” tend to report directly to their business but have a matrix reporting relationship to the enterprise CDO. That helps prevent the development of data silos (which can lead to redundant systems and duplicate work) and ensures that best practices are shared and standards are followed. Generally speaking, unit CDOs own their respective versions of the truth, while the enterprise CDO owns the SSOT. A decentralized approach is well suited to offensive strategies because it can increase the agility and customization of data reporting and analytics. In many companies, among them Wells Fargo, CIBC, and P&G, the CDO is responsible for both analytics and data management, facilitating the ability to balance offense and defense.

Finally, in choosing between a centralized and a decentralized data function, it’s important to consider how funding will be determined, allocated, and spent. The budget may appear larger for a centralized function than for a decentralized one simply because it’s concentrated under one CDO. Decentralized budgets are typically more focused on offensive investments, are closer to the business users, and have more-tangible ROIs, whereas centralized budgets are more often focused on minimizing risk, reducing costs, and providing better data controls and regulatory oversight—activities that are less close to business users and usually have a less-tangible ROI. Thus creating a business case to justify the latter is usually trickier. The importance of investing in data governance and control—even if the payoff is abstract—is more easily understood and accepted if a company has suffered from a major regulatory challenge, a data breach, or some other serious defense-related issue. Absent a traumatic event, enterprise CDOs should spend time educating senior executives and their teams about data-defense principles and how they create value.

EMERGING TECHNOLOGIES MAY enable a next generation of data-management capabilities, potentially simplifying the implementation of defensive and offensive strategies. Machine learning, for example, is already facilitating the creation of a single source of truth in many companies we studied. The promise is more-dynamic, less-costly SSOTs and MVOTs. However, no new technology will obviate an effective, well-run data-management function. Our framework will become even more relevant as distributed technology solutions—blockchain, for example—come into play.

Data was once critical to only a few back-office processes, such as payroll and accounting. Today it is central to any business, and the importance of managing it strategically is only growing. In September 2016, according to the technology conglomerate Cisco, global annual internet traffic surpassed one zettabyte ($10^{21}$ bytes)—the equivalent, by one calculation, of 150 million years of high-definition video. It took 40 years to get to this point, but in the next four, data traffic will double. There is no avoiding the implications: Companies that have not yet built a data strategy and a strong data-management function need to catch up very fast or start planning for their exit.

Leandro DalleMule is the chief data officer at AIG. Thomas H. Davenport is the President’s Distinguished Professor of Information Technology and Management at Babson College, a fellow at the MIT Initiative on the Digital Economy, and a senior adviser at Deloitte Analytics. The updated edition of his book Competing on Analytics, coauthored with Jeanne G. Harris (Harvard Business Review Press), will be published in September.
THE WORLD’S NEXT GREAT MANUFACTURING CENTER

HOW CHINESE INVESTMENT IS RESHAPING AFRICA
BY IRENE YUAN SUN
In a low-slung office building at his giant ceramics factory in southwestern Nigeria, Sun Jian insisted that we have tea. He had just returned from a trip to China, and he had a batch of top-quality tea he wanted to share with visitors, in an age-old gesture of Chinese hospitality.

Sun is from Wenzhou, a midsize city in southeastern China. Nearly 4,000 years ago the lustrous, pale green glaze called celadon was invented in Wenzhou, which became the birthplace of Chinese ceramics. In the 1970s, however, times there were tough. After elementary school, Sun dropped out and started working. In 1978, two years after Mao Zedong’s death, Wenzhou was the first city in China to establish private enterprises. Sun worked his way up through several leather-processing factories and eventually saved enough to start his own leather manufacturing business. But by the late 2000s costs were climbing at an alarming pace, and he knew he needed to move out of China. A friend suggested he think about Nigeria.

He went for a five-day visit. “Immediately all these poor people were asking for money,” he told me. “But then I realized there are a lot of rich people, too, and although it’s hard to make it in this market, it’s just as hard for everyone else as it is for me.” Back in China he called an acquaintance at the customs authority and asked him what was the heaviest, most expensive to ship product being exported in large quantities to Nigeria. The answer? Ceramics.

After that single visit, Sun devoted about $40 million to building a ceramic tile factory in Nigeria. It runs around the clock and employs nearly 1,100 workers, a thousand of them locals. Electricity is unreliable and costly, but business is good. Nigeria, with its relative lack of competition and booming demand, allows Sun to earn a 7% profit margin, compared with the 5% he earned in China. In manufacturing, margins are often razor-thin, and a 2% bump is substantial.

Sun’s story is not unusual. According to data from the Chinese Ministry of Commerce, privately owned Chinese companies are making more than 150 investments a year in the manufacturing sector in Africa, up from only two in 2000. The real figure is probably two or three times as large: Scholars doing fieldwork on
the topic routinely encounter Chinese companies that have not been captured by government data.

These companies are already having a major impact. In Nigeria, Chinese businesses smelt steel to fuel the construction boom in Africa’s largest economy. In tiny Lesotho, Chinese and Taiwanese companies churn out Kohl’s yoga pants, Levi’s jeans, and Reebok athletic wear destined for U.S. shopping malls. They’ve made the clothing industry the largest economic sector in the country. In Ethiopia, just as the British pharma giant GSK was scraping its plans to build a drug production plant, Humanwell, a Chinese pharmaceutical company, broke ground on a $20 million production site outside Addis Ababa; its board approved an eventual investment of $100 million in Ethiopia’s pharmaceutical sector.

Over the past few years, I’ve talked to nearly 50 Chinese manufacturing entrepreneurs across half a dozen African countries. In the following pages I describe how their investments are transforming Africa’s economy and society by providing millions of Africans with formal employment for the first time, fostering a generation of African entrepreneurs, and inspiring African institutions to support vibrant manufacturing clusters. These entrepreneurs are not saints, of course. Bribery, poor working conditions, and problematic environmental practices are pervasive. But Chinese manufacturers are arriving in larger and larger numbers in Africa, and manufacturing—unlike natural resources or services—leads to the possibility of industrialization. An industrial revolution in Africa: This is no longer a far-fetched notion.

THE LARGEST POOL OF LABOR IN THE WORLD

Chinese entrepreneurs are being both pushed and pulled into Africa. On the push side, China’s ascendancy in global manufacturing is now coming under structural pressure. A generation under the one-child policy has shrunk the country’s labor pool, causing shortages in its coastal manufacturing hubs. And labor costs have risen sharply in recent years: Hourly manufacturing wages have increased by 12% annually since 2001, and productivity-adjusted manufacturing wages nearly tripled from 2004 to 2014.

According to Justin Yifu Lin, a former chief economist at the World Bank, “China is on the verge of graduating from low-skilled manufacturing jobs....That will free up nearly 100 million labor-intensive manufacturing jobs, enough to more than quadruple manufacturing employment in low-income countries.” To put that into perspective, when manufacturing employment reached its peak in the United States, in 1978, only 20 million people had jobs in American factories. Now five times that number of jobs are about to migrate out of a single country: China.

Meanwhile, Africa is in the early stages of a population boom that will reach 2 billion people by 2050, creating the largest pool of labor in the world. (Southeast Asia will have only 800 million people by then.) Yet African nations have some of the highest unemployment rates in the world. The official unemployment rate in Nigeria is 12.1%, but the government recognizes an additional 19.1% of the working-age population as “underemployed.” For young people, the situation is much worse: Youth unemployment is at 42.2%. Thus Africa is a natural destination for China’s manufacturing jobs.

From the corporate investor’s perspective, one advantage is that although Africa is still challenging in many ways, it offers arguably the widest array of market options. Nigeria boasts an enormous domestic market with high margins and relatively little competition for a variety of consumer goods. Lesotho enjoys tariff-free access to the U.S. market along with proximity to excellent South African infrastructure and logistics services for shipping time-sensitive fashions to American customers. Ethiopia offers attractive tax breaks along with cheap power and proximity to lucrative Middle Eastern markets. In other words, Africa can provide an appealing location for pretty much whatever business model a manufacturer has.

The demand side is also trending favorably. National governments in Africa have taken decisive steps toward integrating regional markets, which will reduce costs and increase opportunities for entrants. In 2015 half the countries in Africa joined the Tripartite Free Trade Area, which will combine 600 million people in a single trading bloc, forming the 13th-largest economy in the world. The six nations of East Africa have gone a step further, creating a single customs union to boost trade, harmonizing regulations to ease doing business, and instituting a single visitor’s visa to facilitate the movement of people across their borders.

Let’s now look at the effects of Chinese private investment in Africa.

THE PROMISE OF A FUTURE

The word on the street in Africa and the sentiment in African newspapers is that Chinese companies don’t hire Africans. But every rigorous study shows precisely the opposite: Chinese factories in Africa overwhelmingly employ locals. A recent meta-analysis of the various statistics that have been collected shows no sample in which the proportion of local workers dips below 78%, and in some companies with thousands of employees, the figure exceeds 99%. In Nigeria my own (admittedly small-scale) field research shows that 85% of workers hired by Chinese manufacturers are locals. A larger-scale Chinese-language survey in

IN BRIEF

WHAT’S HAPPENING

Pushed out of China by rising costs, manufacturing entrepreneurs are increasingly investing in higher-margin business models in Africa.

WHY IT MATTERS

If the trend continues, Africa could become the world’s next great manufacturing center, taking that role over from China itself.

WHAT IT COULD DELIVER

Such an industrial revolution could lead to 100 million jobs, a new pool of globally competitive manufacturing companies, and the elimination of extreme poverty in Africa.
Kenya found that 90% of the employees in Chinese manufacturing and construction companies were local hires and, moreover, that as Chinese enterprises operated in Kenya over time, their percentage of local hires increased.

Ahmed Ibrahim has lived out this reality. As he showed me around the cardboard box factory I was visiting in Nigeria, I saw that he knows everything about making cardboard: the idiosyncrasies of pulp suppliers, the process of unloading truckloads of raw materials, the ins and outs of every piece of machinery, the status of the latest customer orders, the trick to fixing an offset print run. And he knows all the workers by name. His boss, the owner of the factory, is Chinese, but it was clear that Ibrahim runs things.

Ibrahim started at the bottom. After secondary school he was, like many young Nigerian men, underemployed and surviving by working odd jobs. Because he grew up near the border with Niger, he speaks French. He found a niche buying cars from the French-speaking Lebanese car dealers in neighboring Benin on behalf of Nigerians who were trying to take advantage of Benin’s much lower auto import duties. In 2009 he got a job as a driver for Wang Junxiong, who was fresh from China and hoped to start a business in Nigeria. Ibrahim quickly morphed into a sort of all-purpose local fixer for his employer.

The key moment in their relationship came when Wang needed to buy a car for his fledgling company and wanted to do what the locals did: shop in Benin to bypass the high tariff. Ibrahim would have to do it, because Wang knew no French. But could Ibrahim be trusted with so much money? Wang’s Chinese managers fretted. Finally, in a split-second decision, Wang locked eyes with Ibrahim and handed over the full amount for a brand-new vehicle, in cash. As Ibrahim left for Benin, Wang’s Chinese employees shook their heads in disbelief, convinced they had seen the last of him and the money.

To their surprise, Ibrahim came back with the car—and change. He was full of apologies, however, because he had used some of the change to buy a pair of “beautiful shoes that could not be resisted.” He insisted that it be docked from his next paycheck. From that day on, Ibrahim was Wang’s right-hand man.

Soon he was running the day-to-day operations of the factory. Wang favored him so much that, unprompted, he came in one day with business cards identifying Ibrahim as “manager.” The Chinese person with the same title was insulted. Ibrahim, wanting to keep the peace (and recognizing that he had de facto authority in any case), quietly stopped using the cards.

Without question, working in the cardboard box factory has transformed Ibrahim’s life. In his tribe, men need a certain amount of money to get married; before he had this job, Ibrahim had no choice but to remain single. Now he has not one but two wives (polygamy is accepted in his tribe), cementing his status as a rich man. And in his capacity as de facto plant manager, he brought his younger brother Ishmael into the business. Ishmael learned the ropes quickly and can now run the plant when Ibrahim is taking care of other matters for Wang. As I walked through the plant with Ibrahim, he spoke to the workers in Hausa, a northern Nigerian language rarely spoken in southwestern Nigeria, where the factory is located. But the workers weren’t from the surrounding area—Ibrahim had literally brought his village to work.

Factory work will provide 100 million smart but underemployed and undereducated young people with an opportunity to move from informal, unsteady work into high-productivity, formal jobs connected to the global economy. With that opening comes even more potential.

AFRICA’S NEW GENERATION

As Africans gain manufacturing experience, many of them will become bosses themselves. Such localization of ownership is driven in part by the nature of the manufacturing business, which continually strives for shorter supply chains to reduce costs and increase nimbleness. Wherever factories cluster, local suppliers spring up and scale up. National policies also play a role: Many government tenders advantage locally based manufacturers, and financing by country-level
development banks is often available only to local companies, which encourages partnerships between locals and Chinese. In addition, foreign investors often prize local knowledge and seek out trustworthy local partners; the Chinese are no exception.

Meet Zaf Gebretsadik, from Addis Ababa. After graduating from pharmacy school, in the early 1980s, she worked as a pharmacist in a government hospital. In the mid-1980s the drought and famine that made Ethiopia infamous worldwide hit the country. Gebretsadik joined a relief organization and then transitioned to researching pesticides.

In 1992 she decided to set up her own company. In her work as an agricultural researcher in a largely agrarian economy, she had witnessed the need for both human and animal medicines, and she saw a business opportunity in selling them. Ethiopia made very few medicines, so she decided to import them. She knocked on the doors of the Chinese, French, and Swiss embassies. Only the Chinese were responsive. With the help of their economic consular office, she managed to connect with multiple Chinese drug manufacturers and become their official representative for the Ethiopian market. Within two years she was winning big medical supplies contracts from the Ethiopian government.

A few years later one of the Chinese companies she represented in Ethiopia came to her with an intriguing proposition: They should form a joint venture to make gel capsules, the glossy casings for drugs.

Gebretsadik jumped right in. She put up the capital—essentially all her profits to date—for a 30% stake in Sino-Ethiop Associate Africa. Her company became the first and only gel capsule manufacturer in all of sub-Saharan Africa. Her expertise in the Ethiopian market and in navigating the Ethiopian bureaucracy was a perfect complement to that of her two Chinese partners: One specialized in pharmaceutical sales in developing countries, the other in gel-capule manufacturing technology. Their plant was soon up and running and very quickly turned a profit. The company has increased its initial daily production of 2 million capsules to 6 million, with plans to expand to 11 million. It accounts for the vast majority of Ethiopia's pharmaceutical exports, and its products are sold all over Africa and the Middle East.

Today Gebretsadik is the owner or co-owner of three companies employing some 300 people in all. She and other African entrepreneurs are doing what their counterparts in China, Japan, and the Four Asian Tigers have done: partnering with foreign investors and becoming manufacturing moguls themselves. Gebretsadik's story parallels Sun's: Working for and with foreign investors in China is how the current generation of Chinese factory bosses got their start.

When Gebretsadik reflects on the decision she made nearly 20 years ago to invest her life savings in a manufacturing plant, she doesn't dwell on business considerations. Although she was transitioning from a sales and marketing business that needed very little fixed investment to a manufacturing business with enormous fixed costs, her decision wasn't based on the economics or the business plan: "I wasn't sure I would make it financially," she told me. "But I have known these people since 1992. I really trust them. They are like family."

FROM GOOD BUSINESS TO GOOD INSTITUTIONS

Chinese businesses in Africa have often been accused of undermining the continent's institutional integrity. As the U.S. secretary of state, Hillary Clinton spoke for many critics when she characterized Chinese investment in Africa as a "new colonialism." Asked about China's rising influence in Africa during a 2011 TV interview in Zambia, she responded, "When people come to Africa to make investments, we want them to do well but also want them to do good. We don't want them to undermine good governance in Africa."

As noted, the record of Chinese investment in Africa isn't spotless. But many of the Chinese entrepreneurial ventures I look at are working actively to build up African institutional capacity. By interacting repeatedly with governments and cocreating institutional innovations, these investors are taking the same approach they used in China to transform a Marxist economy with nonexistent market institutions into the second-largest economy in the world.

Qi Lin can tell you a lot about how this works. He started out as a hairdresser in a small town in northeastern China and then tried without much success to run a clothing shop there. He had grown up hearing stories about Africa from his grandfather, a doctor sent to Kenya's back streets as well as any local taxi driver, and he can utter greetings in more of Kenya's tribal languages than most Kenyans can.

After Qi moved to Kenya, his day job was selling lathes and milling machines—the powerful desk-sized equipment used to fabricate specialized parts for factories. But he quickly ran into a problem: No one in Kenya knew how to use the state-of-the-art machinery that his company sold. The country's vocational and technical education was at least a generation out-of-date.

Undaunted by the prospect of trying to fix technical education in an entire country, Qi's company partnered with the Kenya Ministry of Education and the Kenya National Youth Service, the two government departments that carry out most vocational training programs there. The company lowered its price significantly
to supply the latest machinery to Kenyan vocational training centers. For two years Qi worked to install the machines in 10 centers, driving all over the country to check on electricity hookups and to meet with school principals. He thought the hard part was over once the giant machines were in place, but they just sat there, barely used.

One day Qi was on yet another trip to check on a vocational school with Benard Shikoli Isalambo, an official from the Ministry of Education, when Isalambo had an idea. “You’ve given us huge equipment, but we’re not utilizing it,” he said. “If we have a competition to support this equipment, you’ll be helping us build the confidence of our students.” When they got back to Nairobi, they wrote a proposal, and Qi worked his internal channels to get approval for it. That idea turned into the Africa Tech Challenge, launched in 2014, which brings together students from all over Kenya for intensive training and a competition in industrial machining skills. Qi’s company now spends $500,000 a year on the effort as part of its corporate social responsibility program.

But did that solve the problem? Of course not. “When we were doing the ATC, something came out clear: Our instructors were worse than the students!” says Isalambo. Yet again Qi mustered his irrepressible optimism and problem-solving skills. He put together a small team of NGO workers and consultants to create a teacher-training center with his company and the Kenyan government. (I participated in this project for a summer during graduate school.) After two years of pushing and cajoling, the creation of the Sino-Africa Industrial Skill Upgrading Center was formally announced in July of 2016.

Qi’s story is an example of how Chinese companies are patiently forging a new institutional reality in Africa. Perhaps because government agencies and other institutions are very much under construction in China itself, Chinese companies are unafraid of incomplete and evolving institutions. They make things up as they go along—pivoting toward different local partners and adapting their plans to changing conditions. They are open to the ideas of their African counterparts. At once relentlessly realistic and irrepressibly optimistic, they act without waiting for conditions to be perfect, and in so doing, they alter those very conditions.

There is a term for this process: *bootstrapping development,* which the Columbia social science scholar Charles Sabel describes as a means whereby imperfect institutions produce good outcomes by constantly learning about and adapting to market conditions. This dynamic, optimistic view of institutions emphasizes less what they are today than what they might become. As Sabel wrote, “If growth-favoring institutions are indeed built by a bootstrapping process where each move suggests the next, then such institutions are as much the outcome as the starting point of development.”

Of course, these are the success stories; many attempts are less successful, if not downright risky. And the tendency for Chinese companies to work with African institutions as they are, rather than demand something better, may artificially prop up inept or irresponsible local governments, reinforcing the status quo rather than changing it. But institutions do not appear in the world fully formed; they must be used into existence. So companies must be willing to engage with them and give them a chance to improve.

Stephen Knack, of the World Bank, and Nicholas Eubank, of Stanford Business School, studied the alternative—that is, when Western donor systems bypass local institutions. They found that “country systems are...undermined when donors manage aid through their own separate parallel systems.” One major issue is that the parallel donor systems siphon off valuable talent: “When donors bypass country systems they often staff their own...systems by ‘poaching’ the most talented government officials.” From this perspective, bootstrapping toward improvement
looks like a far better strategy than insisting on something perfect from the beginning.

**THE MIRACLE OF MANUFACTURING**

As we sipped the eighth or ninth pour of his excellent tea at the ceramic tile factory, Sun waxed philosophical. “The train of development—which station first and then which station you need to go through—we Chinese know exactly what the path is,” he said. “Nigeria needs to learn from China!”

Sun is no economist, but he unwittingly hit upon a theory in development economics called the flying geese paradigm. Originating with Kaname Akamatsu and recently popularized by Justin Yifu Lin, it posits that manufacturing companies act like migrating geese, flying from country to country as costs and demand change. According to this analogy, factories from a leading country are forced by labor-price pressures to invest in a follower country, helping it accumulate ownership and move up the technology curve. This movement shifts the bulk of economic activity in the follower country from low-productivity agriculture and informal services to high-productivity manufacturing. The follower country eventually becomes a leading country, spawning companies in search of new production locations. The paradigm offers a convincing model of how Asian economies developed—in a chain from Japan to the Asian Tigers to China.

There is a second dimension to the flying geese paradigm: It describes not only the movement of companies from country to country, but also a process of industrial upgrading from product to product within each country. First a few companies show up to try their hands at making a certain product. As they learn, their profits attract other manufacturers of the same product. But as the field gets crowded, intensifying competition and thinning profits, some companies look for something else to make—this time something slightly more complicated and thus harder to copy. As the cycle repeats, companies that started by copying and learning are inventing and teaching a mere generation or two later. An analysis of 148 countries shows that as GDP rises, manufacturers within a country predictably move toward ever more complicated products. In another decade or two, factories in Africa will be churning out computers instead of ceramics and clothing.

That’s why investment in manufacturing is the key to Africa’s development. Economists know that in the long run, the only way to create higher standards of living is to become more productive. Unlike services, which are often locally based and rarely achieve returns to scale, manufacturing becomes more productive over time, partly because its products often have to compete with imports or get exported to other competitive markets. In addition, manufacturing investment has big multiplier effects: Research shows that for every manufacturing job created, 1.6 service jobs follow. As Ron Bloom, President Obama’s onetime senior counselor for manufacturing policy, put it, “If you get an auto assembly plant, Walmart follows. If you get a Walmart, an auto assembly plant doesn’t follow.”

To be sure, industrialization unleashes powerful forces for harm as well as for good, and these are already evident in Africa today. Bribes affect the proper functioning of local governments; poor environmental practices affect the quality of Africa’s air and water; and mistreatment of workers determines not only their wages but sometimes whether they live or die on the job. China itself—with its corruption scandals and smog-ridden air—offers ominous examples of the social and environmental consequences of unbridled economic expansion.

Yet another certainty is that Africa will experience industrialization differently. Its countries and societies don’t resemble China economically, politically, or socially. Although building factories in any new place produces a host of predictable results—from rising incomes to labor scandals—their form, sequence, and flavor vary considerably. In Nigeria the course of industrialization is shaped by reports from a free press, in Lesotho by a strong union movement, in Kenya by tribal and ethnic considerations—all of which are largely absent in China. Indeed, in encounters between Chinese investors and local African actors—workers, suppliers, distributors, governments, media—new types of organizations, partnerships, and power structures will be invented. The theme may be old, but the story will be new.

**INDUSTRIALIZATION WILL ALLOW** Africa to follow in the footsteps of Japan, South Korea, Taiwan, and China: to build factories that employ its booming population and to refashion its institutions to meet the demands of modern capitalism. Most important, it will provide a real chance to raise living standards across broad sectors of the populace. If Africa could lift just half as many people out of poverty as China has in a mere three decades, it will eliminate extreme poverty within its borders. For nearly 400 million people, that would mean the difference between going hungry and being full, between scrounging for work and holding a steady job, between asking their children to do menial labor and sending them to school. The Chinese showing up in Africa today don’t doubt that this will happen. As one of them, who is working to build a special economic zone in Nigeria, said to me: “This is exactly like my hometown 30 years ago. If we could do it, then so can this place.”

BY BART DE LANGHE, STEFANO PUNTONI, AND RICHARD LARRICK

LINEAR THINKING IN A NONLINEAR WORLD
TEST YOURSELF WITH THIS WORD PROBLEM: Imagine you’re responsible for your company’s car fleet. You manage two models, an SUV that gets 10 miles to the gallon and a sedan that gets 20. The fleet has equal numbers of each, and all the cars travel 10,000 miles a year. You have enough capital to replace one model with more-fuel-efficient vehicles to lower operational costs and help meet sustainability goals.

Which upgrade is better?
A. Replacing the 10 MPG vehicles with 20 MPG vehicles
B. Replacing the 20 MPG vehicles with 50 MPG vehicles

Intuitively, option B seems more impressive—an increase of 30 MPG is a lot larger than a 10 MPG one. And the percentage increase is greater, too. But B is not the better deal. In fact, it’s not even close. Let’s compare.
Shockingly, upgrading fuel efficiency from 20 to 100 MPG still wouldn’t save as much gas as upgrading from 10 to 20 MPG.

But choosing the lower-mileage upgrade remains counterintuitive, even in the face of the visual evidence. It just doesn’t feel right.

If you’re still having trouble grasping this, it’s not your fault. Decades of research in cognitive psychology show that the human mind struggles to understand nonlinear relationships. Our brain wants to make simple straight lines. In many situations, that kind of thinking serves us well: If you can store 50 books on a shelf, you can store 100 books if you add another shelf, and 150 books if you add yet another. Similarly, if the

<table>
<thead>
<tr>
<th>GALLONS USED PER 10,000 MILES</th>
<th>CURRENT</th>
<th>AFTER UPGRADE</th>
<th>SAVINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>1,000 (@10 MPG)</td>
<td>500 (@20 MPG)</td>
<td>500</td>
</tr>
<tr>
<td>B.</td>
<td>500 (@20 MPG)</td>
<td>200 (@50 MPG)</td>
<td>300</td>
</tr>
</tbody>
</table>

Is this surprising? For many of us, it is. That’s because in our minds the relationship between MPG and fuel consumption is simpler than it really is. We tend to think it’s linear and looks like this:

But that graph is incorrect. Gas consumption is not a linear function of MPG. When you do the math, the relationship actually looks like this:

And when you dissect the curve to show each upgrade scenario, it becomes clear how much more effective it is to replace the 10 MPG cars.
The price of coffee is $2, you can buy five coffees with $10, 10 coffees with $20, and 15 coffees with $30.

But in business there are many highly nonlinear relationships, and we need to recognize when they’re in play. This is true for generalists and specialists alike, because even experts who are aware of nonlinearity in their fields can fail to take it into account and default instead to relying on their gut. But when people do that, they often end up making poor decisions.

**Linear Bias in Practice**

We’ve seen consumers and companies fall victim to linear bias in numerous real-world scenarios. A common one concerns an important business objective: profits.

Three main factors affect profits: costs, volume, and price. A change in one often requires action on the others to maintain profits. For example, rising costs must be offset by an increase in either price or volume. And if you cut price, lower costs or higher volumes are needed to prevent profits from dipping.

Unfortunately, managers’ intuitions about the relationships between these profit levers aren’t always good. For years experts have advised companies that changes in price affect profits more than changes in volume or costs. Nevertheless, executives often focus too much on volume and costs instead of getting the price right.

Why? Because the large volume increases they see after reducing prices are very exciting. What people don’t realize is just how large those increases need to be to maintain profits, especially when margins are low.

Imagine you manage a brand of paper towels. They sell for 50 cents a roll, and the marginal cost of producing a roll is 15 cents. You recently did two price promotions. Here’s how they compare:

<table>
<thead>
<tr>
<th>Normal</th>
<th>Promo A: 20% Off</th>
<th>Promo B: 40% Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price/Roll</td>
<td>$0.50</td>
<td>$0.40</td>
</tr>
<tr>
<td>Sales</td>
<td>1,000</td>
<td>1,200 (+20%)</td>
</tr>
</tbody>
</table>

Intuitively, B looks more impressive—an 80% increase in volume for a 40% decrease in price seems a lot more profitable than a 20% increase in volume for a 20% cut in price. But you may have guessed by now that B is not the most profitable strategy.

In fact, both promotions decrease profits, but B’s negative impact is much bigger than A’s. Here are the profits in each scenario:

<table>
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<tr>
<td>Sales</td>
<td>1,000</td>
<td>1,200 (+20%)</td>
</tr>
<tr>
<td>Profit/Roll</td>
<td>$0.35</td>
<td>$0.25</td>
</tr>
<tr>
<td>Profit</td>
<td>$350</td>
<td>$300</td>
</tr>
</tbody>
</table>

Although promotion B nearly doubled sales, profits sank almost 25%. To maintain the usual $350 profit during the 40%-off sale, you would have to sell more than 2,300 units, an increase of 133%. The curve looks like this:

The nonlinear phenomenon also extends to intangibles, like consumer attitudes. Take consumers and sustainability. We frequently hear executives complain that while people say they care about the environment, they are not willing to pay extra for ecofriendly products. Quantitative analyses bear this out. A survey by the National Geographic Society and GlobeScan finds that, across 18 countries, concerns about environmental problems have increased markedly over time, but consumer behavior has changed much more slowly. While nearly all consumers surveyed agree that food production and consumption should be more sustainable, few of them alter their habits to support that goal.

What’s going on? It turns out that the relationship between what consumers say they care about and their actions is often highly nonlinear. But managers often believe that classic quantitative tools, like surveys using 1-to-5 scales of importance, will predict behavior in a linear fashion. In reality, research shows little or no behavioral difference between consumers who, on a five-point scale, give their environmental concern the lowest rating, 1, and consumers who rate it a 4. But the difference between 4s and 5s is huge. Behavior maps to attitudes on a curve, not a straight line. (See the chart at the top of the next page.)

Companies typically fail to account for this pattern—in part because they focus on averages. Averages mask nonlinearity and lead to prediction
FEATURE LINEAR THINKING IN A NONLINEAR WORLD

**IN BRIEF**

**THE PROBLEM**

People expect that relationships between variables and outcomes will be linear. Often they are: The amount of data an iPad will hold increases at the same rate as its storage capacity. But often they are not: The time savings from upgrading an internet broadband connection get smaller and smaller as download speed increases.

**THE CHALLENGE**

How can you overcome the inclination to think linearly so that you don’t make poor business decisions when nonlinear phenomena are in play?

**THE SOLUTION**

First you need to understand four types of nonlinear relationships and how linear thinking produces errors in judgment in these situations. Then you can use data visualization to see whether and how relationships in your environment are nonlinear, which will help you make choices that maximize your desired outcome.

errors. For example, suppose a firm did a sustainability survey among two of its target segments. All consumers in one segment rate their concern about the environment a 4, while 50% of consumers in the other segment rate it a 3 and 50% rate it a 5. The average level of concern is the same for the two segments, but people in the second segment are overall much more likely to buy green products. That’s because a customer scoring 5 is much more likely to make environmental choices than a customer scoring 4, whereas a customer scoring 4 is not more likely to than a customer scoring 3.

The nonlinear relationship between attitudes and behavior shows up repeatedly in important domains, including consumers’ privacy concerns. A large-scale survey in the Netherlands, for example, revealed little difference in the number of loyalty-program cards carried by consumers who said they were quite concerned versus only weakly concerned about privacy. How is it possible that people said they were worried about privacy but then agreed to sign up for loyalty programs that require the disclosure of sensitive personal information? Again, because only people who say they are extremely concerned about privacy take significant steps to protect it, while most others, regardless of their concern rating, don’t adjust their behavior.

Awareness of nonlinear relationships is also important when choosing performance metrics. For instance, to assess the effectiveness of their inventory management, some firms track days of supply, or the number of days that products are held in inventory, while other firms track the number of times their inventory turns over annually. Most managers don’t know why their firm uses one metric and not the other. But the choice may have unintended consequences—for instance, on employee motivation. Assume a firm was able to reduce days of supply from 12 to six and that with additional research, it could further reduce days of supply to four. This is the same as saying that the inventory turn rate could increase from 30 times a year to 60 times a year and that it could be raised again to 90 times a year. But employees are much more motivated to achieve improvements if the firm tracks turnover instead of days of supply, research by the University of Cologne’s Tobias Stangl and Ulrich Thonemann shows. That’s because they appear to get decreasing returns on their efforts when they improve the days-of-supply metric—but constant returns when they improve the turnover metric.

Other areas where companies can choose different metrics include warehousing (picking time versus picking rate), production (production time versus production rate), and quality control (time between failures versus failure rate).

Nonlinearity is all around us. Let’s now explore the forms it takes.

**THE FOUR TYPES OF NONLINEAR RELATIONSHIPS**

The best way to understand nonlinear patterns is to see them. There are four types.

**Increasing gradually, then rising more steeply.**

Say a company has two customer segments that both have annual contribution margins of $100. Segment A has a retention rate of 20% while segment B has one of 60%. Most managers believe that it makes little difference to the bottom line which segment’s retention they increase. If anything, most people find doubling the weaker retention rate more appealing than increasing the stronger one by, say, a third.

But customer lifetime value is a nonlinear function of retention rate, as you’ll see when you apply the formula for calculating CLV:

\[
\text{CLV} = \text{MARGIN} \times \text{RETENTION RATE} \times \frac{1}{1 + \text{DISCOUNT RATE} - \text{RETENTION RATE}}
\]

When the retention rate rises from 20% to 40%, CLV goes up about $35 (assuming a discount rate of 10% to adjust future profits to their current worth), but when retention rates rise from 60% to 80%, CLV goes up about $147. As retention rates rise, customer lifetime value increases gradually at first and then suddenly shoots up.
Because they’re misled by their linear thinking in this context, mortgage payers are often surprised when they sell a property after a few years (and pay brokerage costs) and have only small net gains to show for it.

Climbing quickly, then tapering off. Selling more of a product allows companies to achieve economies of scale and boost per unit profit, a metric often used to gauge a firm’s efficiency. Executives use this formula to calculate per unit profit:

\[(\text{Volume} \times \text{Unit Price}) - \text{Fixed Costs} - (\text{Volume} \times \text{Unit Variable Costs}) \] / \text{Volume}

Say a firm sells 100,000 widgets each year at $2 a widget, and producing those widgets costs $100,000—$50,000 in fixed costs and 50 cents in unit variable costs. The per unit profit is $1. The firm can increase per unit profit by producing and selling more widgets, because it will spread fixed costs over more units. If it doubles the number of widgets sold to 200,000, profit per unit will rise to $1.25 (assuming that unit variable costs remain the same). That attractive increase might tempt you into thinking per unit profit will skyrocket if you increase sales from 100,000 to 800,000 units. Not so.

If the firm doubles widget sales from 400,000 to 800,000 (which is much harder to do than going from 100,000 to 200,000), the per unit profit increases only by about 6 cents. (See chart on next page.)

Most companies focus on identifying customers who are most likely to defect and then target them with marketing programs. However, it’s usually more profitable to focus on customers who are more likely to stay. Linear thinking leads managers to underestimate the benefits of small increases to high retention rates.

Decreasing gradually, then dropping quickly. The classic example of this can be seen in mortgages. Property owners are often surprised by how slowly they chip away at their debt during the early years of their loan terms. But in a mortgage with a fixed interest rate and fixed term, less of each payment goes toward the principal at the beginning. The principal doesn’t decrease linearly. On a 30-year $165,000 loan at a 4.5% interest rate, the balance decreases by only about $15,000 over the first five years. By year 25 the balance will have dropped below $45,000. So the owner will pay off less than 10% of the principal in the first 16% of the loan’s term but more than a quarter of it in the last 16%.

Linear thinking leads managers to underestimate the benefits of small increases to high retention rates.
**TEST YOUR NONLINEAR APTITUDE**

Take this quiz to see if you can make the best decisions. (Answers on page 139.)

1. In which scenario do you consume more pizza?
   A. You eat one 12-inch pizza.
   B. You eat two 8-inch pizzas.

2. Firms are often advised to focus on customers with the highest lifetime value. Suppose your analysts segmented your customer base by deciles for lifetime value (where decile 1 is the most valuable). Which two segments’ values are likely to be closest?
   A. Deciles 1 and 2.
   B. Deciles 3 and 8.

3. Your company has two factories. Assuming that the factories operate 24/7, what would give you the largest increase in the number of products made per year?
   A. Increase the productivity of the first factory from 100 to 120 products per hour.
   B. Increase the productivity of the second factory from 130 to 140 products per hour.

4. You’re trying to learn how willing men and women are to pay for a new product. So far, you’ve surveyed 20 men and 50 women. Which option would increase the precision of your estimates the most?
   A. Survey five more women and 30 more men.
   B. Survey 100 more women and five more men.

5. Which of these two business travelers increases the time spent in the air more?
   A. The first traveler increases miles flown from 20,000 to 40,000 a year.
   B. The second traveler increases miles flown from 50,000 to 60,000 a year.

6. Suppose your primary goal is to increase traffic to your company’s website. Which of the following should you do?
   A. Increase your organic search ranking for a keyword from 10th to fourth.
   B. Increase your organic search ranking for a keyword from fourth to second.

Managers focus a great deal on the benefits of economies of scale and growth. However, linear thinking may lead them to overestimate volume as a driver of profit and thus underestimate other more impactful drivers, like price.

**Falling sharply, then gradually.** Firms often base evaluations of investments on the payback period, the amount of time required to recover the costs. Obviously, shorter paybacks are more favorable. Say you have two projects slated for funding. Project A has a payback period of two years, and project B has one of four years. Both teams believe they can cut their payback period in half. Many managers may find B more attractive because they’ll save two years, double the time they’ll save with A.

Company leadership, however, may ultimately care more about return on investment than time to breakeven. A one-year payback has an annual rate of return (ARR) of 100%. A two-year payback yields one of 50%—a 50-point difference. A four-year payback yields one of 25%—a 25-point difference. So as the payback period increases, ARR drops steeply at first and then more slowly. If your focus is achieving a higher ARR, halving the payback period of project A is a better choice.

Managers comparing portfolios of similar-sized projects may also be surprised to learn that the return on investment is higher on one containing a project with a one-year payback and another with a four-year payback than on a portfolio containing two projects expected to pay back in two years. They should be careful not to underestimate the effect that decreases in relatively short payback periods will have on ARR.

**HOW TO LIMIT THE PITFALLS OF LINEAR BIAS**

As long as people are employed as managers, biases that are hardwired into the human brain will affect the quality of business decisions. Nevertheless, it is possible to minimize the pitfalls of linear thinking.

**Step 1: Increase awareness of linear bias.** MBA programs should explicitly warn future managers about this phenomenon and teach them ways to deal with it. Companies can also undertake initiatives to educate employees by, for instance, presenting them with puzzles that involve nonlinear relationships. (See the sidebar “Test Your Nonlinear Aptitude.”) In our experience, people find such exercises engaging and eye-opening.

Broader educational efforts are already under way in several fields. One is Ocean Tipping Points, an initiative that aims to make people more sensitive to nonlinear relationships in marine ecosystems. Scientists and managers often assume that the relationship between a stressor (such as fishing) and an ecological response (a decline in fish population) is linear. However, a small change in a stressor...
sometimes does disproportionately large damage: A fish stock can collapse following a small increase in fishing. The project's goal is to identify relevant tipping points in ocean ecology to help improve the management of natural resources.

**Step 2: Focus on outcomes, not indicators.** One of senior management's most important tasks is to set the organization's direction and incentives. But frequently, desired outcomes are far removed from everyday business decisions, so firms identify relevant intermediate metrics and create incentives to maximize them. To lift sales, for instance, many companies try to improve their websites' positioning in organic search results.

The problem is, these intermediate metrics can become the end rather than the means, a phenomenon academics call “medium maximization.” That bodes trouble if a metric and the outcome don't have a linear relationship—as is the case with organic search position and sales. When a search rank drops, sales decrease quickly at first and then more gradually; the impact on sales is much greater when a site drops from the first to the second position in search results than when it drops from the 20th to the 25th position.

Other times, a single indicator can be used to predict multiple outcomes, and that may confuse people and lead them astray. Take annual rates of return, which a manager who wants to maximize the future value of an investment may consider. If you map the relationship between investment products' ARR and their total accumulated returns, you'll see that as ARR rises, total returns increase gradually and then suddenly shoot up.

Another manager may wish to minimize the time it takes to achieve a particular investment goal. The relationship here is the reverse: As ARR rises, the time it takes to reach a goal drops steeply at first and then declines gradually.

Because ARR is related to multiple outcomes in different nonlinear ways, people often under- or overestimate its effect. A manager who wants to maximize overall returns may care a great deal about a change in the rate from 0.30% to 0.70% but be insensitive to a change from 6.4% to 6.6%. In fact, increasing a low return rate has a much smaller effect on accumulated future returns than increasing a high rate does. In contrast, a manager focused on minimizing the time it takes to reach an investment goal may decide to take on additional risk to increase returns from 6.3% to 6.7% but be insensitive to a change from 0.40% to 0.60%. In this case the effect of increasing a high interest rate on time to completing a savings goal is much smaller than the effect of increasing a low interest rate.

**Step 3: Discover the type of nonlinearity you're dealing with.** As Thomas Jones and W. Earl Sasser Jr. pointed out in HBR back in 1995 (see “Why Satisfied Customers Defect”), the relationship between customer satisfaction ratings and customer retention is often nonlinear—but in ways that vary according to the industry. In highly competitive industries, such as automobiles, retention rises gradually and then climbs up steeply as satisfaction ratings increase. For noncompetitive industries retention shoots up quickly and then levels off.

In both situations linear thinking will lead to errors. If the industry is competitive, managers will overestimate the benefit of increasing the satisfaction of completely dissatisfied customers. If the industry is not competitive, managers will overestimate the benefit of increasing the satisfaction of already satisfied customers.

The point is that managers should avoid making generalizations about nonlinear relationships across contexts and work to understand the cause and effect in their specific situation.

Field experiments are an increasingly popular way to do this. (See Eric T. Anderson and Duncan Simester’s 2011 HBR article “A Step-by-Step Guide to Smart Business Experiments.”) When designing them, managers should be sure to account for nonlinearity. For instance, many people try to measure the impact of price on sales by offering a product at a low price (condition A in the chart on the next page) and a high price (condition B) and then measuring differences in sales. But testing two prices won’t reveal nonlinear relationships. You need to use at least three price levels—low, medium (condition C), and high—to get a sense of them.
Step 4: Map nonlinearity whenever you can.
In addition to providing the right training, companies can build support systems that warn managers when they might be making bad decisions because of the inclination to think linearly.

Ideally, algorithms and artificial intelligence could identify situations in which that bias is likely to strike and then offer information to counteract it.

Of course, while advances in AI make this possible in formal settings, it can't account for decisions that take place off-line and in conversations. And building such systems could eat up a lot of time and money.

A low-tech but highly effective technique for fighting linear bias is data visualization. As you've noticed in this article, whenever we wanted you to understand some linear bias, we showed you the nonlinear relationships. They're much easier to grasp when plotted out in a chart than when described in a list of statistics. A visual representation also helps you see threshold points where outcomes change dramatically and gives you a good sense of the degree of nonlinearity in play.

Putting charts of nonlinear relationships in dashboards and even mapping them out in “what if” scenarios will make managers more familiar with nonlinearity and thus more likely to check for it before making decisions.

Visualization is also a good tool for companies interested in helping customers make good decisions. For example, to make drivers aware of how little time they save by accelerating when they're already traveling at high speed, you could add a visual cue for time savings to car dashboards. One way to do this is with what Eyal Pe'er and Eyal Gamliel call a “paceometer,” which shows how many minutes it takes to drive 10 miles. It will surprise most drivers that going from 40 to 65 will save you about six minutes per 10 miles, but going from 65 to 90 saves only about two and a half minutes—even though you're increasing your speed 25 miles per hour in both instances.

SAVING CONSUMERS FROM LINEAR BIAS

Discussions about deceptive business practices and consumer welfare tend to focus on the vulnerability of certain segments, such as children or the elderly. But with linear bias, we are all vulnerable. In their 2008 book *Nudge: Improving Decisions About Health, Wealth, and Happiness*, Richard Thaler and Cass Sunstein argue that managers and policy makers are the architects of the environments in which consumers make decisions. When these are designed well, consumers can make better choices for themselves and for society.

Governments and consumer advocacy groups have begun to push for the adoption of standard performance metrics that allow consumers to make “apples to apples” comparisons between offerings. Unfortunately, metrics are often adopted straight from engineering without explanations of how they translate into product benefits. For instance, leading printer manufacturers all include pages per minute (PPM), the ISO standard for printer speed, in their product information. But the time savings don’t increase in linear fashion as PPM rises; they taper off at the high end of the PPM spectrum.

Standardized metrics are useful: They make product comparisons easier, and that should ultimately benefit consumers. But when consumers make linear assumptions about such metrics, their spending may be suboptimal.

Customers, in the end, don’t care about metrics; they care about things like how much time or money they’re actually saving. We can provide them that data and help them make more-informed decisions.

THE IMPLICATIONS FOR MARKETERS

A cornerstone of modern marketing is the idea that by focusing more on consumer benefits than on product attributes, you can sell more. Apple, for instance, realized that people would perceive an MP3 player that provided “1,000 songs in your pocket” to be more attractive than one with an “internal storage capacity of 5GB.”
Our framework, however, highlights the fact that in many situations companies actually profit from promoting attributes rather than benefits. They’re taking advantage of consumers’ tendency to assume that the relationship between attributes and benefits is linear. And that is not always the case.

We can list any number of instances where showing customers the actual benefits would reveal where they may be overspending and probably change their buying behavior: printer pages per minute, points in loyalty programs, and sun protection factor, to name just a few. Bandwidth upgrades are another good example. Our research shows that internet connections are priced linearly: Consumers pay the same for increases in speed from a low base and from a high base. But the relationship between download speed and download time is nonlinear. As download speed increases, download time drops rapidly at first and then gradually. Upgrading from five to 25 megabits per second will lead to time savings of 21 minutes per gigabyte, while the increase from 25 to 100 Mbps buys only four minutes. When consumers see the actual gains from raising their speed to 100 Mbps, they may prefer a cheaper, slower internet connection.

Of course, willfully exploiting consumers’ flawed perceptions of attribute-benefit relationships is a questionable marketing strategy. It’s widely regarded as unethical for companies to take advantage of customers’ ignorance. (See the sidebar “Saving Consumers from Linear Bias.”)

IN RECENT YEARS a number of professions, including ecologists, physiologists, and physicians, have begun to routinely factor nonlinear relationships into their decision making. But nonlinearity is just as prevalent in the business world as anywhere else. It’s time that management professionals joined these other disciplines in developing greater awareness of the pitfalls of linear thinking in a nonlinear world. This will increase their ability to choose wisely—and to help the people around them make good decisions too. 

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ANSWERS TO QUESTIONS FROM PAGE 136

1. **A.** The formula for the area within a circle is \(\pi(r^2)\). In scenario A you’d consume 113 square inches of pizza; in scenario B you’d consume 101 square inches of pizza.

2. **B.** Most firms would benefit from using a finer segmentation strategy for their most profitable customers than for their least profitable customers. For instance, a firm might lump deciles 4 through 10 into one segment but separate the first decile into two segments.

3. **A.** The relationship between the number of products made per hour and annual production is linear, so going from 100 to 120 products per hour will increase annual output twice as much as going from 130 to 140 will.

4. **A.** The statistical precision of an estimate shoots up quickly and then tapers off slowly with sample size. The benefit of increasing larger sample sizes is usually much smaller than the benefit of increasing smaller sample sizes.

5. **A.** Travel time is a linear function of travel distance, so 20,000 extra miles will lead to more time in the air than 10,000 extra miles will.

6. **B.** The relationship between organic search ranking and click-throughs is nonlinear. The difference in traffic is very large between the first few positions but much smaller further down the search results.
There are new competitors blooming everywhere.

Is your company agile enough to outpace them?

Using innovative thinking, approaches and tools, KPMG can help you adapt your business in the face of constant disruption. Learn more at KPMG.com/innovation

Anticipate tomorrow. Deliver today.
Will it happen? Yes. Business process applications and computer intelligence are converging, promising a world where cognitive systems handle many business processes now done by humans—faster, with fewer errors. Forerunners of this sci-fi-like digital labor are already at work at select companies copying and pasting order information into spreadsheets, answering customer questions in call centers and helping technicians diagnose equipment maintenance issues. At KPMG, we’re investing in these advanced technologies to improve the efficiency, effectiveness and quality of the work we do for clients every day.

Most companies understand they can’t ignore these developments, but many are uncertain about where to begin or how to manage the fallout among their workforce. Here’s a reassuring truth. While technological change can indeed make an impact quickly, it almost always happens incrementally. Uber seemingly disrupted the taxi business overnight, but it wasn’t possible before the Internet, high-speed mobile communications, cloud computing, big data, distributed storage and advanced data analytics enabled its platform. Digital labor, too, will develop in stages—even if they move quickly—giving businesses time to start small and work toward increasingly sophisticated applications. And while some companies may find it makes short-term economic sense to reduce their workforce, others will surely find it smarter to deploy displaced workers into high-value activities.

In fact, we believe many companies will find that digital labor acts less as a displacer of employees, especially in its earliest iterations, and more as an assistant, allowing people to do their jobs faster, more thoroughly and more accurately—and to spend more time on work that makes a difference. As cognitive technologies become more sophisticated, they promise to create knowledge at an explosive rate and help companies innovate faster. Viewed this way, digital labor is not so much a threat to the human workforce as it is the next evolutionary step toward ever smarter, productive and innovative employees.

This is what we are finding at KPMG, where we are investing heavily in cognitive technologies, including IBM Watson, to supercharge our audit capabilities. For example, a typical audit today covers a statistically valid sample of data, but we see that cognitive systems could analyze the full population of available data—financial and non-financial. The result: more accurate audits; more granular audit reports; deeper insights into client controls, accounting practices and reporting processes; and a broader perspective on risk.

For companies eager to take advantage of digital labor, we suggest a three-step approach. Think about how digital labor could impact your business, and develop a business case for its application. Prioritize pilot projects, in which cognitive technologies can be used to automate strategic business activities, and leverage your findings to develop a short- and medium-term roadmap. Finally, develop a longer-term vision for your digital labor strategy and communicate it to your organization.

The time to start is now. Digital labor’s entry into the workforce will be incremental, but it will be fast. How quickly you segue from a labor-centric to a technology-centric business process model will help determine where you rank among tomorrow’s winners.

To learn more about getting started with digital labor, please visit KPMG.com/us/digitallabor.
“ABOVE ALL, ACKNOWLEDGE THE PAIN” A CONVERSATION ABOUT RESILIENCE WITH SHERYL SANDBERG AND ADAM GRANT
BY ADI IGNATIUS
Sheryl Sandberg’s life seemed ideal—she had a great job, an influential book, a loving family. But then, in the spring of 2015, her husband, Dave Goldberg, was felled by a cardiac condition while the couple was vacationing in Mexico. Sandberg suddenly had a new, unwanted identity: grieving widow.

After struggling to recover her footing at home and at work, she began to write about her pain. She authored a long essay about her suffering and sense of isolation and posted it on Facebook, where she serves as chief operating officer (and has nearly 2 million followers). The piece set off a global conversation about how people can cope with tragedy.

As Sandberg worked to get back on track, she reached out to her friend Adam Grant, a Wharton professor and author, to learn what research tells us about resilience. That led to a collaboration on the newly published book *Option B: Facing Adversity, Building Resilience, and Finding Joy.* Sandberg and Grant recently sat down with HBR at Facebook’s headquarters in Menlo Park, California. In this edited conversation, they explore what it takes to build resilience in yourself, your team, and your organization.

**HBR:** Why did you decide to write about the pain of losing your husband?

**SHERYL SANDBERG:** Losing Dave is the hardest thing I’ve ever been through. Early on, I felt I wasn’t going to survive the minutes, the days, the weeks, the months. I felt people were looking at me like a ghost—afraid to say anything. As the days turned to weeks, I felt increasingly isolated. So as the end of Shloshim [in Judaism, the 30-day period of mourning for a spouse] approached, I started writing a Facebook post about it all. I wasn’t sure I was going to share it, but I decided it could not make things worse and just might make them better, so I hit “post.”

**Were you satisfied with the response?**

**SANDBERG:** It was very helpful, because my friends and colleagues finally felt they could start talking about the elephant in the room. One told me that she had driven by my house almost every day but was afraid to come in. After my post, she came in. Others said they had been afraid to ask me about what I was going through, and they started asking. In addition to my friends’ responses, I was blown away by the responses of so many people. A man who had lost his wife right before their third anniversary talked about honoring her life by trying to help women in his male-dominated field succeed. Friends and strangers posted support for one another. I think it was these responses that eventually led to writing the book.

**What’s the origin of the title *Option B?***

**SANDBERG:** It came about when I was looking for someone to cover a father-son activity. My friend Phil came up with a plan, and I said, “But I want Dave.” Phil said, “Option A is not available. Let’s kick the shit out of Option B.”

**How did you bring Adam into this?**

**SANDBERG:** Adam is a friend and a great psychologist and researcher. I asked him early on what I could do to help my kids get through this—my biggest fear was that they would never be happy again. As we worked together, we learned that resilience is not something we have a fixed amount of but something we can build—in ourselves, in our children, in our organizations, in our communities. *Option B* is our attempt to share what we learned.

**Having exposed your feelings and vulnerability, are you now a different kind of leader?**

**SANDBERG:** When I came back to work, I was so overwhelmed with grief that I could barely get through a day or even a meeting. When people said, “Well, of course you can’t really contribute—look at all you’re going through,” my self-confidence crumbled even further. It helped when people—and this was especially true of [Facebook CEO] Mark Zuckerberg—would tell me after a meeting that I hadn’t made a fool of myself or even that I had made a good point. So now I try to take that extra step of noticing and helping rebuild the confidence of colleagues who are facing adversity. When you suffer a tragedy, the secondary loss of having it bleed into other areas of your life is so real. It’s important for all our companies to give everyone the time of they need to grieve and heal. And once people come back to work, it’s important to help them realize that they can still contribute and not to write them off because they’re sick or grieving.
Would you advise people coping with a difficult personal situation to reengage with their work life as quickly as possible?

SANDBERG: Absolutely not. There’s no one way to grieve, and there’s no one path. The timing for one person is not the timing for another. In the book we share the story of a woman who went back to work the day after her husband died and felt judged by her colleagues. But she just couldn’t bear to be home, and she needed somewhere else to go. Other people may need months or longer. Everyone has to find their own path. The same is true of how much sharing you want to do. I ended up sharing much more openly than I would have expected, to break through the isolation. But some people don’t want to share. We have to respect everyone’s timing and feelings.

WHEN A COLLEAGUE SUFFERS A LOSS
How should companies respond when employees are coping with a personal crisis?

ADAM GRANT: Research shows that companies with assistance programs that provide financial support or time off in a crisis—when an employee’s house is destroyed by a tornado, or when he or she has to care for somebody who is very ill—actually see dividends. People feel they belong to a more caring company. They take pride in their company as a “human” place to work and are more committed to it. There’s a real case to be made for organizations to step up.

People often don’t know what to say in the face of a colleague’s tragedy—so they say nothing, or they say the wrong thing. What’s your advice?

SANDBERG: Above all, acknowledge the pain—acknowledge that there is a ginormous elephant sitting in the room. Before I lost Dave, I would tell colleagues who had been diagnosed with cancer or who had lost a spouse that I was sorry, but I wouldn’t bring it up again—to avoid “reminding” them. Losing Dave made me realize how absurd that is. You could not remind me that I had lost Dave; I remembered that. Acknowledging it—“Hey, I know this is a brutal time for you and your kids; how are you?”—makes such a big difference. The people who say “You’re going to get through this” are kind. But it’s way kinder to say “We’re going to get through this.”

How helpful is it when people ask if there’s anything they can do?

SANDBERG: It’s a nice offer, but it puts the burden on the person suffering to ask for help and to think about what might help. When you are overwhelmed with sadness, what do you ask for? Dan Levy works with me at Facebook, and his son became very ill and, tragically, passed away. When Dan was in the hospital, a friend texted him: “What do you not want on a burger?” Not “Do you need anything?” Doing something specific is incredibly helpful.

“POSTTRAUMATIC GROWTH”
Did you have any fears about writing this book or how it might be received?

SANDBERG: I don’t think anyone can share so openly without feeling nervous. But I’m looking for some meaning—any meaning—to come from the tragedy of Dave’s death. Dave was an incredibly giving person. At the funeral, our friend Zander Lurie, who’s now the CEO of SurveyMonkey—the company Dave was running—asked how many people had had their lives changed by something Dave did for them. A sea of hands went up. So in the spirit of Dave’s life, I hope to help people by sharing my experience, by sharing the research Adam and I uncovered, and by sharing incredible stories of other people who have overcome adversity.

Adam, what’s your hope in getting these ideas out there?

GRANT: Neither of us is an expert on grief. I study motivation and meaning. Sheryl is speaking from her personal experience. This is about so much more than grief. It’s about the adversity we all face and the hardships people can run into. How do you find the strength to overcome them—or sometimes just to persevere?

Resilience means snapping back to where you had previously been. But you also write about “post-traumatic growth.” What’s the idea behind that?
**GRANT:** A pair of psychologists, Richard Tedeschi and Lawrence Calhoun, put this on the map. They were working with parents who had lost a child. Parents said that in addition to the tremendous pain they felt, they experienced some positive changes in their lives. A whole community of researchers then tried to figure out what it means to grow from trauma. Many people eventually felt stronger. They said, “I got through this; I can get through anything.” Some people found gratitude for what they still had. Some formed deeper relationships than they’d experienced before. And some felt a new sense of meaning and purpose—they wanted to make something of their lives.

**Sheryl, is this familiar? Have you experienced any of these things?**

**SANDBERG:** Gratitude, for sure. Early on, Adam said to me that things could be a lot worse. I said, “Are you kidding? How could things be worse?” And Adam said, “Dave could have had that cardiac arrhythmia while driving your children.” Hearing that, I felt better—appreciative that my kids are healthy and happy and alive. It’s counterintuitive that one can recover from tragedy by thinking about even worse tragedy, but it helps us feel grateful for what is still good in our lives. No one would want to grow this way. I would absolutely trade it all in to have Dave back. But when trauma happens, we can grow from it.

**Is it possible to develop in these ways without first experiencing catastrophe?**

**GRANT:** This is one of the really interesting things about working together—the juxtaposition of social science and Sheryl’s lived experiences. Sheryl responded to all this by saying, If we have posttraumatic growth, why don’t we have pretraumatic growth? And I was like, pre-what? But this is a great concept; people shouldn’t have to experience horrible events to learn some of these lessons.

**Have you seen examples of pretraumatic growth?**

**SANDBERG:** After Dave died, my friend Katie Mitic was inspired to start writing long letters to her friends on their birthdays telling them why she loved and appreciated them. Some of her friends started doing the same. That’s a good way to deepen relationships and find meaning and gratitude—before any trauma. I think we build resilience to prepare for whatever adversity we’ll face. And we all face some adversity—we’re all living some form of Option B.

**BUILDING RESILIENCE**

**Is there a tool kit for developing resilience?**

**GRANT:** At work, the most powerful thing is learning from failure. We all fail; we all make mistakes. It can be incredibly difficult to face them, but that’s the only way we can build resilience. I learned this when I was in grad school. I was terrified of public speaking, but I had to do it to be a teacher. So I tried to get feedback. I volunteered to give guest lectures for other people’s classes, and afterward I gave out feedback forms. Reading them was unpleasant (one said I was so nervous I was causing the students to physically shake in their seats), but I learned what my systematic mistakes were, and I was able to set goals to try to improve. It would be great to bring that kind of openness to our jobs—to encourage others to critique us and help us improve.

Everyone talks about learning from failure, but a lot of companies don’t do it very well. Why is that?

**GRANT:** I think the simple answer is ego. We all know that failure can make us better if we treat it as a learning opportunity. But I don’t know anyone who says they want to screw up as badly as they can just to learn. So when we fail, it tends to catch us off guard. And then we get in a mode of trying to defend our ego and our image, to prove to ourselves and others that we’re not stupid. That stands in the way of improving and making progress.

**How can we learn to handle failure more constructively?**

**GRANT:** When I work with executives, I ask them to score not only their performance in a given episode but also how well they take feedback afterward. It’s amazing how open they become to feedback, especially the overachievers—they really want to get an A!

**How do you design an organization that fails well?**

**GRANT:** The first thing is to create a culture where people can talk openly about their failures and mistakes. Amy Edmondson of Harvard Business School has studied hospitals to figure out how they can prevent major medical errors. She found that teams learned more and could avoid problems if they had a sense of psychological safety—if they could take risks and be open about mistakes, if they weren’t going to be punished for honest errors.

Facebook famously encourages employees to take the kinds of risks that can result in failure. How have you built that sensibility into the culture?

**SANDBERG:** One way is by learning from other organizations. One year the Facebook management team traveled to the Marine Corps training facility at Quantico, Virginia. We did some hard exercises. And we saw that after each exercise, the Marines do a full debrief on everything that went wrong. In the past, I would have thought an approach like that was just piling on.
But we learned that if you do these debriefs and build them into the culture, you become an organization that keeps learning.

**Resilient companies also adapt effectively to changing circumstances. What’s the key to that?**

**GRANT:** Resilience is about the speed and strength of your response to adversity. The best thing you can do is build routines that might be applicable in an unexpected situation. SpaceX is an interesting example. CEO Elon Musk told us that because the rockets had failed over and over again, he asked people for a list of the 10 biggest launch risks. (It turned out that one explosion was caused by the 11th risk, so maybe the lesson is to ask for the top 11.) High-reliability organizations know how to set these routines in place. They make exhaustive lists of things that could go wrong, they precheck them, and then every time they have an unexpected failure, they expand the list.

**Does Facebook consciously prepare itself for unexpected crises?**

**SANDBERG:** Mark often says that companies fail in two ways—by not hitting their plan, and by hitting a plan that isn’t ambitious enough. He never wants us to fail the second way, because then you’ve basically failed before you start. You need the discipline of setting really ambitious goals, making it safe for people to debrief and own failure and get feedback, and being willing to learn and correct.

**HBR has run articles showing that you can cultivate personal resilience by taking some downtime, via scheduled or unscheduled breaks, or by cutting yourself off from technology.**

**GRANT:** A lot of evidence speaks to that. But I think we tend to define breaks too narrowly. Kim Elsbach of UC Davis has done research showing that one of the best ways to give people a break is to assign them mindless work. Rote tasks can free up your mind to think creatively. As people advance and develop more-complicated skills, we make the mistake of taking repetitive tasks off their plates. Switching between challenging, creative problems and, say, entering data into a spreadsheet for a few minutes can help us recharge.

**It’s often said that a sense of humor is vital to resilience. How do you access humor in the darkest moments?**

**SANDBERG:** I think humor is huge. Nell Scovell, who edited our book, is a TV comedy writer with four siblings. At her mother’s funeral, she stood up with an envelope and said, “I have in this envelope the name of Mom’s favorite child.” In those really dark moments, being able to laugh, even for a second—even about the event itself—is a huge stress release. It makes you feel, “Oh my God, it’ll be OK.”

**You write about how to build resilience in kids, in part by helping them understand their strengths. Is this a model for helping employees as well?**

**GRANT:** I think so, with the caveat that parenting is way harder than leadership. One of the drivers of resilience in kids is “mattering”—the belief that other people notice you, care about you, rely on you. When kids feel they don’t matter, the consequences can be devastating: delinquent and antisocial behavior, aggression. Along those lines, it is every leader’s responsibility to make every single employee know that they matter, to show that they’re noticed. That’s one of the reasons management by walking around is so popular. You also want to make employees feel relied on. Many leaders are afraid to ask for help, but people want to know that their contributions have an impact. One of the most powerful things a leader can do is say, “I don’t know the answer here.”

**DEALING WITH MASS GRIEF**

The U.S. election produced grieflike symptoms in maybe half the population. How should a company deal with something like that?

**GRANT:** I can speak to this from a university perspective. It was all over the map—some people were elated, others were depressed, a few didn’t know what to think or feel. There has been a lot of debate about how open our universities and workplaces should be to talking about politics. I believe strongly in the importance of making it safe to have intellectual exchanges—that’s what a university is for. In class I said, “We’re going to talk about the dynamics of the election and how it will affect leadership.” Several conservative students said they had been made to feel it wasn’t acceptable to be a Republican on an Ivy League campus. That’s not OK, just as it’s not OK to unfriend somebody with different political views. What matters is, How does this person treat you? And what do they stand for in their daily actions?

Sheryl, your previous book, *Lean In*, was a best seller, but some criticized it, saying that your life is different from most people’s and that therefore the message wasn’t broadly relevant. Are you anticipating what the critics will say this time?

**SANDBERG:** I know how fortunate I am, not in Dave’s death but in so many other aspects of my life. I have a great job, a great boss, resources very few people have. I understand that adversity and hardship are not evenly distributed. *Option B* draws not just on my story but on the research and stories of many people overcoming all kinds of adversity. No one should have to go through challenges and trauma alone. 💙

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RECLAIM YOUR COMMUTE

GETTING TO AND FROM WORK DOESN’T HAVE TO BE SOUL CRUSHING.
BY FRANCESCA GINO, BRADLEY STAATS, JON JACHIMOWICZ, JULIA LEE, AND JOCHEN MENGES

ILLUSTRATION BY GABRIEL SILVEIRA
Every day, millions of people around the world face long commutes to work. In the United States alone, approximately 25 million workers spend more than 90 minutes each day getting to and from their jobs, and about 600,000 “mega-commuters” travel at least 90 minutes each way, according to the U.S. Census Bureau. In the United Kingdom, the average round-trip commute takes 54 minutes (up from 45 minutes in 2003), and in most of the world’s major cities, from Milan to Manila, it’s over an hour.

And yet few people enjoy their commutes. When Ford Motor Company surveyed 5,500 people in six European cities, many ranked commuting as more stressful than their jobs, moving into a new house, or going to the dentist. In a 2006 survey of 909 working women in Texas, conducted by Nobel laureate Daniel Kahneman and his colleagues, respondents said the morning journey between home and the office was, on average, the least enjoyable activity of their day; the evening trip home was the third worst. (Working itself took second place.)

This distaste for commuting has serious implications for well-being. A 2014 British government survey found that workers with lengthy commutes felt more anxious and less satisfied with life than people with shorter ones. They were also less likely to find their daily activities worthwhile. Other studies have found that people with long commutes are more exhausted and less productive at work, and have lower job satisfaction. And a study conducted in Sweden in 2011 found that couples have a 40% higher chance of getting divorced when one partner commutes at least 45 minutes to work each day.

But it doesn’t have to be this way. Research, including our own studies, suggests that small tweaks can improve your commuting experience, leaving you happier and more productive. Here are five strategies to try.

**USE THE TIME TO SHIFT YOUR MINDSET**

Your commute is an opportunity to transition from the personal to the professional. At home in the morning, you might play the role of parent, partner, or caregiver. When you arrive at the office, you don your professional hat. In the evening, you might revert to the personal even if you eventually switch to finish up work before bed. Each of these transitions requires a shift in mindset. If we don’t take the time to make one, the thoughts and concerns that stem from one role are likely to carry over into the next and weigh us down.

One way to smooth this mental transition is to engage in simple rituals. In an as yet unpublished study of regular commuters, one of us (Francesca) and Hal Hershfield of UCLA found that those who maintained small routines on the way to work—such as checking the news on the train or having a look at the calendar for the day—felt more excited about the day ahead, more satisfied with their jobs, and less stressed-out than those who had no set routine. This is not surprising, given that rituals have been shown to produce all sorts of benefits—even for people who don’t believe in their value or effects: They lower our anxiety before we engage in high-stakes performance tasks, increase our enjoyment of the activity at hand, and even help us recover faster when we experience failure or loss. So consider establishing your own commuting routines. You might buy a decaf latte from the same coffee shop every day on your way to work, for example. For an even more powerful effect, try making a ritual out of one or more of the other commute-enhancing tactics we recommend below.
prepare to be productive

When you spend at least some of your commute planning for the day or the week ahead, you’ll arrive at work better prepared and therefore happier and more energetic and productive. That’s what we concluded from a series of studies we did with British and American workers. The first was a field study of 225 employees at the UK offices of DigitasLBi, a global marketing and technology agency. As we expected, our study showed that, on average, the longer people commuted each day, the less content and more likely to quit they were. But there were exceptions to the rule, which left us wondering whether those individuals possessed certain psychological traits that helped them avoid the negative outcomes experienced by their peers. We found one: self-control, or the ability to resist temptations that can undermine efforts to achieve longer-term goals (such as checking Facebook instead of doing work, or eating the cake a colleague brought in instead of an apple).

To explore that link, we surveyed 229 employees from various organizations to learn what they typically did on their way to work and discovered that those who scored high on measures of self-control tended to use the time to engage in productive planning—what we call work-related prospection. “I think about what I will do when I get into the office,” one participant told us. “I try to plan out what things I will accomplish for the day.”

Our final step was to investigate whether everyone—not just the most disciplined people—could benefit from the same exercise. We recruited 443 full-time U.S. workers with commutes of 15 minutes or more for a four-week study. In the first two weeks, participants received daily prompts that allowed us to measure how much work-related prospection they did during their morning travel. As before, we found that those who did the most planning were better able to handle longer commutes.

In the second two weeks, we randomly assigned the same participants to one of four conditions. In a daily text message that arrived 15 minutes before they typically left for work, we asked some of them to engage in work-related prospection as...
they traveled, some to engage in relaxing thoughts and activities, and others to do both. A quarter of the participants received a text message that did not contain any particular prompt. We found that only employees in the first group—those asked to engage in productive planning and nothing else—reported feeling more satisfied with their jobs than they had prior to the intervention. This finding held regardless of their natural propensity for self-control, as measured at the start of our study.

So this is a simple, straightforward strategy available to everyone. Simply ask yourself: What steps can I take today and during this week to accomplish my work and career goals? How can I be more productive?

FIND YOUR “POCKET OF FREEDOM”
As you sit in traffic, wait for a delayed bus, or stand in a crowded subway car, you may feel you have little control over your commute. But you can temper that frustration by focusing on what you can control: how you spend your time during the trip. We’ve already talked about rituals and planning, but think also about activities that you enjoy, such as listening to music, catching up on podcasts, or reading books. We borrowed the phrase “pocket of freedom” from Adela, the great-aunt of one of us (Jon), whose early adult years were spent in various Polish ghettos during the Nazi occupation. No matter how hungry, tired, or frightened she was, she devoted one hour each night to a creative activity with her niece—a practice that, she later noted, helped her persevere. Though the stakes in a commute to work are much less significant, you, too, can make the time more bearable by thinking of it as an opportunity to pursue your passions. Beyond passive media consumption, you might use the time to learn a new language via audiobooks or if your hands are free, take up a new hobby, such as drawing or knitting.

This advice is supported by research that shows a correlation between higher levels of autonomy and greater well-being, satisfaction, and productivity and lower levels of stress. For example, John Trougakos of the Rotman School of Management and his colleagues discovered that employees who could decide where, when, and how to spend their lunch breaks felt more replenished by them than those who had no choice.

So try to tune out the negatives of commuting and concentrate on the opportunity to express yourself and recharge.

SHARE THE SPIRIT
So far, we have explored how you can improve your commute by dedicating it to solitary pursuits. But one of the downsides of long travel to and from work is that it can be lonely. In fact, when Harvard political scientist Robert Putnam studied the issue, he found that for each extra 10-minute period that people spent commuting, they had 10% fewer social connections, which led to greater isolation and unhappiness. We recommend preempting that problem by using your commute to reach out to others.

Most research on the psychological benefits of social connection focuses on relationships with family or close friends. But according to studies conducted by behavioral scientists Nicholas Epley of the University of Chicago and Juliana Schroeder of the University of California at Berkeley, talking to strangers can improve well-being.
for commuters. Epley and Schroeder went to a train station, recruited more than 200 people, and randomly assigned them to one of three groups. Some were instructed to connect with a fellow rider, others were asked to keep to themselves, and the rest were told to behave as they normally would. Although participants predicted that their ride would be more enjoyable if they sat in solitude, the research team found that the opposite was true: Those who were asked to engage in conversation had a more positive commuting experience and felt no less productive.

Another study, from the New Cities Foundation, found that even using social sharing apps, such as Waze, can trigger this effect and reduce drivers’ transport-related stress.

So think about how you might be more social as you commute. If you take public transportation, consider removing your headphones and flouting the unwritten rule against chitchat. If you drive, put your phone on speaker and call a friend, ask a neighbor who works near you to ride with you, or try an app, such as Sluglines, that helps coordinate casual carpooling. If you live in a city that has Uber, choose uberPOOL (which will connect you with strangers) over uberX (where you ride by yourself). And if you’re on a company-provided shuttle, as is often the case for Silicon Valley tech companies, talk to your seatmate.

**REDUCE YOUR COMMUTE**

If you’ve done all you can to make the most of your existing commute but it’s still causing you stress, making you unhappy, and killing your productivity, there is another option: Reduce it.

This starts with the decisions you make about where to live and work. Most people overweight the upside of traveling a greater distance—a job with a higher salary, for example, or a larger house in a nicer neighborhood—while underweighting the downsides of commuting. We call this commuter’s bias. To test it, we conducted an as yet unpublished study in which we asked more than 500 full-time U.S. employees from a wide range of industries to choose between two scenarios: Job 1, with a salary of $67,000 a year and a commuting time of 50 minutes, and Job 2, with a salary of $64,000 and a commuting time of 20 minutes. Everything else would be equal: the neighborhood where they lived, the advancement opportunities at work, and how much they would enjoy the role. A full 84% of our participants chose Job 1, thus expressing a willingness to forfeit one hour each workday to their commute—250 hours per year—in exchange for just $3,000. That’s $12 an hour of commuting time—less than half their hourly rate at work! We checked to see whether participants could do this math, and they could. Their responses simply reflected an inability to fully appreciate the psychological, emotional, and physical costs of longer travel times.

If you’re considering a new job or looking for a new apartment or house, we encourage you to resist this bias. Carefully consider the downsides of a long commute before committing yourself to one.

One way to reduce your commute without switching jobs or moving is to occasionally work from home or at a place closer to home, such as the shared offices provided by companies like WeWork. Telecommuting is becoming increasingly common: In 2015, 24% of U.S. workers did some or all of their work at home, according to the U.S. Census, and research from Global Workplace Analytics suggests that regular telework has more than doubled over the past decade. Studies have also shown that people who have the choice of working from home on some days are more productive and happier than those who don’t. In a field experiment conducted at the Chinese travel agency Ctrip, Stanford economist Nick Bloom and his colleagues found that employees randomly assigned to work from home accomplished 13% more than those assigned to work from the office, reported being more satisfied with their jobs, and were 50% less likely to quit their organizations. So if your employer allows flexible work, and you think your boss and teammates would be amenable to your telecommuting, try it one day a week or a few days a month.

**PEOPLE WHO ENGAGED IN CONVERSATION HAD A MORE POSITIVE COMMUTING EXPERIENCE AND FELT NO LESS PRODUCTIVE.**

Most people who have long commutes feel like helpless victims enduring a necessary evil. As a result, they arrive at their jobs and homes depleted, and their performance and well-being suffer. But it is possible to improve your commute by turning it into a more positive experience and, when possible, reducing it.
ARE YOU LOOKING for new ways to think about and improve your organization’s customer interactions? Do you aspire higher?

In today’s competitive business environment, focusing on the customer experience has become the most important way for an organization to stand out in its market and achieve organizational growth and success. But improving on the customer experience isn’t about just focusing on the “customer service” department. It’s about paying extraordinary attention to the details of everything that happens before, during, and after these service interactions.

For over 60 years, Walt Disney Parks & Resorts has worked to perfect the business of making people happy. And when it comes to understanding our unique customer experience approach, we offer one of the most amazing classrooms in the world. That’s why the Disney Institute has created a portfolio of professional development training courses and events to help you discover ways to positively impact your organization and the customers you serve with insights and experiences that are easily adaptable to your own business environment.

Disney Institute’s professional development courses focus on three key areas.

LEADERSHIP EXCELLENCE: A leader is more than a label—leadership is about taking actions that can lead to sustained, positive transformations within an organization. We know that leaders who intentionally create and nurture an environment of mutual trust and respect find that they can strengthen employee performance, deliver exceptional customer service, and continually drive business results. Disney Institute offers leadership development through a time-tested approach that illustrates the importance of a leader’s personal values and behaviors to help establish, operationalize, and sustain the values and vision by which they and their organization can thrive.

EMPLOYEE ENGAGEMENT: With a rich tradition and heritage built upon creating memorable experiences, Walt Disney Parks & Resorts has consistently worked to attract, develop, and retain employees dedicated to upholding Walt’s original vision. To ensure employees are able to consistently deliver exceptional experiences, we know that an organization must intentionally design its internal processes to reinforce its desired culture. Disney Institute can help you reimagine your own workplace culture by sharing insights about how strategically focusing on selection, training, communication, and genuine care can lead to sustained levels of employee engagement.

QUALITY SERVICE: Excellent service does not come simply from a friendly transaction or helpful technology—it is the result of truly understanding your customers’ expectations and putting the right framework in place to exceed them. With a common purpose and quality standards, your employees can be empowered to perform because they are equipped with the right tools and clear service expectations. And when your team members’ behaviors are reinforced through positive feedback, they tend to feel valued and appreciated and will make sure their customers do as well. Why is all this important? At Disney, we have seen that the power of service lies in its ability to create an emotional connection in addition to a rational connection—which can impact economic outcomes.

Our courses are designed as both one-day and multiday experiences at Disney locations in both California and Florida. We take participants out of the classroom and behind the scenes of our theme parks, resorts, and other operational areas.

It’s one of the ways our courses are so unique. By giving participants the opportunity to observe for themselves in our “living laboratory,” they can better understand how Disney’s time-tested methodologies are operationalized and see our principles of business excellence in action.

We have launched an annual Disney Institute Customer Experience Summit at Walt Disney World® Resort. Unlike other conferences where you only hear ideas, this one-of-a-kind, immersive learning event is your unique opportunity to live, feel, and observe customer experience best practices in action in the world’s most renowned customer experience (CX) environment—the business operations of Walt Disney World Resort.

The 2017 Disney Institute Customer Experience Summit is designed to inspire action. Not only will you participate in firsthand exploration of Disney business insights and best practices in service, employee engagement, and leadership, but you also will learn how these critical customer experience elements can be adapted and applied to your own customer interactions. You can learn more at https://disneyinstitute.com/customer-experience-summit/.

To learn more about the Disney Institute’s customer experience portfolio, visit us at DisneyInstitute.com.
Wei Song noticed the fashion models first, preening in their chiffon-and-lace gowns.

They flanked the entrance to Shanguang Jewelers’ flagship store on Nanjing Road. A vintage Eagle roadster was parked nearby; a dozen well-heeled men and women clustered around it. Song could see more people inside the store, sipping champagne. Many were trying on watches.

“It’s quite an event,” Song said to his colleague, Pearl Zhang, who was standing next to him, across the street.

“Yes,” she replied. “If only it were ours.”

Song was a director at Rochat & Schmid, a 100-year-old Swiss maker of luxury timepieces, overseeing Greater China from his base in Shanghai. Pearl, his VP of marketing, had learned that their rival Berlinger was launching a line of gem-accented watches, which would be sold through Shanguang, China’s biggest jewelry retailer. She’d persuaded him to do a bit of intelligence gathering with her.

“I told you they’d make a splash,” Pearl said. “Couture clothes, a classic car, and watches with your choice of diamonds, emeralds, or rubies around the face. Look at the customers—they’re loving it. You asked what we could do to boost sales? The answer is something like this.”

“Well, unlike Berlinger, we’re not owned by a conglomerate that has a fashion line, a winemaker, and a car company,” Song replied. “Besides, we don’t do diamond-encrusted anything. Berlinger’s brand is splashy, so they do splashy promotions. R&S stands for subtle elegance.”

“And so we’re stuck with subtle marketing? In this city? This country?” Pearl gestured toward the neon-lit road, then up at a billboard featuring a Hollywood actress. “There has to be some license to adapt to local tastes. Geneva needs to understand that, especially given how much they depend on us to make their yearly numbers.”
“You know I’ve passed on your thoughts about adding new designs and rethinking how we market here. Every time I’ve had to address the same-store sales declines, I mention it. But you also know how Simon feels about bling.”

He was referring to R&S’s strong-willed chief creative officer, Simon Carbonnier. “So,” Song continued, “we’ll need to think about more-innovative ways to generate buzz here.”

“I’m ready to show my ideas to you and Simon tomorrow,” Pearl said. They were scheduled to present mock-ups for the Chinese New Year ad blitz to the CCO via teleconference the next day. “Still,” she added, staring at the models, the car, and the crowded store, “I’m not sure I can compete with that.”

**A GOOD NICHE?**

The following afternoon, Song was back at the Shanguang store, meeting with the retailer’s CEO, Li Gui Ying.

“I walked by the event here last night, and it looked like a great success,” Song said.

“You should have come in!” Gui Ying admonished. “That was the first, but we’re doing them across the country—next in Hong Kong and Beijing, of course, but then Shenzhen, Guangzhou, Tianjin, Hangzhou, and Chengdu. Given the new government initiatives, we can’t rely on the ‘gifting’ market anymore. The only way to drive sales is to persuade customers, especially the middle class, that they deserve to splurge, even if the economy is slowing down.”

“Are you hoping for events from us, too?”

“We had impressive sales last night, and the publicity was amazing. But events from Rochat & Schmid? No, nothing along the lines of what we did with Berlinger. You’re in a good niche. When people come in looking for something less glitzy, we send them right to your watches.”

“But our sales with Shanguang are flat—even with your new locations—and our same-store figures in the big cities are all slightly down,” Song said. “I know from your recent earnings report that most of your points of sale seem to be doing OK despite the dip in luxury spending. I’m not sure you’re sending enough people our way. I’m wondering if you would consider giving us more counter space, showing a wider variety of our watches—especially in the faster-growing cities.”

Gui Ying sat stone-faced for a minute. Song waited politely.

“I think we have just the right amount of Rochat & Schmid now,” she said. “Yes, sales are off, but the corruption crackdown and the sluggish economy are causing tastes to shift. People are trying to be less obvious about their wealth, so I can see your watches drawing many more customers going forward—maybe in a year or two? Of course, if you want to give me something new to work with—a new slogan, new designs, even a celebrity endorser—I’m always willing to listen.”

**CELEBRITY FLASH**

Song had to hustle back to the R&S China headquarters to make Pearl’s 4 PM presentation. When he walked into the teleconference room, Simon was already up on the video screen.

“Song, good to see you, my friend.”

“And you, Simon. How are you?”

“Very well, thank you. I’m unfortunately pressed for time today. The design team has a workshop starting at 10 our time. And then I’m meeting with Rolf.” Song and Pearl exchanged glances. They often made bets about how long it would take Simon to mention his contact with Rochat & Schmid’s CEO, Rolf Odermatt.

“But you have my undivided attention for the next 30 minutes. Pearl, please go ahead.”

“Thanks, Simon. So I’ve worked with our team and our ad agency on two distinct directions.” She clicked on her laptop, and a slide appeared on a second screen in the room.

“The first will feel very familiar,” she said, calling up a set of ads. “We run with our traditional ‘Mark every occasion’ tagline but give it a feminine spin to highlight our new range of women’s watches. Instead of a father giving his son a watch at graduation, we see a mother giving one to her daughter. Instead of a wife giving a husband a watch for his birthday, we see sisters surprising each other with matching watches. We update to a
By 2014 women accounted for more than half of Chinese luxury spending, up from 10% in 1995, according to Bain. However, in China men still dominate the luxury watch market by a ratio of 3:1, reports HKTDC Research.

When Deloitte asked 19- to 29-year-olds which marketing channel most influenced their decision to buy a watch, the top answer among Chinese consumers was brand ambassadors. Most luxury goods companies pay celebrity endorsers to wear their products and appear in their ads. What are the costs and benefits of such an approach?

slightly more modern font, but the photography is still black-and-white.”

Pearl waited for a response from Simon. When she didn’t get one, she pressed on. “The second would be a departure but a calculated one, also designed to appeal to women. Song, I know you’re familiar with Changchang Gao. Simon, she’s a Chinese singer and actress who recently switched from TV to films. She has 30 million followers on Weibo, many of them Millennials. When she releases a song, they download it. When she wears a dress, they buy it. I happen to be friendly with her agent, so I know she’s open to one or two endorsement deals. I think she could be locked down at a reasonable rate if we gave her a three-year contract. I’d like to make her the face of a new slogan: ‘You deserve it.’” Pearl clicked and an image of Changchang appeared on-screen. She was walking down a busy street in a short red dress, flashing an irreverent smile and wearing three R&S watches on her right arm. Everyone else in the picture was looking at her.

Song smiled. He liked it. Simon clearly did not. He was frowning.

“Simon, I’d love your feedback,” Pearl said carefully.

There was a long pause. “I admire your creativity, but I’ve always found endorsement deals a bit lazy. And even if we did do celebrities, which we don’t,” Simon said, “she doesn’t seem right for us. Too young, too flashy.”

“But, Simon, Chinese consumers are young, and they like flash,” Pearl replied. “We’d love to offer them products that capture that, but without new watches, all we have is marketing.”

“Elegance always trumps excess with luxury buyers. We’ve talked about it before. These days the trend is toward inconspicuous consumption. It’s starting to happen in China, too. That’s why we’re not changing our product designs now. We shouldn’t change our marketing, either.”

Song decided to speak up. “I understand what you’re saying, Simon. Certainly the anticorruption movement seems to be hurting the flashier brands. And maybe aesthetic preferences will change in a way that favors us. But will they change fast enough to deliver growth to our shareholders this year? As you know, if we lose ground in China, it affects the whole company. So maybe we need to shake things up.”

“I’m against it,” Simon said. “Let’s not lose track of what value Rochat & Schmid offers the market.”

Pearl chimed in. “Simon, I understand the importance of honoring our heritage and maintaining a consistent image worldwide, but as you’ve said yourself, China is a unique market. Our existing campaigns are beautiful and on brand, but in a crowded and stagnating market they’re simply not working as well as we’d like.”

“And how do you know that this endorsement will work?” Simon asked.

When Pearl didn’t reply, Song spoke up again. “Simon, perhaps you and I can take some time to review these.”

“I don’t think I need time on both,” Simon replied, “but I’ll send my notes on the first set in a few days.”

UP FOR A FIGHT?
The next day Song had his weekly call with Rolf. They exchanged the usual pleasantries, then talked through the regional sales numbers.

“What’s this I hear about you and Pearl wanting to shake up your marketing?” Rolf asked.

Song was taken aback; he didn’t think Simon would have spoken to Rolf already. “Yes, we’re considering a slightly new direction.”

“Simon thinks it’s off-brand and could hurt our image,” Rolf said. “Of course, he doesn’t run the firm. I do.”

“Have you looked at Pearl’s mock-ups? They’re a departure, yes, but not too flashy.”

“Simon showed me. To be honest, the pretty girl, the red dress, the three watches—it does seem flashy to me. But you know China better than I do. Do you have the budget to do it?”

“We wouldn’t be asking for more than we’re already allocated. Pearl says we’d get a better deal by signing a longer contract.”

“Unless it doesn’t work. Then it’s not a deal,” Rolf replied.

“No,” Song admitted. “So do you want to fight Simon on this?”

Song had been asking himself that same question since the previous day. He hadn’t realized he would need to answer it so soon.
SONG AND PEARL know the Chinese consumer better than Simon does. They should trust their instincts, engage Changchang Gao as an endorser, and pursue the new marketing strategy.

I suggest this course of action for a few reasons. First, despite the current slowdown in high-end watch sales in China, it’s still the world’s most important luxury market, with the potential to grow further in the future. Companies must continue to invest in brand building here if they want to keep succeeding. Second, we’ve seen many companies, including Longines, Omega, and Baume et Mercier, benefit from advertising campaigns featuring Chinese celebrities. Critically, Changchang appears to be not just a famous singer and actress but one with a significant social media following, through which she can promote Rochat & Schmid. Her digital influence will be a huge asset in attracting buyers—both young and old—to the brand’s watches, as more people investigate products and make purchases on mobile phones. But it will particularly help R&S appeal to Millennials, an increasingly important market. (In China the average age of luxury buyers is 40, compared with 50 or 60 in other countries.) We’ve seen some fashion watch brands—those priced at $1,500 or lower—really take off in recent years because of their savvy use of new digital platforms. And even some at the superluxury end—priced at $100,000 and above—are now embracing online and social marketing. Of course, any new campaign must fit with the brand’s DNA. But the one Pearl suggests seems to walk that line well.

Any new campaign must of course fit with the brand’s DNA. But the one Pearl suggests seems to walk that line well.

Simon mentions the rising preference for inconspicuous consumption in China. I would characterize changing customer tastes in a different way. In my view, luxury buyers are now gravitating toward items that reflect independent thinking rather than following the crowd. I believe manufacturers and retailers should respond by, as Pearl suggests, offering more varied, perhaps even localized, designs and the ability to customize.

Technology now allows us to tailor products and shopping experiences to customers’ preferences. In 2016, our group had more than 2,300 Chow Tai Fook and Hearts on Fire points of sale in over 500 cities in Greater China, Singapore, Malaysia, Korea, and the United States, but we also sold close to a million pieces of jewelry through our own e-shop and other e-tail accounts on important online shopping platforms, such as Tmall. Now we’re experimenting with blending the two experiences: taking orders online, often via our mobile app, which allows for designing-your-own products, and delivering them off-line. Customers can go to the nearest store to pick up their purchases or have a sales associate deliver items to their homes. Whether it is in product development, sales, or marketing, R&S needs to be much more responsive to its Chinese customer base.
MANY BRANDS ENLIST celebrity endorsers or ambassadors, but at Breguet we don’t. We prefer to focus on our heritage and the quality of our products. Since our founding, in 1775, our clientele have always included royalty and heads of state, so we like to say that the people who wear our watches are our ambassadors.

While I understand that Song feels he needs to do something to boost Rochat & Schmid’s sales in China, I’m not sure a celebrity-led ad campaign will solve all his problems.

Before pushing for this shift in marketing strategy, he needs to ask himself whether a singer-turned-actress fits with his brand’s mission and priorities in China. Just look at the many types of endorsers that real-world watchmakers have used to highlight their strengths: sports stars, scientists, conductors, artists.

Even if Song finds the right ambassador, he must also consider other risks: Do all current and target customers know and like this person? Might he or she be less successful or popular in a few years’ time? Or behave in a way that reflects poorly on the brand?

Formal endorsements are quite expensive and involve long-term contracts. Perhaps Song should consider a lower-cost, shorter-term experiment instead. For example, if he believes an association with Changchang Gao will help attract younger customers or those that prefer a bit more flash, R&S could simply sponsor a party, dinner, or concert—or a series of events—ask her to perform or attend, and invite the media.

These events need not be as “blingy” as the Berlinger one described at the start of the story. Instead of models and cars, R&S might bring in artisans who demonstrate how its watches are made. As someone who has worked in Hong Kong for more than 30 years and spent the past six building Breguet’s mainland China business, I can tell you that luxury brands in Asia benefit when they offer customers special experiences, particularly when they’re able to team up with leading retailers to do so. In Taiwan and the Philippines, for example, Breguet has had success with events featuring prominent television anchors.

If the response to R&S China’s initial experiments with Changchang are positive and—more important—the initiatives boost sales, Song and Pearl can then present a better case for investing in a partnership that would make her the new face of R&S in China (although I would still recommend limiting the contract to a year or 18 months, with an option to renew).

To be clear, I’m not suggesting that Song roll over for Simon. Brand headquarters need to be the driving force of companies, and their brand strategies should be implemented as much as possible, but it’s key to take local intelligence into account. The motto should be: Think globally—act locally.

Clearly the status quo isn’t working, and Song is right to consider a change. However, celebrity endorsements are risky, and I would advise him to proceed very carefully.

HBR Reprint R1703N
Reprint Case only R1703X
Reprint Commentary only R1703Z

MARTIN GANZ is the vice president, Hong Kong and Macao, of Breguet, a division of the Swatch Group.

CELEBRITY ENDORSEMENTS ARE RISKY. THE BRAND AMBASSADOR MIGHT BE LESS POPULAR IN A FEW YEARS OR BEHAVE IN A WAY THAT REFLECTS POORLY ON THE BRAND.
SYNTHESIS
THE OTHER DIGITAL DIVIDE
THE TECH WORLD IS ISOLATING ITSELF JUST WHEN IT MOST NEEDS TO ENGAGE.
BY WALTER FRICK

n the new film The Circle, based on the 2013 novel by Dave Eggers, a young woman joins a Google-like company and is awestruck by its amenity-filled campus, talented employees, and mission to unify and simplify people’s online lives. We soon realize, however, that The Circle’s influence on the world outside is less benign: Its leader urges people to live-stream their entire lives, and those who don’t suddenly find themselves watched, judged, even sometimes pursued by angry mobs.

Eggers did little research for the book, which bothered some in the tech community. But just four years after its release, the story seems weirdly prescient in its depiction of the gulf between the people who make technology and everyone else—those who want to “reinvent our world” and those experiencing that change and feeling threatened by it. Indeed, several works of nonfiction out this year explore the same increasingly problematic divide.

In The Upstarts, the journalist Brad Stone offers histories of the tech darlings Airbnb and Uber, providing a glimpse into worlds that nontechies seldom get to see. We watch Airbnb employees playing Ping-Pong at the office, taking yoga breaks, rallying for kickball games, and championing CEO Brian Chesky’s vision of bringing people together. Signs in the office read “Belong Anywhere” and “Airbnb Love,” and in one scene Chesky tells employees that although he first laughed at a colleague’s suggestion that the Airbnb community might one day win a Nobel Peace Prize, he’s come to think it isn’t that crazy an idea. (For the record, it is.)

Uber offers its own perks. The company has a long tradition of paid “workations,” which in 2015 meant taking 5,000 people to a four-day retreat in Las Vegas. Participants attended seminars and listened to CEO Travis Kalanick outline a new values statement centered on improving cities through more-efficient transportation; they also volunteered at a local food bank and enjoyed special entertainment at night, including a private concert by Uber investor Beyoncé.

Stone shows, however, that outside Silicon Valley, the view of Airbnb and Uber is less rosy. In 2012, for example, a New York man who rented his room on Airbnb’s platform was charged with running an illegal transient hotel; although the company filed a brief on his behalf, it declined to offer legal services. Other hosts have faced similar fates, and researchers have found alarming discrimination on the site: Black would-be renters are much less likely than white ones to be accepted.

Uber has been accused of flouting local transportation laws, destroying licensed taxi drivers’ livelihoods, endangering passengers, and failing to offer adequate pay and benefits to its own drivers. Earlier this year Kalanick was even caught on video arguing with one of them about compensation. (And the problems aren’t just external: The company has recently been under fire for allegedly ignoring sexual harassment.)

WHAT I’M READING...

With books I’m an omnivore. When I volunteered for a year of civil service in my home country, Italy, it was in a public library. I go back to the classics in Latin, Italian, and English for their timeless universal themes—doubt in Hamlet, guilt and revenge in Macbeth, journey and exploration in The Odyssey or The Divine Comedy. But I also like modern business books: The Art of Thinking Clearly, by Rolf Dobelli, on cognitive bias, is a favorite, as is Who Says Elephants Can’t Dance?, Lou Gerstner’s account of the turnaround he executed at IBM.

For news, I’m a believer in push notifications from outlets like the New York Times, the Wall Street Journal, and La Repubblica. I also subscribe to Monocle for social trends, politics, and design coverage, and to the Financial Times weekend edition for books, style, real estate, and travel.

DAVIDE GRASSO IS THE CEO OF CONVERSE.
Other tech darlings are facing increased criticism too: Facebook has been charged with helping fake news to flourish; Twitter has failed to address bullying on its platform; Google continues to fight antitrust battles in Europe. The tech world as a whole has eroded privacy and contributed to income inequality by enabling automation of what was once human work.

And consider the contrasting portraits painted in two other new releases: Valley of the Gods, by the journalist Alexandra Wolfe, and The Complacent Class, by the economist Tyler Cowen. Wolfe focuses on PayPal’s founder, Peter Thiel, and a cohort of teenagers selected by his foundation to forgo college and start companies, but she also lets us peek into a variety of tech subcultures—from seasteaders to polygamists to those who, like Thiel, chase immortality through investments in life-extending technology. The suggestion isn’t that these pursuits are inherently flawed; it’s that they stem from a single-minded desire to push boundaries—technological and social.

Meanwhile, in the rest of the country, Cowen argues, most Americans are in fact working much harder than before to postpone change, or to avoid it altogether. For instance, while lots of start-ups continue to be founded in the nation’s tech hubs, new-business creation in the rest of the country has been trending down for decades.

Will the tech world try to bridge this gap, moving from the old “move fast and break stuff” model to one that remains agile and innovative but also considers the broader, long-term societal consequences? I’m not sure. Uber’s response to its critics has so far relied largely on what Stone calls “Travis’s law”: If the product is good enough, consumers will demand it, and that support will allow you to succeed. Airbnb has maintained a friendlier public image, but Stone chronicles its bare-knuckle tactics, from spamming potential hosts in its early days to fighting New York’s request for data on its customers.

In January, Facebook CEO Mark Zuckerberg announced his goal of meeting people in every state he has not yet visited—a sign of outreach. But some of his peers have darker preoccupations. Thiel has told the New York Times that he supports “Calexit,” the tech-led proposal that California literally secede from the United States. And, according to the New Yorker, the new hobby in Silicon Valley is doomsday prepping: buying land, supplies, and even weapons to maximize the chances of surviving a disaster.

There is tremendous danger here. The tech world cannot sequester itself—inside corporate campuses and coworking spaces today; who knows where tomorrow—and refuse to grapple with inequality, diversity, and other social issues. By the same token, the rest of society must resist its tendency to defend jobs and neighborhoods as they once were and to favor preservation over renewal. We need to find a middle ground.

In The Circle, an insider does try to eliminate the danger posed by technology, but he is ultimately thwarted—and in any case, no mysterious heroes are waiting to save us in the real world. Silicon Valley has to work harder to ensure that it plays a productive role in society, and outsiders must accept that although change is difficult, technology can bring progress, not just disarray. ᵖ
This twin-island paradise brings together the perfect combination of quality lifestyle, economic growth and dynamic business environment, making it one of the most attractive investment destinations in the Eastern Caribbean.

THE HUB OF THE EASTERN CARIBBEAN

ANTIGUA & BARBUDA

PART I

Atlantic waves rock its west coast while the Caribbean sea’s gentle turquoise waters kiss the east of the islands, but Antigua & Barbuda’s 365 beaches are far from being the country’s only appeal.

With one of the most exciting real estate development sectors in the Caribbean region, the twin island nation attracts investment from all over the world, in part thanks to its Citizenship by Investment Program (CIP) which, in addition to the high-end property stake itself, unlocks many doors thanks to one of the world’s most powerful passports.

With a well-regulated financial services sector and one of the most stable currencies in the world, the Eastern Caribbean Dollar, common to all seven full members of the Organization of Eastern Caribbean States (OECS), the Antiguan economy has seen consistent and predictable growth over the years.

Indeed, the country’s Gross Domestic Product had grown consistently for over 30 years until the 2008 financial crisis, which hit it hard.

Since Prime Minister Gaston Browne took office in 2014, Antigua & Barbuda’s economy has made a phenomenal recovery, growing at three times the average rate in the region, and surpassing its pre-crisis levels.

As the gateway to the Eastern Caribbean, the twin island nation is a sweet spot for cruising, transshipment and passenger transit. Its brand-new airport terminal at V.C. Bird International serves as a hub for the region, while its cargo port, though not located directly on international shipping lines, is a crucial distribution point to reach the rest of the Eastern Caribbean.

With a refueling platform off Antigua’s western coast, the country also offers bunkering services for cruise and cargo ships passing by.

To reduce its dependence on fossil fuels, Hon. Browne, along with many of his Caribbean counterparts, signed the Caribbean Energy Security Initiative in January 2015, through which the United States provides natural gas as a means of transition towards cleaner forms of energy.

Later that same year, the Browne administration enacted the Renewable Energy Act, with a push towards biomass and solar energy.

THE EASTERN CARIBBEAN’S POWER BROKER

Nested almost entirely within CARICOM, the OECS’ full members and associated states are comprised of six independent island nations, three British Overseas Territories and one French Overseas Department.

Bound together by the free movement of goods and people, and the EC dollar, OECS is therefore able to weigh more than the sum of its parts on a regional scale.

While Antigua & Barbuda has neither the largest population nor the biggest economy, it punches above its weight with just the right combination of factors making it the essential powerhouse of the region.
The independent Commonwealth state of Antigua and Barbuda, located in the Eastern Caribbean, is a lush green paradise that boasts 365 white sand beaches with clear, turquoise waters. Home to over 80,000 people, the twin-island nation is considered to be one of the most beautiful places in the world.

Historically, as a result of tourism and real estate, the country has experienced continuous growth in foreign direct investment. However, more recently, financial services, tertiary education and e-commerce have become significant contributors. Bolstered by generous Government incentives, foreign investment has contributed to the rapid development of the economy, resulting in the country having one of the highest GDP per capita in the sub-region.

Along with seven other states, Antigua and Barbuda is a member of the Eastern Caribbean Currency Union (ECCU), a development of the Organization of Eastern Caribbean States (OECS), using the Eastern Caribbean dollar as its currency. The Eastern Caribbean dollar has been pegged to the United States dollar for the last forty years, contributing to long-term financial stability.

The Government of Antigua and Barbuda has set a clear goal for the country to become, according to its Prime Minister, the Honorable Gaston Browne, “the economic powerhouse of the Eastern Caribbean” and sees its Citizenship-by-Investment Program (CIP) as one of the key drivers that will lead to the realization of this ambition.

The Program was launched in 2013 and is managed by a dedicated Citizenship by Investment Unit (CIU), a team of professionals who are responsible for processing applications and for recommending the approval of real estate and business investment options. The ultimate responsibility for the Program rests with the Office of the Prime Minister.

With its efficient processing, rigorous due diligence, wide choice of investment options and the sheer physical attraction of the islands, the Antigua and Barbuda CIP is fast becoming a jurisdiction of choice.

Ranked as the number one program in the Caribbean and third globally by Henley and Partners and Arton Capital, due to its culture of efficiency, robust due diligence, transparency, accountability, and a fast turnaround time of about 60 days, Antigua and Barbuda has earned over $100 million from the program and has conferred citizenship on 1,000 new Antiguans.

The program provides three options to acquire citizenship in exchange for a one-off capital contribution.

**Investment Options**

1. **Contribution to the National Development Fund (NDF)**

   A. For a single applicant, or a family of 4 or less:
   - US$200,000
   - Contribution and processing fees of:
     - Main applicant US$50,000
     - Spouse US$50,000
     - Up to two dependants pay no processing fees

   B. Family of 5 or more:
   - US$250,000
   - Contribution and processing fees of:
     - Main applicant US$50,000
     - Spouse US$50,000
     - Up to three dependants pay no processing fees

2. **Real Estate Investments**

   US$400,000 investment minimum - in an approved project (must be owned for at least 5 years)

3. **Investment in Business**

   - Single investor US$1.5M
   - Two or more investors US$5M (each at least US$500,000)

Antigua and Barbuda was the first Caribbean nation to permit investment in approved businesses, an innovation that other jurisdictions are now copying.

In addition to visa-free travel to 134 countries, including Canada, the United Kingdom, and the European Union’s Schengen area states, CIP-eligible investors have the right to reside permanently on the islands. If Antigua and Barbuda were not enticing enough a place already, the recent elimination of personal income tax by the end of 2017 makes it an even more attractive prospect.

Applicants must be over 18 and submit to a rigorous due diligence process. The only residency stipulation is that new citizens spend at least five days on Antigua or Barbuda in the five years following the granting of citizenship.

**Benefits**

- Visa free access to 134 countries, including Schengen area, United Kingdom and Canada
- Decision rendered in 60-90 days on most files
- No restrictions on dual nationality
- Citizenship for life, once residency requirement is met
- Straightforward application process, no minimum net worth requirement or previous business experience
- No tax on worldwide income, inheritance, capital gains or investment returns

- History of a stable currency US$1 = EC$2.70 (XCD) since 1976
- Antigua and Barbuda is a stable “Westminster” style democracy
- Well established legal and regulatory framework, supporting civil and commercial relationships
- Well educated work force, skills and abilities for modern work place
- Active and committed member of the International community:
  - United Nations
  - CARICOM (Caribbean Community)
  - OAS (Organization of American States)
  - Commonwealth

Despite being a relatively new entrant in the alternative citizenship space, Antigua and Barbuda’s Citizenship by Investment Program is already proving very popular with investors. Speedy processing and the quality of real estate offerings give the Program a serious competitive advantage.

From all accounts, Antigua and Barbuda seems destined to fulfil the vision of becoming the economic powerhouse of the Eastern Caribbean.

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**“Our CIP is about attracting long-term investment, capital formation, employment generation, and ultimately protection of foreign investments for the investor.”**

Chisanga Chekwe
CEO
Investment coming into Antigua & Barbuda is primarily geared towards improving its tourism product by building resorts and other real estate properties. Meanwhile, to satisfy its energy needs, the country is devoting an increasing amount of resources to renewable energy with, for instance, the 3 MWp solar plant at the V.C. Bird International Airport. As Minister of Tourism, Economic Development, Investment and Energy, Asot Michael stands at the crossroads of these major developments. With tourism as its central pillar, the country’s development strategy fans out from there into several branches.

**A VIRTUOUS CYCLE OF TOURISM INVESTMENT**

“Antigua & Barbuda is one of the most tourism-dependent countries in the world,” says Hon. Michael. “However, the government has increased its efforts to provide the climate that has seen increased investments in areas like construction, manufacturing, agriculture and information and communication technology.” Indeed, accounting for roughly 75% of GDP, the continued growth of the tourism sector directly impacts job creation in construction and services, thereby raising the standard of living of Antiguans.

“A large part of incoming investment comes through its Citizenship by Investment Program (CIP) which goes directly into high end property developments, resorts and other economic development programs.”

**“Our ultimate goal is to reposition Antigua & Barbuda as a premier tourism brand and attract investors to complement that declaration.”**

The beautiful twin-islands of Antigua and Barbuda are caressed by some of the most stunning white and pink sand beaches in the Caribbean. These islands boast of an authentic island experience to its visitors, with its less cosmopolitan landscapes, lush, tropical scenery and warm, friendly people.

Antigua and Barbuda’s unique charm and luxurious five-star accommodations have made the islands a new home to actor Robert De Niro, and his latest property project, Paradise Found Resort.

Antigua and Barbuda offers 365 of the best beaches in the world, but there’s so much more to see and do. If excitement is what you seek, take a sail around the islands, zip-line through the lush rainforest, go kite surfing, or simply kayak through a mangrove for an unforgettable eco-experience.

Popular among visitors and locals is the world renowned Nelson’s Dockyard, the world’s best-preserved Georgian Naval dockyard and recently named a UNESCO World Heritage Site.

Located in the heart of the Caribbean archipelago, Antigua & Barbuda lies 17 degrees north of the equator; approximately 1,425 miles south-east of Miami and 4,076 miles south-west of the United Kingdom. These fine islands have a combined area of 170 sq. miles, and form part of the Leeward Islands in the North Eastern Caribbean. Washed almost exclusively by the Caribbean Sea, Antigua’s 108 sq. miles are encircled by 95 miles of indented coastline while Barbuda’s 62 sq. miles are surrounded by reefs, with a large lagoon on the northwest side.

Serving as a major hub for the Eastern Caribbean, Antigua and Barbuda has various flights from the USA, Canada, Europe and the Caribbean and is strategically located in the centre of the Caribbean islands, with a near-perfect climate.

Tourism dominates the national economy and is the most important source of foreign exchange and direct investment to the islands. It underpins the country’s economic growth accounting for more than two-thirds of GDP, forty percent of investment, and more than half of the island’s employment opportunities.

From the moment you step into the country’s new airport terminal, until that final swim before leaving the beautiful, sun-kissed shores, you will experience warm memories that will last a lifetime.

**Top Ten Reasons to Invest in Antigua and Barbuda:**

1. Political Stability
2. Safety and security
3. Well-Educated population
4. Skilled Population
5. Robust ICT Infrastructure
7. General Financial Incentives
8. Welcoming People
9. Strong Investor Protection
10. One Stop Shop Approach to Investors

For more information please visit:

http://investantiguabarbuda.org

http://visitantiguabarbuda.com
At the cusp of the Eastern Caribbean sits one of the island chain’s most modern airports – the V. C. Bird International Airport, from which the Antigua & Barbuda Airport Authority (ABAA) manages the region’s key hub for both passengers and cargo. ABAA has recently inaugurated a new 23,000 square meter state of the art passenger terminal, which boasts four passengers loading bridges and one fixed connector. These service thirteen direct contact and remote gates, accommodating all types of aircraft. Strategic in its location, “Antigua is one of the first islands that you reach, arriving from Europe,” points out Stanley Smith, ABAA’s Chief Executive Officer. “With LIAT being the local carrier and having their hub here, it’s a natural fit to take passengers from Antigua to the different islands of the Caribbean.”

“Antigua is one of the first islands that you reach, arriving from Europe.”

With the potential to accommodate up to 2.2 million yearly passengers, the terminal features Executive and VIP lounges and a number of retail, food and beverages concessions available to its 850,000 annual travelers. Additionally, the airport is outfitted to accommodate passengers with reduced mobility and even offers a pet lavatory. The ABAA is also implementing strategies to develop its cargo service. With the closest destination at a mere 20-minute flight away, the farthest Eastern Caribbean islands can be reached in no more than two hours, truly making Antigua the gateway of choice to the Eastern Caribbean and beyond.

The ABAA is also implementing strategies to develop its cargo service.

CONNECTING THE EASTERN CARIBBEAN AND BEYOND
LIAT: The Primary Airline in the Eastern Caribbean

Over the past 60 years, LIAT has established itself as the primary airline in the Eastern Caribbean, connecting all major hubs in the region with more than 80 daily flights to 18 destinations.

“What is important now is to get to the next stage where each island is not competing against each other.”

As Leeward Islands Air Transport (LIAT) celebrated their 60 years of service to the region on October 16th, their attention was clearly focused on the future. By the end of the year, they would have received their 10th ATR aircraft, completing a three-year fleet transition process. This new aircraft will be an ATR 72-600. Today, their fleet is comprised of five ATR 72-600 aircrafts, with an average age of two years and the airline has an exemplary safety record.

With their fleet transition completed, LIAT’s focus is now to improve their infrastructure. “We are using a lot of manual systems in our operations,” says CEO Julie Reifer-Jones. “Our focus is to change those systems to provide the environment that will allow our employees to manage operations more efficiently.”

“We are also looking to revise and improve our schedule in such a way that we can deliver a more reliable product to the market,” she adds.

In addition to its customer base mixing business and leisure, comprised of 85% regional travelers and 15% international travelers, LIAT’s unique schedule of services also includes an overnight courier package service to their 18 destinations called Quikpak.

In keeping with the larger Caribbean region’s ambition to move further towards integration and interconnectivity, LIAT sees a future with more alliances and multi-destination holiday partnerships.

“What is important now is to get to the next stage where each island is not competing against each other,” says Mrs. Reifer-Jones, pointing out that a traveler coming to Barbados and then hopping to St. Lucia or Antigua and then Dominica would be beneficial for both LIAT and for the Caribbean as a whole. In the long run, the company hopes to expand beyond the Eastern Caribbean with flights to Haiti, Jamaica, and South America through Guyana.
THE SELF-MADE FAMILY DRIVING ANTIGUA’S GROWTH

The Hadeed Group: A Family History of Innovation and Entrepreneurship

By far the largest indigenous conglomerate in Antigua & Barbuda, the Hadeed Group of companies is one of the central pillars of the country’s economy, with a history dating back to the late 1950s revolving around the Hadeed family. One of the biggest success stories in the Eastern Caribbean, the first brick of the Hadeed family conglomerate was laid in 1958 when family patriarch the late Fares Hadeed arrived from Syria in 1958 with his eldest son, Radwan, and started a business in St. John’s. As the rest of the Hadeed family moved to Antigua in the early sixties — Fares’ five sons and one daughter — the business expanded to include the Hadeed Furniture Factory in 1966 and Hadeed Motors Ltd in 1972. “Originally, we started our business in the fifties by issuing credit,” says Hadeed Group Director Francis Hadeed, Radwan’s eldest son. “My grandfather realized back then there was need for common household items; beds, televisions, refrigerators, and people could not afford them.” This strategy of issuing credit to their clients became one of the keys of Hadeed Motors’ Ltd success through the establishment of the Finance & Development Company in 1984. Today, it is chaired by Sir Ramez Hadeed KCN, Fares’ third son, who has been a pioneer in Antigua’s manufacturing sector through the family company since the 1960s. Hadeed Motors’ Ltd’s simple corporate philosophy of putting the ownership of a motor car within the reach of the average family in Antigua & Barbuda has enabled the company to become the largest car dealership in the country.

“Flirst, we are able to assist people who are unable to qualify for bank loans […] by taking risks and knowing the background of these people, we have a lot of success stories.”

Francis’ younger brother Andrew Hadeed, also one of the group’s directors, describes the company’s philosophy as ‘people first’. “We are able to assist people who are unable to qualify for bank loans,” such as taxi drivers, farmers, vendors and single mothers. “We feel that by taking risks and knowing the background of these people, we have a lot of success stories,” Francis adds.

Today, Hadeed Motors’ Ltd brands include Nissan, Suzuki and Porsche, and CPM Ltd are distributors of Hyundai vehicles in Antigua & Barbuda as well as Trinidad & Tobago. They are also continuing their renown trajectory as “the group holds substantial Real Estate Holdings and will be diversifying into resort and Mariner developments,” says Andrew.

Without a doubt one of the chief architects of the Hadeed family empire, Aziz Hadeed CBE, Executive Chairman of the Hadeed Group of Companies since 1980 and one of the top businessmen in the Eastern Caribbean, cemented the Hadeed Group’s status as a pillar of the country’s economy in 2005 by acquiring Antigua Masonry Products, the number one construction materials producer in Antigua. Since then, they have reinvested in the company, diversifying its products to support all initiatives within the construction sector.

Nearly 60 years and three generations on, the Hadeed Group remains a key player in Antigua’s future, all the while continuing its own successful journey while at the same time giving back to society by being of the most philanthropic companies in Antigua and Barbuda.

A NEW ERA OF ENGAGEMENT BANKING

Caribbean Union Bank

The Caribbean Union Bank (CUB)’s new partnership with the government of Antigua & Barbuda has breathed new life into one of the country’s main financial institutions. It is now poised to become a prominent player in the wider region’s financial landscape as it redefines itself as the premier “Engagement Bank” within the Caribbean Region – a term coined by the new Board of Directors as they redefined CUB’s strategy. According to Caribbean Union Bank’s General Manager Karen Harris-Quinland, “CUB’s management philosophy is built on four pillars: Empower employees, Excel in processes, Engage customers and Enrich shareholders and the wider community.” “Our focus is now to make the entire customer experience an engagement affair by giving them control over digital self-service tools, personalization and reporting.” She believes that the milestone partnership will pave the way for this transformation. CUB is now well positioned to draw upon strategic partnerships. These include investors sharing a common vision of a modern bank which truly embraces technology to create an exceptional service experience for its customers and the wider community.

A FRIENDLIER CUSTOMS DIVISION

Customs Division Modernizes Technology and Internal Culture

Over the past few years, the Customs and Excise Division of Antigua & Barbuda has been transforming its processes for more efficiency and transparency, enabling the country to fully realize its potential as a hub for the Eastern Caribbean. As Antigua & Barbuda improves import/export infrastructure – the airport terminal and the port – the customs division needed to adapt to new technologies and processes to facilitate trade, collect revenues and protect the country’s borders.

“We are transforming customs into a more accessible and friendlier division, working to help people, facilitate trade and guarantee border security.”

As part of the division’s modernization, it has just implemented the new ASYCUDA platform for more efficiency and transparency. Many of these changes have taken place under the tenure of Mr. Boddu, a certified information systems auditor and fraud examiner, who continues to improve the division’s processes and culture.
Antigua has been able to capitalize on its coastline for cruises, cargo and an important yachting industry thanks to its many harbors. St. John’s Deep Water Harbour saw an investment of US$22 million to dredge the port to a depth of 35 feet and widen the channel into the harbor. In November of 2016, the government secured a further investment of US$100 million for a massive expansion of its porting facilities.

THE REGION’S DISTRIBUTION CENTER
“We are not directly tied to the global supply chain, though we are connected regionally. We want to grow in terms of efficiency so that we could begin to signal certain changes and maybe start some services such as warehousing, distribution and transshipment,” says Antigua & Barbuda Port Authority CEO Darwin Telemaque. “We want to make it dynamic so that you could literally transport your warehouse from Miami to Antigua and distribute to other islands from here. The overall cost of life in Antigua could be reduced if we can achieve that efficiency,” he adds.

A PARADISE FOR YACHTING
Another key harbor, Falmouth Harbour, is located on Antigua’s south coast and is a berthing place for smaller cruise ships and large yachts. “The yachting sector here has a bigger impact than the cruise sector,” says Falmouth Harbour Marina Chairman Ivor Jackson. Other harbors include Nelson’s Dockyard, English Harbour, famous for its world renowned Antigua Sailing Week, and Jolly Harbour, which hosts smaller vessels. Barbuda is also expanding its facilities to accommodate larger cruise ships.

THE GROWING INSURANCE SECTOR
Antigua’s rising standard of living enables a growing number of its residents to purchase insurance. In a region which is prone to occasional hurricanes, being competitive in this sector requires a certain amount of expertise.

“We have been able to stand the test of time, because we have been through quite a few catastrophes including hurricanes.”

BARRY KNIGHT, Chairman,
State Insurance Corporation

State Insurance Corporation (SIC) is one of the main insurance providers in the country, which has been more resilient over time. “Some other companies weren’t able to hold their own,” says SIC’s Chairman Barry Knight. In the past, only the wealthiest Antiguans could afford insurance, but as the standard of living rises in the country, the sector has been able to offer options suitable to a growing number of islanders. Caribbean Alliance Insurance, the largest general insurance company in Antigua and one of the leading companies in the Caribbean region, has had its financial strength rating raised three years in a row by US-based ratings agency A.M. Best Company. To date, Caribbean Alliance is the only general insurance company to have achieved A.M. Best Company’s A (Excellent) Stable rating in the Eastern Caribbean.

Caribbean Alliance Insurance

Caribbean Alliance House, St. John’s, Antigua, W.I.

Rated A (Excellent) by A.M. BEST
Caribbean Alliance Insurance, St. John’s, Antigua, W.I.

www.caribbeanalliance.com

State Insurance Corporation

The port of St. John’s, honored with the 2016 PMAC Port of the Year Award, is expanding after having secured Approx 100 million dollars to develop the port and improve its service and delivery systems. The Port aims to be a leader in logistics, cargo handling, transportation and marine management both locally and regionally.

www.anuport.com
THE FINANCIAL SERVICES CENTER OF CHOICE
Financial Services Regulatory Commission

The origins of Antigua & Barbuda’s reputation as an international financial services center can be traced back to the International Business Corporations Act of 1982 ("IBCA"). In 2013 the Government created the Financial Services Regulatory Commission (“the Commission”) via a stand-alone legislation referred to as The Financial Services Regulatory Commission Act No. 5 of 2013. The Commission’s mandate is to regulate and supervise international business corporations incorporated and licensed under the IBCA. “We supervise the international financial services sectors such as international banking; the offshore gaming sector and non-banking financial institutions including insurance, credit unions and co-operatives,” says FSRC’s CEO Brenda Sheppard.

Since the IBCA’s establishment, the country’s financial industry had grown to become one of the world’s premier financial services centers. “The policy proposition is to make Antigua & Barbuda the model financial center in the region. Our focus is on ensuring we have in place the most appropriate set of legislation and that our regulations are as advanced as possible and in compliance with international standards,” says FSRC’s Chairperson Rasona Davis-Crump.

The Commission also meets with the various sectors of the financial services industry under its purview at least once a year. “We are generally identified as a ‘safe harbor,’ not only for yachting, but also as a provider of wealth management,” says Global Bank of Commerce CEO Brian Stuart-Young. “If one estimated the risk associated with a jurisdiction by its size and impact on world financial stability, Antigua would be deemed as very, very low risk.”

“We like to think of Antigua as the crossroads of the Caribbean for financial services.”

BRIAN STUART-YOUNG
CEO, Global Bank of Commerce

AT THE CROSSROADS OF CARIBBEAN FINANCE
A Low Risk Jurisdiction Turning Towards New Technologies

With a competitive financial services sector in the Caribbean, Antigua & Barbuda takes advantage of its economic stability, political independence, small size, location and advantageous regulatory framework to be an attractive option for offshore financial services. “We are generally identified as a ‘safe harbor,’ not only for yachting, but also as a provider of wealth management,” says Global Bank of Commerce CEO Brian Stuart-Young. “If one estimated the risk associated with a jurisdiction by its size and impact on world financial stability, Antigua would be deemed as very, very low risk.”

“We like to think of Antigua as the crossroads of the Caribbean for financial services.”

BRIAN STUART-YOUNG
CEO, Global Bank of Commerce

INJECTING HEALTH SCIENCES TRAINING WITH A SENSE OF COMMUNITY
University of Health Sciences Antigua

Committed to excellence and innovation in health sciences education, community service, and research, the University of Health Sciences Antigua (UHSA), which was established in 1982, is known for training highly competent physicians and nurses dedicated to improving the health of our global communities. Located on a 50-acre campus in English Harbour, UHSA celebrates diversity with its motto being “medical and nursing school to the world” illustrative of the institution’s diverse student body and faculty who represent many nations.

What sets UHSA apart is the unique approach that the university takes in educating students and serving the community. UHSA is one of few medical schools in the Caribbean that offers a world-class Standardized Patient/Clinical skills unit, an innovative facility which exposes students to standardized, trained patients from day one of their education.

Recognizing the importance of giving students a sense of community while in Antigua and while remaining in-line with US medical and nursing school standards, UHSA class sizes remain small. Also, the majority of faculty live on campus and are available to students. Furthermore, in collaboration with Georgetown University in the United States, UHSA recently launched the Free Clinic of English Harbour, a not-for-profit health clinic offering complimentary healthcare to the population of English Harbour and nearby areas.

The Free Clinic is managed by UHSA medical and nursing students who are supervised by appointed physicians and nurses. The Free Clinic offers a unique opportunity for students to contribute their clinical skills to a medically underserved patient population, while also allowing students to directly experience the social, economic, and cultural challenges that impact rural and island healthcare delivery.

The Free Clinic of English Harbour is supported by volunteers, donors, and institutional partners.

To learn more...

—or to become involved, please visit:
http://freeclinic.uhsa.ag
or email partnerships@uhsa.edu.ag
—or about UHSA’s programs and initiatives, please visit www.uhsa.ag
Caribbean Heritage – Global Vision

by Brian Stuart-Young
Chairman Emeritus & CEO

Global Bank of Commerce Ltd. ("GBC") is an indigenous Caribbean-owned and operated international bank, offering prestige financial products to its regional and international customers, since 1983. It was the first Bank to be licensed in Antigua and Barbuda after its independence from Britain in 1981, and is often referred to as the "grandfather" of international financial services in this jurisdiction. It conducts worldwide banking services with significant banking partners in North America, Europe and the Middle East. The Bank earns the regard of their loyal customers through competitive and innovative management of multi-currency accounts; trade facilitation; worldwide wire transfers; and a team of dedicated and professional executives.

The Bank strongly supports the national development thrust of the Government of Antigua and Barbuda and provides prime banking and escrow services to various public-private sector partnerships and tourism related real estate projects. Its key relationships with major international asset management and brokerage institutions allow trade and wealth facilitation services, and its online banking system provides security for banking with your fingertips. While GBC offers online technology for convenience, the Bank recognizes that each customer's financial needs are unique. GBC's management takes great pride in tailoring their services for their valued customers.

"The satisfaction of the customer remains our first priority."

With over 33 years of experience in financial services, GBC has managed family investments from generation to generation, and understands the requirements of the more discriminating investor seeking superior wealth management and private banking services. The Bank's wealth management department caters for clients requiring personalized individual and corporate financial services, including second home and citizenship options. In serving the Latin America and Caribbean Region, the Bank provides multilingual banking officers to maintain its relationships with non-English speaking clients.

The financial group, of which GBC is a part, is not simply about attracting clients and providing depository services. The Group has invested in the expansion of technology-driven facilities to support alternative payments which now enable the Bank and its affiliates to provide community specific services, including microfinance and multi-channel payment delivery services that meet the demands of regional economies seeking more efficient means of safe and regulated money transfer facilities.

GBC has invested in its own local data centre, known as Global Processing Centre (GPC) which was established as a fully certified PCI DSS processor of electronic financial transactions, processing Visa, MasterCard and China UnionPay transactions for card issuing and acquiring payments services. This home-based, modern and fully integrated processing platform caters for all card, electronic wallet, mobile wallet, private label card services

and ecommerce services. The technology platform is an enabler for the development and adoption of Fintech innovations. These services have established alternative payment systems to support retail trading, government payments, international remittances and currently serves local banks in Antigua and other Caribbean jurisdictions. GPC developed its own home-grown alternative payment solution, called SugaPay, known as the "sweepest way to pay". Its mobile and merchant services are expanding to improve financial services driven by banks and credit unions domestically as well as regionally and are helping to enhance Caribbean lifestyles by making payments more convenient and banking more engaging.

Global Bank of Commerce and its affiliates embrace the vision that it can provide globally competitive financial services and products, regardless of its size and geographic location on a small and sovereign Caribbean island. The Bank represents a new breed of financial institution, one which is committed to maintaining best banking traditions but is prepared to step outside the box to deliver technology-driven services for banking and global commerce. By knowing its customers and complying with international regulatory standards, the Bank responds to customer demands for more personalized service and customer convenient delivery channels to best support superior banking relationships.

We live in an increasingly interconnected and interdependent world and our banking service must cross borders and create a flat, seamless environment. We have been able to achieve that through our online banking and payment solutions and our multi-currency products and services. Our expertise in providing international banking services, wealth management and electronic financial transaction facilities has developed a strong client base in the Caribbean, Latin America and world-wide as we deliver the kind of banking access they need and the financial services that they want.

The satisfaction of the customer remains our first priority. We believe that any success that we achieve is because we put our customers at the centre, the heart of our business, and then build our strategy around them.

Global Bank of Commerce
www.globalbankofcommerce.com
www.gpcantigua.com
www.sugapay.com
MANAGING FOR THE LONG TERM

In this issue we examine how a focus on maximizing shareholder value—which leads to short-termism for management and boards—can threaten companies’ health and financial performance.

A New Model of Governance
Agency theory, promulgated by academic economists in the 1970s, is behind the idea that corporate managers should make shareholder value their primary concern, and that boards should ensure they do. The theory regards shareholders as owners of the corporation—but that raises a grave accountability problem: Shareholders have no legal duty to protect or serve the companies whose shares they own; they are shielded by the doctrine of limited liability from legal responsibility for those companies’ debts and misdeeds; they may buy and sell shares without restriction and are required to disclose their identities only in certain circumstances; and they tend to be physically and psychologically distant from the companies’ activities.

Joseph Bower and Lynn Paine examine the agency-based model’s foundations and flaws and its implications for companies before proposing an alternative model that would have at its core the health of the enterprise rather than near-term returns to its shareholders. Their model would refocus companies’ attention to innovation, strategic renewal, and investment in the future.

The CEO View
David Pyott led Allergan during a hostile takeover attempt by Valeant Pharmaceuticals and Pershing Square Capital Management in 2014. He describes how he fended off their bid and what companies need to do to reorient themselves toward long-term growth.

The Board View
Barbara Hackman Franklin, an expert in corporate governance, sees her field as a tripartite system of checks and balances. Activist shareholders, she says, are a new and worrying complication. Here she proposes some important changes boards need to make.

The Data
Five charts reveal that long-term-focused companies surpass their short-term-focused peers on several important financial measures and create significantly more jobs.

THE COMPLETE SPOTLIGHT PACKAGE IS AVAILABLE IN A SINGLE REPRINT. HBR Reprint R1703B
Every day, millions of people around the world face long commutes to work. In the United States alone, approximately 25 million workers spend more than 90 minutes each day getting to and from their jobs. And yet few people enjoy their commutes. This distaste for commuting has serious implications for well-being. Studies have found that workers with lengthy commutes feel more anxious and less happy and satisfied with life than those with shorter ones and are more likely to get divorced. They also are less likely to find their daily activities worthwhile, are more exhausted and less productive at work, and have lower job satisfaction.

But it doesn’t have to be this way. Research (including studies by the authors) suggests that small tweaks to the way you conduct your commute can improve the experience, leaving you both happier and more productive. They offer five strategies that commuters can try: Use the time to shift your mindset; prepare to be productive; find your "pocket of freedom"; share the spirit; and reduce your commute.
At the top of the ladder, the stakes are high and the demands intense. Too many CEOs falter in the job; about a quarter of the Fortune 500 chiefs who leave their firms each year are forced out. Clearly, boards do not always get their hires right.

In conducting an analysis of in-depth assessments of 17,000 executives, the authors uncovered a large disconnect between what directors think makes for an ideal CEO and what actually leads to high performance. The findings of their 10-year research project challenge many widely held assumptions. Charisma, confidence, and pedigree all have little bearing on CEO success, it turns out. Instead, top performers demonstrate four specific business behaviors: (1) They’re decisive, realizing they can’t wait for perfect information and that a wrong decision is often better than no decision. (2) They engage for impact, working to understand the priorities of stakeholders and then aligning them around a goal of value creation. (3) They adapt proactively, keeping an eye on the long term and treating mistakes as learning opportunities. (4) They deliver results in a reliable fashion, steadily following through on commitments.

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Although the ability to manage torrents of data has become crucial to companies’ success, most organizations remain badly behind the curve. More than 70% of employees have access to data they should not. Data breaches are common, rogue data sets propagate in silos, and companies’ data technology often isn’t up to the demands put on it.

In this article the authors describe a framework for building a robust data strategy that can be applied across industries and levels of data maturity. The framework will help managers clarify the primary purpose of their data, whether “defensive” or “offensive.” Data defense is about minimizing downside risk: ensuring compliance with regulations, using analytics to detect and limit fraud, and building systems to prevent theft. Data offense focuses on supporting business objectives such as increasing revenue, profitability, and customer satisfaction.

Using this approach, managers can design their data-management activities to support their company’s overall strategy.

**HBR Reprint R1703H**
KEEPING EMPLOYEES engaged isn’t easy. To address this problem, try encouraging your workers to break rules and be themselves. At the center of this program is the feature “Let Your Workers Rebel,” by Francesca Gino of Harvard Business School. Gino also offers two mini case studies: “The Most Important Trait for Rebel Talent: Curiosity” (about Egon Zehnder) and “The Manufacturer That Set Its Workforce Free” (Sun Hydraulics). Take the assessment “Are You a ‘Constructive Nonconformist’?” to gauge how much of a rebel worker you are. Watch the video “Rebel Talent at Osteria Francescana” to see chef Massimo Bottura break all the rules of running a kitchen. Learn from Ariel Investments president Mellody Hobson in “The Everyday Ways One Leader Helps Employees Bust the Status Quo.” In “Small Measures Can Liberate Employees to Contribute Their Best,” Gino presents new research on rebel talent. Finally, watch the webinar “Fostering Rebel Talent at Work” and a discussion with Pixar’s Ed Catmull, HBR editor in chief Adi Ignatius, and Gino on “Fostering Rebel Talent Inside Pixar.”

BEING SELFLESS at work leads to exhaustion—and often hurts the very people you want to help. Here’s how to share your time and expertise more effectively. This program is anchored by the feature article “Beat Generosity Burnout,” by Adam Grant and Reb Rebele. The series of audio postcards “Leaders Who Get How to Give” profiles leaders who learned how to avoid burning out, with an accompanying article by HBR editor Curt Nickisch. For more on Grant and Rebele’s research, watch the video explainer “How and When Selflessness at Work Backfires.” Find out if you’re prone to giving too much with the assessment “Generosity Burnout—Are You at Risk?” Hear more from Grant and Rebele, with HBR editor Amy Bernstein, in the webinar “Managing Collaborative Overload.” And see answers to questions they couldn’t get to in the webinar “More on Being Generous Without Being a Doormat.”

HERE’S A part of the income-inequality debate you may not know about: Today’s winner-take-all economy rewards workers at top firms and leaves the rest behind. In his feature article, “Corporations in the Age of Inequality,” Stanford economist Nicholas Bloom presents his case for how that happened and what we can do about it. For a primer, watch the video “The Other Kind of Inequality, Explained.” Former White House economist Jason Furman offers his perspective in the interview “Competition Is on the Decline, and That’s Fueling Inequality.” Craig Rowley, of executive search firm Korn Ferry, explains “Why Some Firms Pay Better Than Others.” Top economists share data visualizations in “The Inequality Story, in Charts.” For a look at how inequality plays out in one industry, Silicon Valley financial planner Lavina Nagar discusses “Income Inequality, by Chance or by Choice.” Finally, Harvard Business School professor Rebecca Henderson’s call to action, “Why Inequality Is an Urgent Business Problem,” explains management’s vital role in finding a solution.

THE BIG IDEA

AN IN-DEPTH EXPLORATION AT HBR.ORG
Between issues of HBR, we continue to examine the most important ideas and challenges facing business leaders today. Join us every other month as we roll out a weeklong program offering a new HBR feature from a leading management thinker, along with a full complement of related articles, videos, events, and more.

COMING IN MAY:
THE DRONE ECONOMY

THE BIG IDEA
ENGAGE AND DOWNLOAD A PDF AT HBR.ORG
Building the Capacity for Change

New technologies and market competition have always been major catalysts of corporate change. But in today’s global business environment, where technology evolves at lightning speeds, many organizations confront the need to change on a nearly constant basis.

Business leaders realize that the breakneck tempo of business puts a premium on mastering the art of change. Across the board, they see the importance of change management essentials such as a compelling vision, strong business case, clear strategy, senior management alignment, and data and analytics capabilities.

However, a Harvard Business Review Analytic Services global survey of business leaders found that a decisive majority say that their organization’s performance on each is fair to middling at best. As a result, nearly three-quarters of business leaders report that their organizations accomplish only some or very few of the objectives set out in their major change initiatives and growth plans. Although one might think that large enterprises have better luck because of their large resources, the change challenge is found in near-equal measures in organizations of all sizes.

Experts point out that while executives and managers likely understand how to tackle each component of change management, they often don’t understand how these elements interact and support each other. For example, weak analytics capabilities can lead to endless disagreement, which thwarts the ability of senior managers to align and create a clear business case and strategy.

Indeed, analytics remain a challenge. Most companies still depend primarily on outside insights and anecdotal sales force reports to make the mission-critical decision of when to embark on a major change effort and monitor its success. However, the companies most successful at change reported that they were leveraging data and analytics to support decision making at levels almost double those of poor performers.

Some organizations are putting insufficient emphasis on hard drivers of change, such as metrics, milestones, clearly defined roles and responsibilities, and flawless project management. These drivers have a major impact on the ability to monitor and measure success and make crucial decisions to change course quickly to meet market demands.

The study also found that CIOs, CTOs, and CHROs are playing a major role in driving successful change. In organizations that meet many of their objectives, CIOs and CTOs are taking the lead in identifying how technology can change business models and operations. CFOs are being asked to support new (disruptive) business models and to provide a better view of future growth opportunities. CHROs are also stepping up to the plate by detailing how the company should invest in talent and what changes in organizational design and structure may be needed.

The research highlights that C-suite collaboration, technology advancement, and real-time analytics are needed to inform and influence strategies. Those who work cross-functionally and leverage new tools and technology are able to successfully take on more strategic roles for their business and help expedite growth.

To learn more about how companies are successfully managing change, read the full study at www.workday.com/hbr-change-report. The report also makes the case that having one seamless finance and HR system enables finance leaders to help build a smarter business, focus on what’s ahead, and find new ways to grow. More information about Workday and the value of a single system for HR and finance can be found at www.workday.com.
When Waters opened Chez Panisse, in Berkeley, California, in 1971, she didn’t expect to spark a national movement toward local, organic, sustainably sourced food or to inspire a generation of chefs to follow in her footsteps. But she did. Now a committed activist, she is the founder of the Edible Schoolyard Project, which has spawned food education programs in over 5,000 schools. She still oversees her single restaurant.

**HBR:** How did you shift from restaurateur to activist?

**WATERS:** I wanted to do something I was passionate about and open a little restaurant and feed my friends food that tasted like the French food I’d fallen in love with in Paris. In trying to find that food, I ended up on the doorstep of the local organic producers. I depended on them, became friends with them, and celebrated them. I realized that the people who care for the land are precious and should be paid for their hard work. I didn’t think this was radical. I knew it was part of the counterculture to avoid industrial food and buy from farmers’ markets. But to me, it seemed natural: We tend the land, we celebrate the harvest, we use seasonal ingredients to cook, we sit at the table to eat.

**Aside from sourcing, how did Chez Panisse stand out?**

I always wanted every little detail just so. People thought I was obsessed about lighting, portion size, and everything else, but I was also willing to listen to anybody with a better idea. I wanted people to love what we were cooking. That was most important.

You were trained in Montessori education. How did that inform the way you ran the restaurant?

Montessori emphasizes learning by doing, using all the senses. You touch, taste, smell, look, and listen. I wanted the experience of the restaurant to be like that. So I would fan the smell of rosemary from the oven outside. I put beautiful flowers on the table and food on the counters. And people could touch and taste what they were served and come into the kitchen and see it being cooked.

What qualities do you look for in your team members?

I hire people who bring different talents and cultivate a collaborative spirit. When someone is too involved in their own work, it’s hard to have them in the kitchen. I ask people what they like to cook for themselves, where they shop, what books they read. I want to know if they’ve ever worked on a farm and whether they ate dinner with their family at night when they were little. I want men and women, young and old, and I treasure people from other countries. Our internship program brings university students in, and I think that constant change keeps us alive.

How do you foster teamwork?

Everybody in the kitchen can say something about what’s being cooked. It’s not a pyramid where vegetable choppers do the prep work and chefs cook. The chefs wash and dry the salad, too, and we all taste the dish. You learn something when you work with food from beginning to end, and if you’re listening to people’s opinions, they feel part of something bigger. Our mission also empowers everybody, from the dishwashers to the night cleanup crew. They know we have a part to play in trying to change the U.S. food system.

“IT MIGHT BE HARD TO IMAGINE MAKING THREE MEALS OUT OF ONE EXPENSIVE CHICKEN. BUT IF WE ALL LEARN BASIC COOKING SKILLS, WE CAN MAKE EXTREMELY AFFORDABLE FOOD.”

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TO BREAK THE RULES, YOU MUST FIRST MASTER THEM.

THE VALLÉE DE JOUX, FOR MILLENNIA A HARSH, UNYIELDING ENVIRONMENT; AND SINCE 1875 THE HOME OF AUDEMARS PIGUET, IN THE VILLAGE OF LE BRASSUS. THE EARLY WATCHMAKERS WERE SHAPED HERE, IN AWE OF THE FORCE OF NATURE YET DRIVEN TO MASTER ITS MYSTERIES THROUGH THE COMPLEX MECHANICS OF THEIR CRAFT. STILL TODAY THIS PIONEERING SPIRIT INSPIRES US TO CONSTANTLY CHALLENGE THE CONVENTIONS OF FINE WATCHMAKING.

ROYAL OAK CHRONOGRAPH IN STAINLESS STEEL

AUDEMARS PIGUET
Le Brassus