How to Tap Into Your Inner Genius P. 142

FORTUNE

MARCH 15, 2017

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100 BEST COMPANIES TO WORK FOR 2017

Everything you need to know to land your dream job P. 79

Yuki Igarashi
Financial Advisor
Seattle

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MARCH 15, 2017

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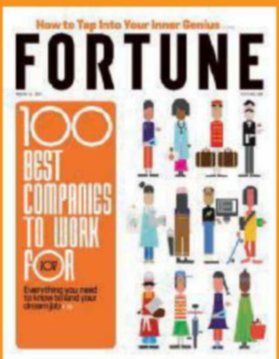

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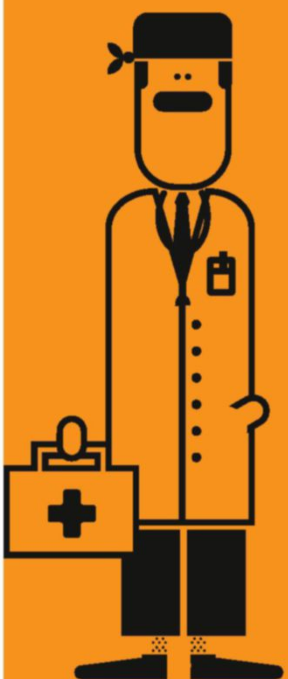

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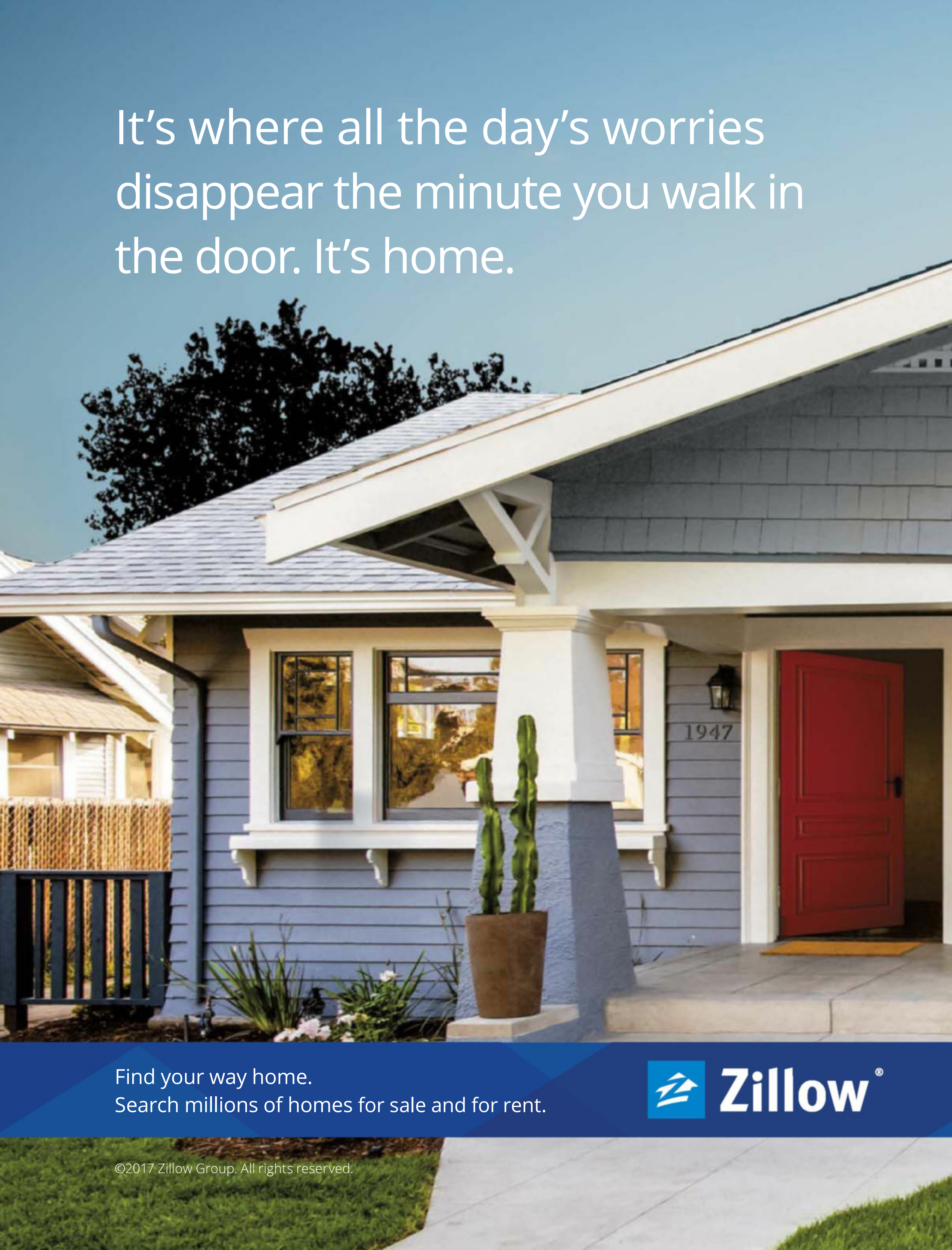
"TECHNOLOGY SHIFTS HAVE BECOME SOMEWHAT ROUTINE. BUT WHO CAN TRANSITION THEIR TALENT AT SCALE AS THE TECHNOLOGY CHANGES?"
—AT&T CEO RANDALL STEPHENSON

© BRENT HUMPHREYS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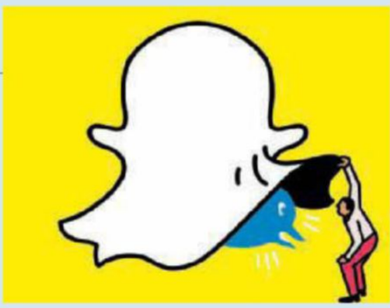

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A SMART INVESTMENT IN AMERICA

AMERICANS SEEM TO AGREE on only one thing when it comes to politics: The system isn't working very well. Even as we spend more time and money on national elections, dissatisfaction seems only to grow.

Why? Katherine Gehl and Michael Porter offer a novel answer to that question in this issue. Applying the competitive analysis for which Porter is famous, they conclude the U.S. political system has all the dysfunctional characteristics of a classic duopoly. The two parties have become extremely good at supporting and sustaining themselves. But they deliver unsatisfying results for their ultimate consumer: the American citizen.

If only our antitrust statutes could be used to bust up this political duopoly! But understanding why the system delivers such poor results does suggest some interesting reforms, focused on allowing third-party candidates a better chance to thrive. While politics isn't *Fortune*'s normal fare, we think this business-minded approach to what is arguably our most pressing national problem deserves some serious attention (see "Why Politics Is Failing America" on page 74).

Also in this issue, we are publishing the 20th edition of our 100 Best Companies to Work For list, produced in partnership with the Great Place to Work institute (page 79). With each passing year, this list has become more popular and, we think, more important. It is now, by far, the most-read list we publish each year, with the 2016 version reaching a total 2 million people online.

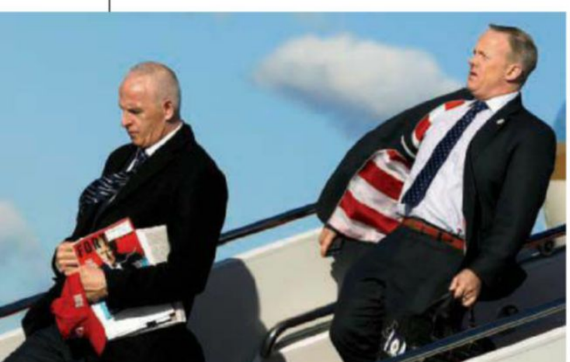
There's a reason for that. In a world where companies are no longer measured by the size of their factories or the reach of their storefronts, human capital has become an ever more essential determinant of value. And as a result, the competition for talent has become ever more intense. The companies that make our list are there, by and large, by choice. They know their business success depends on their ability to attract great people.

That's why I wasn't totally surprised to learn, courtesy of Jen Wieczner's fine reporting, that the companies that make our list also make great investments. In this issue, she reports on how Jerry Dodson of the Parnassus Endeavor Fund has become one of the most successful managers of his era by focusing investments on the 100 Best Companies to Work For list (page 137). Since 2005, Endeavor has delivered annualized returns of 12.2%, compared with just 8.5% for the S&P 500. Says Dodson: "*Fortune* has been a very important part of our success."

Finally, the recent Snap IPO looks likely to be one of the most important business events of 2017. But our columnist Dan Lyons is having none of it. You can read his counter to the conventional wisdom on page 72.

Lots more inside, all aimed at making you better at business. So read on!

ALAN MURRAY
Chief Content Officer, Time Inc.
Editor-in-Chief, *Fortune*
@alansmurray



White House director of Oval Office operations Keith Schiller (left) carries some must-reading for President Trump—a copy of the March 1 issue of *Fortune*—as he and White House press secretary Sean Spicer exit Air Force One.

SCHILLER AND SPICER: JONATHAN ERNST—REUTERS

THE WORLD IN 7 PAGES

BRIEFING

PAGE 1

MARCH 15, 2017

KEN JAMES—BLOOMBERG/GETTY IMAGES

Big Food Is Going to Get Even Bigger

The nation's largest foodmakers are getting set to gobble each other up. BY JOHN KELL

M&A

IN LATE FEBRUARY, Unilever received a gigantic $143 billion merger offer from Kraft Heinz. The move dazed some casual observers: Could the corporate giant that makes Lipton teas and Hellmann's mayo so easily be subsumed by an American rival? Unilever's board thought not, and turned down the deal. But the rebuff may not be an ending so much as a harbinger of things to come. If investors get their way (and they usually do), it won't be long before Big Food is forced to digest another big merger or two.

BRIEFING

Kraft Heinz, notably, is still hungry for a deal. And that has Wall Street fantasizing about concoctions no whiz in the kitchen would dare dream up. Should Coca-Cola buy Hershey? Or perhaps Mondelez should? Maybe PepsiCo will make a play for Kellogg. General Mills plus Pinnacle Foods? Kellogg acquires Campbell Soup? The possibilities are endless.

Why is Big Food likely to binge on buyouts? Times are tough for major consumer packaged goods companies. Shoppers in the U.S. and other Western markets are gravitating toward the perimeter of the grocery store, where healthier fare is found, putting pressure on sales of packaged items like soups, cereals, and sodas. Critically, those are the products on which America's food giants built their empires. And as a result, sales this year are poised to drop at big players like General Mills, Kellogg, and Conagra, while they'll barely increase at Campbell Soup and Mondelez.

"With revenue now in negative territory for a lot of these companies, the sense of urgency to do a deal is going to be higher," says Credit Suisse analyst Robert Moskow.

Mergers are also on Wall Street's radar because of a Big Food bogeyman: Brazilian private equity firm 3G Capital. 3G was behind the 2015 merger of Kraft and Heinz, last year's mega-beer deal between Anheuser-Busch InBev and SAB-Miller, and most recently Burger King–Tim Hortons takeover offer for Popeye's. Kraft Heinz and AB InBev, in particular, will almost certainly want to pick off more targets.

With the Kraft Heinz/Unilever deal off (for now) some expect the company to narrow its focus and try to buy Unilever's food and beverage portfolio, without the added cost of nonfood brands like Dove (soap) and Axe (fragrance). But with U.K. regulations prohibiting revived talks for six months, observers think it's just as likely to make a play for Oreo- and Triscuit-maker Mondelez.

Also worth watching: AB InBev, fresh off its SABMiller acquisition, will still likely need another deal to hit its goal of $100 billion in revenue by 2020. PepsiCo and Coke are potential targets. The soda giants have done a better job innovating to stay competitive in the U.S., but that may not be enough to ward off a looming bid. "3G is the catalyst. They are out there with a plan to consolidate the industry," says SIG analyst Pablo Zuanic.

The buying spree leaves struggling Big Food players with two options—do their own deal, or potentially get devoured. And the latter might be uncomfortable: Kraft Heinz and AB InBev are known for buying companies, aggressively cutting costs, and then moving on to the next big target.

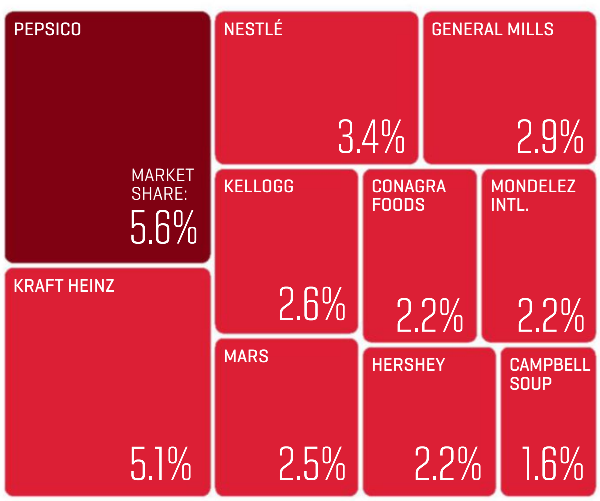
The cost cutting could be bad news for an industry that already has a reputation for not spending nearly enough on innovation. Plus, any deal that comes with big layoffs would face scrutiny from a Trump administration that bristles at U.S. job losses or factory closings.

Yet despite those challenges, investors may ultimately prefer a 3G-led buyout. Since absorbing Kraft, Kraft Heinz has cut 5,150 jobs, closed six factories, and consolidated distribution, but it's poised to lift operating margins to an astonishing 30% this year. Results like those leave shareholders salivating. (For more on Unilever, see "Stocks That Are Better-Off Single" in this issue.)

Investor Warren Buffett, who was part of the Kraft Heinz deal, is a fan of the 3G way. He says they aren't just productivity winners, but savvy marketers and product developers too. "When people see what the 3G management has accomplished," he said on CNBC, "it may make shareholders of other companies somewhat unhappy." In other words, if Big Food doesn't shake itself up, big investors might do it for them.

THE BUYING SPREE LEAVES STRUGGLING BIG FOOD PLAYERS WITH TWO OPTIONS—DO THEIR OWN DEAL, OR POTENTIALLY GET DEVOURED.

LARGEST CONSUMER PACKAGED GOODS COMPANIES



SOURCE: EUROMONITOR

■ FAKE NEWS

HEALTH NEWS OFTEN MISSES THE MARK

48.7%

PROPORTION OF MEDICAL STUDIES REPORTED IN NEWSPAPERS THAT WERE CONFIRMED BY BROADER RESEARCH

Don't believe [half of] what you read. That's the conclusion of researchers in the journal *PLOS One* who tracked newspapers' health reporting—finding it didn't always jibe with meta-analysis [a broader review of relevant research on the topic].

5.1%

THE PROPORTION OF THE STUDIES COVERED BY NEWSPAPERS THAT REACHED A NEGATIVE FINDING

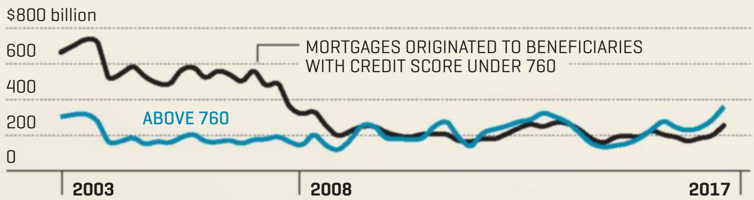
There's a reason you don't read about, say, all the foods that *don't* cause heart disease. Outlets surveyed generally ignored studies that didn't find positive correlations.

■ CREDIT REPORT

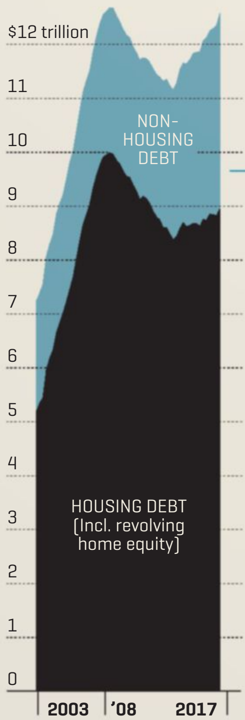
CONSUMER DEBT NEARS PRE-CRASH LEVELS

Debt is back, says new data from the Federal Reserve Bank of New York. U.S. households increased borrowing in 2016—bringing student loan and auto lending balances to new records. But don't panic yet. Credit scores and delinquency rates look better now than they did in 2008.

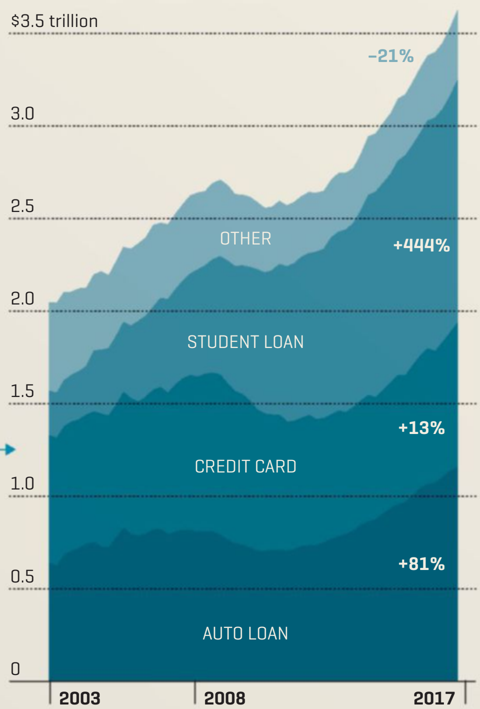
SINCE 2008, BORROWERS AND BANKS HAVE FACED TOUGHER STANDARDS FOR MORTGAGES ...



... LOWERING HOUSING DEBT LEVELS ...



... BUT OVERALL PERSONAL DEBT HAS STILL CLIMBED ...



... BRINGING TOTAL DEBT CLOSE TO 2008 LEVELS

SOURCE: NEW YORK FED CONSUMER CREDIT PANEL/EQUIFAX

■ VENTURE

NO, REALLY, DON'T CALL IT "SILICON BEACH"

Messaging service Snap's IPO gave Los Angeles' burgeoning tech scene a big win, but Silicon Valley still dominates in venture capital deals by both value and volume.

SOURCE: CB INSIGHTS

Trump's Travel Ban Could Hit Colleges

The President's immigration policies may drive away students—and revenue. BY ERIKA FRY

The steady growth in the number of international students in the U.S. could be in jeopardy.

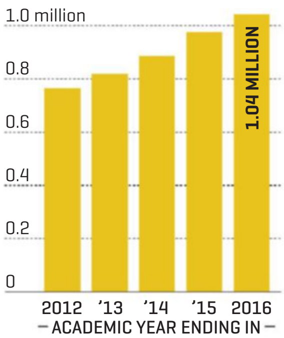
COLLEGE

IN THE high-stakes global war for talent, Jan. 27 may go down as the day America shot itself in the foot.

That's when President Trump's executive order effectively barred the citizens of seven countries from entering the U.S. for 90 days. Courts quickly blocked the ban, and a subsequent presidential order, issued in March, was less sweeping. But the logistical chaos and angry debate that ensued have created unease worldwide. And perhaps nowhere is it felt more intensely than in America's universities, which collectively host more than 1 million foreign students—some 17,000 from the seven affected countries.

In an effort to draw the world's best and brightest, U.S. institutions have rapidly increased international enrollment; the number of foreign students has swelled 73% over the past decade. And the benefits are not strictly philosophical. Foreign students typically pay full freight, subsidizing their American counterparts who receive financial aid. (While 5% of U.S. university-goers are from overseas, the group accounts for 8% to 10% of the system's revenues.)

NUMBER OF INTERNATIONAL STUDENTS IN THE U.S.



SOURCE: INSTITUTE OF INTL. EDUCATION

Just after the election, Moody's sounded the alarm, declaring international students "a potentially volatile revenue stream." Universities, the ratings agency warned, were increasingly exposed to changes in government policy under Trump.

It's too early to tell whether an America-first administration will steer international students to competing countries. (The U.K. has its own self-inflicted wounds post-Brexit.) But there's anecdotal evidence that Canada, which made attracting international students part of its national economic strategy, is likely to gain. The country's higher-ed association says its members have been flooded with inquiries since the U.S. election, from American and international students alike.

IRS, ROBOT

BILL GATES' IDEA ABOUT TAXING ROBOTS SPARKED A GLOBAL DEBATE

"You'd think that we'd tax the robot at a similar level."
—BILL GATES

If a human worker does $50,000 worth of work in a factory, Gates noted in a recent interview, that income is taxed. Why not when a robot does the same?

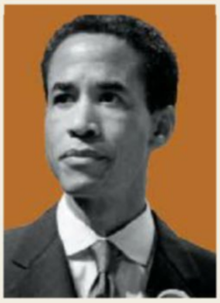
"Picking on robots won't deal with job destruction."
—LARRY SUMMERS

A robot tax could tamp down desirable tech innovations, the former Treasury chief rebutted, and wouldn't help distribute wealth.

"There is an alternative to a robot tax ... a universal basic dividend."
—YANIS VAROUFAKIS

This Greek economist's riff on a "basic income" could ease the pain of automation but would bring headaches of its own.

STUDENT: MARK PETERSON—REDUX; BILL GATES: CHRISTOF STACHE—AFP/GETTY IMAGES; LARRY SUMMERS: ROB KIM—GETTY IMAGES; YANIS VAROUFAKIS: JACK TAYLOR—GETTY IMAGES



HIRING

SEEKING NEW HIRES, INFOR GOES STRAIGHT TO THE SOURCE

INFOR CEO Charles Phillips has taken an unusual approach to tech's talent wars. Rather than lament a lack of candidates, Infor is sponsoring courses at 26 higher-ed institutions. They're not traditional classes—students get certification on Infor's software suites rather than school credit—but the payoff is real. Since its inception in 2014, Infor and partner businesses have hired 244 interns and 25 full-timers from the program.
—POLINA MARINOVA

Free Trade Can't Get a Break

Nativism's surging global popularity could have severe consequences, warns FedEx founder Fred Smith. BY ALAN MURRAY

FedEx's Smith worries about Xi Jinping and Trump alike.

TRADE

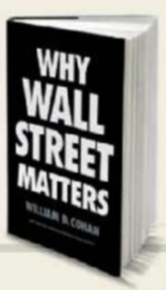
FOR NEARLY three quarters of a century, the U.S. led the charge for global free trade, while developing countries like Japan and China pursued a more protectionist path. Now, in an odd role reversal, President Trump is vowing to put America first, while China's Xi Jinping has said he wants to pick up the torch to lead globalization.

How will that play out? That was *Fortune*'s question to one of the pioneers of globalization, FedEx founder and CEO Fred Smith. He was a spotlight guest at a dinner in New York on March 13 in the run-up to the *Fortune* Global Forum, which will assemble the world's top business leaders in Guangzhou, China, in December.

Smith worries that the new nativist approach backed by Trump threatens to make the U.S. the equivalent of Argentina or Brazil: "Trade has been a big part of U.S. growth and success, and what we need to be doing is leaning into more trade, not less."

He also fears that China's Xi will have trouble following up on his globalization promise. Smith championed China's entry into the World Trade Organization back in 2001 but says the nation's free-trade record since then has been less than stellar. While Xi has called for economic reforms, the Chinese "can't bring themselves to cut the spigot of loans off to state-owned enterprises," Smith says.

Unless that happens, China could be headed for a painful reckoning, and global free trade could be the odd man out.



BOOK VALUE

HOW TO TEACH YOURSELF TO LOVE THE BANKS

THIS IS THE BOOK everyone in finance is going to buy as a gift for their friends—especially their friends who rag on them for working in finance. Seasoned journalist (and *Fortune* contributor) William Cohan writes a spirited and convincing defense—not exactly of Wall Street, but of the critical role it plays in the economy. Part history and part industry cheat sheet, Cohan's book explains why reform is still needed but breaking up the Wall Street titans is a bad idea. A quick read at just 147 pages, it's a good primer for anyone who wonders what big banks are good for.

PHILLIPS: JEFF CHIU—AP IMAGES; SMITH: KRISTOFFER TRIPPLAAR—SIPA USA

ACCESSORIES

Fashion's Great Handbag Crash

Retail power players reel as consumers tighten their purse strings.

BY PHIL WAHBA

LIKE every gold rush, the handbag boom was bound to bust. After years of clocking double-digit growth earlier in the decade, handbag sales in the U.S. have cooled. The $9.3 billion market grew a mere 2% last year, according to Euromonitor International. (That follows a nearly 1% sales decline in 2015.)

Handbag makers have no one to blame but themselves. During the boom, the likes of Michael Kors, Coach, and Kate Spade kept opening stores, expanding their lower-priced assortments, and flooding outlet stores with their wares, all in a bid to outdo one another.

The satchel surfeit led to discounting, which in turn slammed profit margins and cheapened their brands. Adding to the pain was the shift away from big, flashy bags to smaller, discreet, and less expensive cross-body bags.

Among the major U.S. brands, Coach reacted early to handbag fatigue, going higher-end again. Now half the bags it sells cost more than $400—up from 30% a year ago. Kors is trying to restore its luxury aura by pulling its wares from department stores. And Kate Spade simply put itself up for sale.

The struggling department stores are eager to see the traffic-generating handbag market perk up. "We've got to get the big guys on track," Macy's CEO Terry Lundgren recently said.

It's not that shoppers don't want any more bags. Michael Kors CEO John Idol recently said the company had sold 11% more units last quarter. But too much of the product is still heavily discounted, and training shoppers to pay full price again may take a while.

Retailers found they'd stuffed a few too many handbags into store windows.

CAREER

BORED AT WORK? YOU'RE NOT ALONE

WITH THE OBVIOUS exception of those who work for one of *Fortune*'s 100 Best Companies [see our list on page 79], it seems a solid majority of Americans, 74%, find their jobs a snooze—or so says a survey by salary benchmarking service Emolument.com. Who are the least engaged? Take a guess.

LEGAL

81%

Portion of people in the **legal industry** reporting boredom at the office, more than any other industry.

FINANCIAL SERVICES

67%

The rate of boredom in finance wasn't far behind.

R&D

45%

Employees who work in research and development were among the most engaged.

HANDBAGS: GEORGE ROSE—GETTY IMAGES; SUPERSTOCK/GETTY IMAGES

Tax plan champions Paul Ryan and Donald Trump still face big hurdles.

That 'Huge' Tax Cut May Take a While

Passing tax reform is hard enough. More challenging? The GOP isn't sure what it should look like. BY TORY NEWMYER

TRADE

DON'T TELL the stock market, but prospects for quick action on a tax code overhaul aren't looking great. The legislative hurdles are significant, sure, but a more pressing problem might be that the GOP is still split on fundamentals.

A push by House Republican leaders to impose a new levy on imports has generated the most static so far. That measure, the so-called border adjustment tax, would pay for lower corporate rates across the board by raising some $1 trillion over a decade. But major retailers and oil refiners, among others, argue it would cause prices on consumer goods to spike. That has prompted opposition from some Senate Republicans, including Sen. Tom Cotton of Arkansas, Walmart's home state, and Georgia Sen. David Perdue, a former CEO of Dollar General. The White House itself is divided: Treasury Secretary Steven Mnuchin and Gary Cohn, Trump's top in-house economist, remain skeptical, fearing the tax could reverberate in unknown ways through global markets. But chief strategist Steve Bannon embraces the concept as a way to level the playing field in support of domestic manufacturers (read Boeing, GE, Honeywell, and Pfizer).

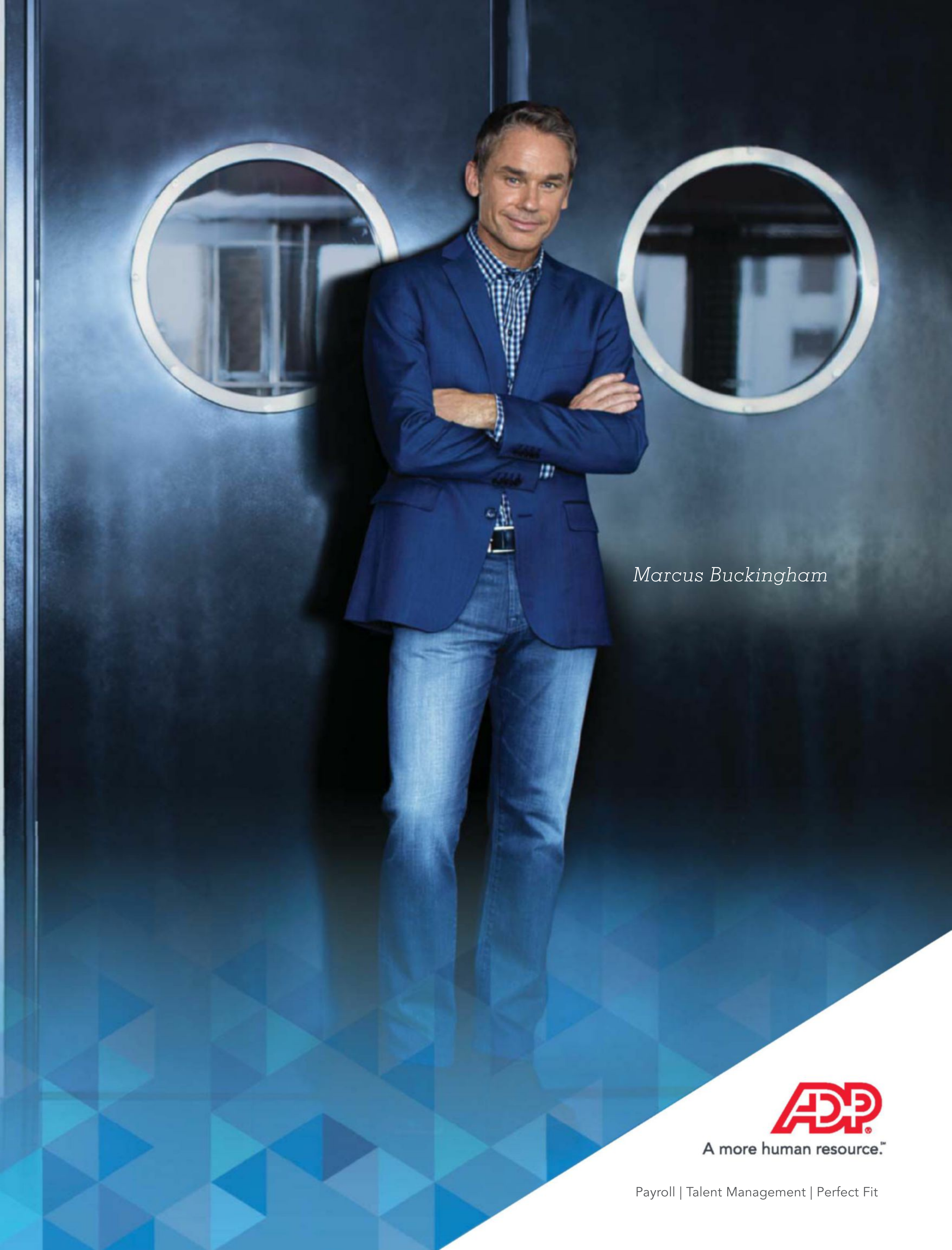
The early commotion over the border tax obscures a larger muddle. Some basic questions about the aim of the rewrite still need to be answered: Will it address the personal side of the code? What's in it for the middle class? What will it cost the Treasury, if anything? Congressional Republicans are increasingly eager for the White House to provide guidance. "We have a while to go," one senior Republican Senate aide says. "But they have to tell us what they want."

DEFINITIONS

"RISK ON, RISK OFF"

GO AHEAD and make Mr. Miyagi *Karate Kid* jokes (we certainly did), but you'll hear this phrase more often as commentators gauge the economic mood under President Trump. When optimism is high and corporate earnings grow, investors get their "risk on"—they're more willing to buy volatile assets like stocks. When investors feel grimmer, they go "risk off" and chase safer assets like bonds and gold. In the Obama years, investors behaved as though risk was on *and* off, driving prices up for stocks and bonds alike; so far under Trump, the old binary model appears to have returned. —MATT HEIMER

BILL CLARK—CQ ROLL CALL/GETTY IMAGES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FOCUS

PRACTICAL EXPERTISE

VENTURE

THE FUTURE OF WORK

IS THIS ROBOT A FRIEND— OR A FOE?

Automated manufacturing technology is becoming affordable for smaller companies. What does that mean for jobs?

BY JENNIFER ALSEVER

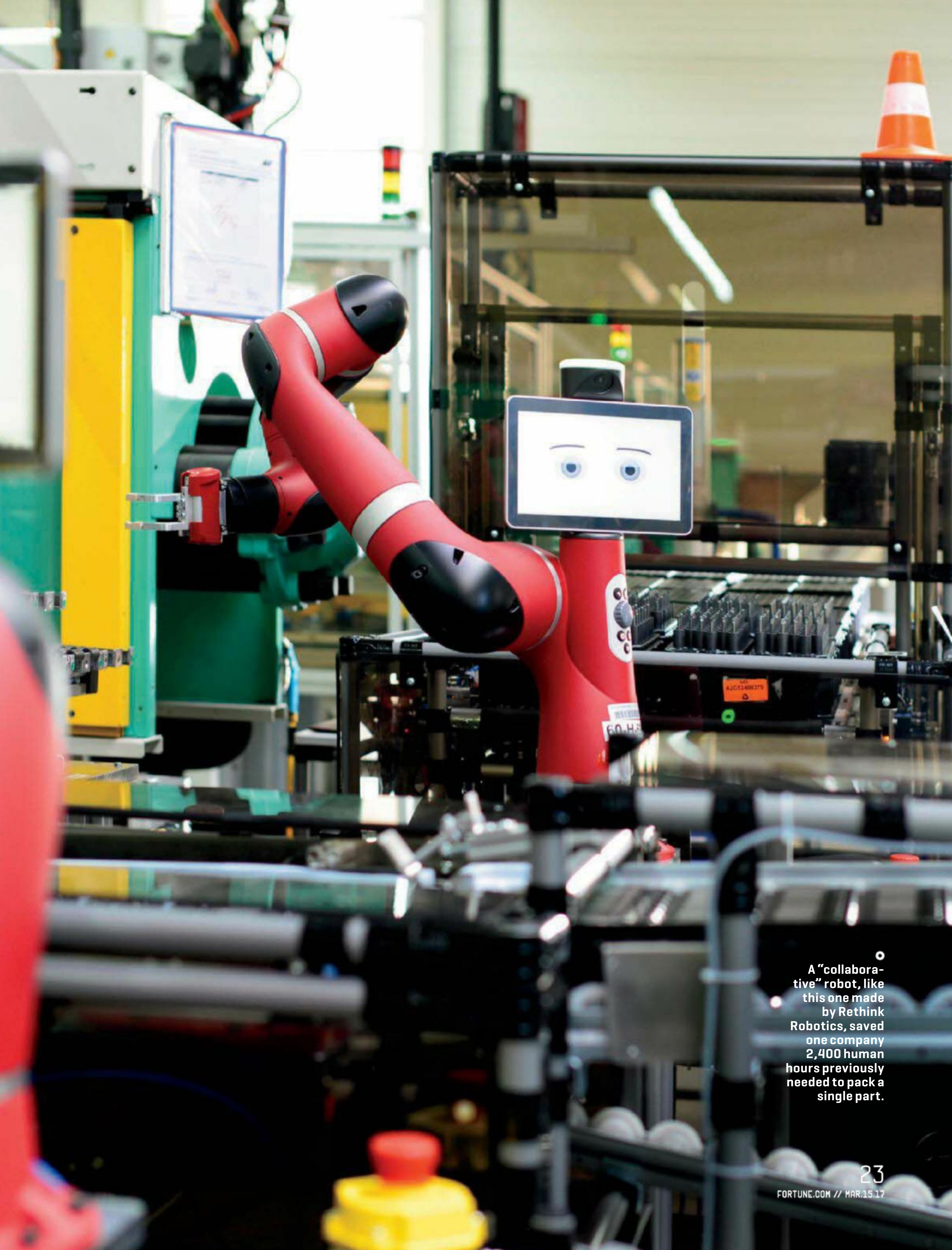
DONALD TRUMP rode a wave of anger and frustration among blue-collar workers, who had watched 8 million manufacturing jobs vanish over 30 years, to the presidency. He promises to restore them by slashing taxes, reducing regulations, and redrafting or killing trade agreements. But even if those strategies revive U.S. factories, a threat looms that has nothing to do with China or Mexico: Robots are likely to claim many roles long performed by flesh-and-blood workers.

Robots are on the rise—and the greatest growth may be about to come. Some 34,600 manufacturing robots shipped in North America last year, nearly double the 18,200 that were sold in 2005, according to the Robotic Industries Association. And as costs drop and performance climbs, the use of such technology is expanding beyond the auto industry, where it has made its deepest incursions. Robot sales have tripled in industries such as packaged foods and pharmaceuticals during the 2005–16 period. And by early in the next decade, some old-school industries that have been tough to automate, such as furniture-making, will begin to see robotics become cost-effective, according to Boston Consulting Group. Says Justin Rose, a BCG partner who follows the sector: "I don't think it's too bold to say that this will deeply impact large swaths of American manufacturing."

For decades, the costs of robots were so prohibitive that only corporate behemoths could afford them. Bots often required hundreds of hours of programming by teams of engineers and computer scientists, and a single machine might run $100,000. They also took up large amounts of floor space because they were kept inside large steel cages to ensure worker safety.

In recent years, though, a new generation of faster, cheaper bots has emerged, making them affordable for the first time for small and medium-size factories. Today a unit may cost as little as $25,000. They're easier and safer to use because of more intuitive software, smarter visualization technology, smaller chips, better sensors, and materials such as springs that allow robots to sense and respond to human touch. That means they don't ▷▷

© COURTESY OF RETHINK ROBOTICS



A "collaborative" robot, like this one made by Rethink Robotics, saved one company 2,400 human hours previously needed to pack a single part.

require safety cages and can be used next to people. Some are operated by touch screen and can easily be repurposed to perform different tasks. In some cases, programming involves simply moving a robot's arm around to "show" it how to do a job.

"In just an hour, we taught the robot to move things around on our CEO's desk," jokes Drew Rabkewych, a sales manager at Standby Screw, a Cleveland maker of outdoor equipment parts that recently purchased two robots from a company called Rethink Robotics. Standby Screw employees quickly trained the machines to wash parts and pack them into boxes. One robot replaced 2,400 human-hours a year that were used to pack a single part. The savings allowed the company to stay profitable even when its revenues dipped last year. Says Rabkewych: "Automation and programming will be the future of American manufacturing."

For unskilled workers, that's bad news. A 2016 World Economic Forum survey estimated 1.6 million manufacturing and production jobs will be lost globally due to automation between 2015 and 2020.

But it could be a boon for those who are educated and adaptable. Demand is growing for jobs requiring abstract judgment and expertise in engineering, analytics, and creative design. Think job titles like robot coordinator, equipment installer, and mobile service technician.

The addition of robots transformed the workforce at Vickers Engineering, a Michigan company that makes precision-machined components for the auto, oil, and gas industries. The company boosted revenues from $8 million to $50 million and cut its factory-labor costs by a third during the decade following automation. Meanwhile, Vickers expanded from 100 employees to 180, and today only a third of its jobs involve repetitive tasks. The rest involve business operations or machine engineering, maintenance, and quality. Those positions bring salaries of $65,000 to $100,000, vs. something closer to $20,000 for, say, a factory floor operator. "The vast majority of those jobs didn't exist before automation," says CEO Matt Tyler.

The same kind of shift occurred at Task Force Tips when it began automating its production of water nozzles for fire departments in 2013, using four bots. The company boosted production and revenues but didn't need to increase its 250-person payroll, says CEO Stewart McMillan. "Instead of five people doing these jobs, I have one guy running five robots that do tedious jobs longer without quality issues," says McMillan. "Plus, the robot shows up for work every day and doesn't get the flu, and it frees people up to use their brains."

McMillan disagrees with the view that manufacturing jobs were lost solely to offshoring. Even if companies were to move their facilities to the U.S., according to BCG, what takes 60 to 70 workers in China might translate to six or seven American jobs with automation. "Mr. Trump needs an education on manufacturing," McMillan says.

Only if the U.S. embraces new manufacturing technologies, BCG's Rose maintains, will the country be able to win a greater share of global production and, potentially, see a net increase in domestic factory jobs. "You can't do it halfway," he says.

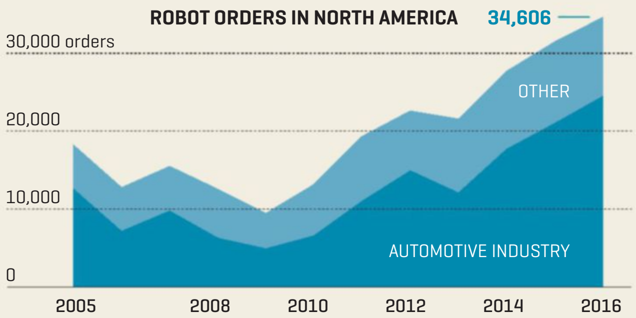
That requires a change in mind-set. Gone are the days when an owner might build a plant and plug people into jobs they would stick with till retirement. Today companies must stay on top of fast-changing technology and ensure employees refresh their skills. Says Rose: "Companies will have to embrace technologies quickly and train people to get ahead of the curve."

The federal government supports some apprenticeship and college programs that prepare people for those higher-skilled jobs, and states like Ohio are opening centers to offer advanced manufacturing training.

But much of the workforce training will fall on companies. Some have started pooling resources to educate people for commonly needed jobs. Others, like Task Force Tips, started their own programs. The company invested $250,000 to create an on-site training facility where employees can learn skills related to machine tooling, programming, hydraulics, metrology, computer-aided design, and robots. McMillan, whose father founded the company, believes the program will breed more loyalty and reduce turnover in crucial, high-skilled jobs. After all, McMillan knows robots can't quit their jobs, but people can. ■

ROBOTS ON THE MARCH

SO FAR robots have been most widely used in the auto manufacturing and parts businesses. But falling prices for automated factory technology augur broad adoption in other industries, according to BCG and others.



SOURCE: ROBOTIC INDUSTRIES ASSOCIATION

MANAGING L'ORÉAL'S 'ORGANIZED CHAOS'

Jean-Paul Agon, now in his second decade as CEO of the world's largest cosmetics company, on keeping a corporation flexible in a digital age. BY ERIN GRIFFITH

SMOOTH OPERATOR
Since Agon became CEO in 2006, L'Oréal sales have risen nearly 70% and the stock price has more than doubled.

VENTURE

WHEN JEAN-Paul Agon joined L'Oréal in 1978, he didn't plan to spend his entire career at the cosmetics giant, much less become its fifth CEO. But as decades passed, the "organized chaos" of the now-108-year-old company kept Agon stimulated with new challenges and far-flung adventures. He ran divisions in Greece, Germany, and Asia and served as president of L'Oréal USA out of New York City before taking the top job in 2006. Over Agon's tenure, L'Oréal's revenue ($28.6 billion in 2016) and share price have steadily grown, thanks to global expansion, savvy acquisitions, and an aggressive focus on digital. (Last year the company's e-commerce revenue grew by 33%.)

Agon, 60, spoke with *Fortune* about the future of shopping malls, brand authenticity, and navigating the "digital tsunami." (Edited excerpts follow.)

For a long time, traditional consumer goods and retail businesses were in denial about the Internet and the impact it would have on them. When did you realize it?
Around seven years ago, some friends in the digital world were explaining what was going on, and I realized a tsunami was coming. I could see it from far away. I declared—like you declare

war or mobilization—that 2010 should be "the digital year" for L'Oréal. And no one knew what it meant.

The good thing at L'Oréal is people are positive. That year, every division of L'Oréal—every country, every brand, suddenly everyone started something in digital. It was very disorganized, very chaotic, but at least suddenly, everyone got conscious of the huge transformation that was coming. Because of digital, everything today is much more interesting and more powerful than it was before.

What has worked and what hasn't?
We have four divisions, 34 brands, 140 countries, and digital is by definition pretty decentralized, so you have hundreds of initiatives and experiments. Some of them, they try and see it's not working. Some are doing really well. In four years we hired 1,600 digital people from the outside. We completely embedded them into the marketing teams. The next step is that we make every new marketing recruit since Jan. 1 get digital accreditation. It would be crazy to have someone doing marketing today that does not do digital.

The rise of social media has been credited for the boom in makeup sales. People want to look good in their selfies. On the other hand, young people also crave more authenticity online. There's a bit of a conflict between being authentic and being a mass-market brand.
I'm not sure there is a conflict. There could be a tension. Brands have to be authentic, but for [consumers], it means the brand is transparent and there is sincerity in what they express. That's what we are trying to do our best with. A brand like Kiehl's is a big brand, but also a brand that is seen as totally authentic. It's easier to look authentic when you're very small, but I don't think it's impossible, even when you are a large brand, as long as you respect these rules.

L'Oréal is an active acquirer. Besides money, what do you offer entrepreneurs to entice them to sell their companies to you?
We offer them the total respect of the identity, culture, spirit, and soul of the brand. When you go to a Kiehl's store today anywhere in the world—in Korea, China, France, Argentina—it is exactly the replica of the spirit, of the soul, of the identity, of the Kiehl's store we bought [in 2000]. We have been more than loyal and cultivated the spirit of the brand. Except that now it's a $1 billion brand.

This is very important if you are an entrepreneur and you want to pass the baton to someone else. And that's what we guarantee. Look at Urban Decay—the creators of that brand are still with us and managing the business.

"WE HAVE TO ANTICIPATE PERMANENTLY THE CONSUMER'S DEMANDS, DESIRES, AND DREAMS. THIS IS THE OBSESSION OF EVERYONE HERE."

A few years ago, you were bullish on turning around the Body Shop, a retailer L'Oréal acquired in 2006. Then in February you put the company up for sale. What changed?
We tried and tried and tried. And maybe in this case we are being too loyal to the brand's spirit. Because we didn't want to change too much, in fact, we didn't change enough. This is always a difficult balance. You have to evolve, but also be respectful to brands. We really put in our best efforts for 10 years. I still think it's a beautiful brand with great awareness everywhere in the world, but maybe someone else can do something better with it.

It's surprising, given that the Body Shop's whole ethos of natural, eco-friendly products has become more relevant and mainstream in the past 10 years.
That's true. But maybe also because it has become more mainstream, it's less unique. There is always a flip side.

Do you predict, as many digital disrupters have, the end of shopping malls?
I don't think tomorrow it will be either e-commerce or store. The future that we can see is to offer consumers a choice between different types of services and experiences. NYX [a professional beauty brand L'Oréal acquired in 2014] is a combination of e-commerce, freestanding stores where you find a huge range of products with [supplementary digital experiences], and you can also buy a more limited assortment in stores like Target and Ulta. That's what the future that we can see is—to offer consumers a choice between different types of services and experiences. Stores in malls will be a part of this choice.

There is the famous saying that only the paranoid survive. What are you paranoid about?
The new aspirations of consumers. We have to adapt permanently, or even anticipate permanently, the consumer's demands, desires, and dreams, so this is the obsession of everyone here. You have to adapt permanently to the evolution of the trends.

For many, many years, our competitors—especially here in the U.S.—called us a kind of "organized chaos," because for them, we are not very organized. It's intentional, because it allows us to always keep our mind open to new ideas, ready to jump on new trends and take new opportunities. ■

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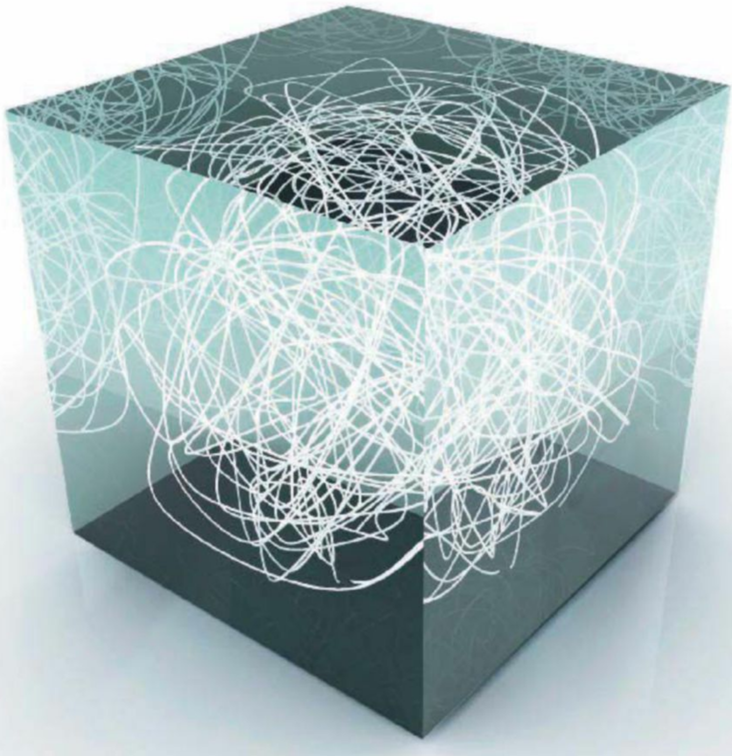


VENTURE

THE STORIES WE FALL FOR

Humans crave narratives that **impose order and make sense of random events.** But this phenomenon, the "narrative fallacy," can create serious problems—in the markets and in politics. BY ROGER LOWENSTEIN

I KNOW AN investor who anthropomorphizes the stock market, as if the Dow were a living beast. "Wouldn't it be just like the market to draw us in with a rally, then deliver a sucker punch?" he will say, as if "the market" were a canny three-card monte player, entrapping tourists in Times Square.

Irrational as that may sound, it's no more so than the ever-popular investing method known as "technical analysis." This is a branch of astrology—chart interpretation—that purportedly "reads" the market, even though it tells you nothing about the underlying companies. You see a chart of zigs and zags and impute to it a story—the market is "exhausted," or "bottoming," or whatever.

Many investors are addicted to such fruitless techniques. Behavioral economics, which studies the impact of psychology on financial decision-making, explains why. It reflects what author Nassim Nicholas Taleb called the "narrative fallacy." It's the human tendency, actually the human need, to impose order on random events and to make events we didn't anticipate seem "predictable" after the fact.

The narrative fallacy explains many common financial errors. The news is that it's equally useful for understanding today's conspiracy politics. It's why, rather than accept that John F. Kennedy was killed by a lone, random gunman, we invented conspiracy theories—to spare us the ontological despair of acknowledging that chaos, not order, rules the universe.

Taleb's *The Black Swan,* published in 2007, became a handbook for market traders—a reminder that random, extreme events like economic crashes overtake the best of plans. They also overtake individuals—those who happened to be in the wrong place during a natural disaster or who worked in a once-healthy industry, such as journalism, that was undercut by a new technology.

Randomness has a subtler significance for ordinary business. It delivers extreme results for some firms and human endeavors but not for others. Life insurance and pensions are predictable businesses because the randomness is contained—average life spans aren't going to suddenly change by much. But given the unpredictability of hurricanes, a property and casualty insurer concentrated in South Florida should prepare for the possibility of very big variations in claims.

People have a tough time accepting that many realms are beyond the power to forecast. Even retrospectively, many occurrences cannot be explained. In general, news events and historical developments are less predictable than people suppose. No one could have forecast Sept. 11, 2001, ▷▷

▲ ILLUSTRATION BY SINELAB

▷▷ with any useful specificity—nor could economists foresee in 1970 that wealth distribution was about to skew, the rich were about to get richer, and middle America was going to stagnate. The number of variables is simply too great. The important variables (say, the potential of a new industry called software) might not even be recognized.

IT'S POSSIBLE TO AVOID falling for the narrative fallacy. If you're an economist, this means trying not to superimpose, say, a pattern from the last economic cycle on the future. If you're in business, assessing diffuse data to figure out whether to go ahead with an investment, it means resisting the temptation to see a coherent story in that data. Reality is messy. If the investment works, it will have to work in a future that abides a wide range of environments—recessions, new competitors, wars.

Investors, in particular, should be wary of falling in love with a stock's story, after which every data point is seen as confirmation. Securities analysis is not an exercise in metaphysical truth seeking. It's a prosaic business of buying stocks at a discount. But judgments can be wrong, or random stuff can make them wrong.

In the broader world, refusing to accept that stuff can go randomly wrong can lead to frustration, then to blame. A *reason* is sought.

Consider a pair of benign examples. The first is from *The Black Swan.* Taleb offers the sentence "The king died, and the queen died." It is unmemorable. Then a slight refinement: "The king died, and then the queen died of grief." Voilà! We have narrative; what's more, we have the satisfaction of causation. No need to wonder why the queen died—it was from grief.

The second is from Michael Lewis's new book, *The Undoing Project.* Lewis describes an experiment conducted by the Israeli psychologists Daniel Kahneman and Amos Tversky, pioneers in behavioral economics. For the purpose of quizzing unknowing test subjects, the two invented "Linda." They cast her as a type: "31 years old, single, outspoken and very bright ... deeply concerned with issues of social justice."

They then asked subjects which was more likely—(a) "Linda is a bank teller" or (b) "Linda is a bank teller and is active in the feminist movement." Since feminist bank-teller Lindas are a subset of all bank-teller Lindas, the correct answer is (a). But 85% of the subjects said (b)! People find it easier to engage with a *feminist* Linda who cares about social justice. This Linda adheres to a preconceived type; she bows to the narrative fallacy.

Kahneman and Tversky, in Lewis's words, were asking how "a person's understanding of what he sees change(s) with the context in which he sees it." Taleb supplies an answer, also anticipated by the psychologists: People need narrative.

It's striking how similar this is to the language of paranoia and conspiracy. The idea of "paranoia" as a political tendency was introduced by historian Richard Hofstadter. In "The Paranoid Style in American Politics," an essay that appeared in *Harper's Magazine* a year after the Kennedy assassination, Hofstadter traced the history of conspiracy theory in American life. A politically paranoid person, Hofstadter wrote, "is always manning the barricades of civilization," engaged (so he believes) in a life-and-death struggle against an "amoral superman" endowed with magical, malevolent powers: "He makes crises, starts runs on banks, causes depressions, manufactures disasters."

Although Hofstadter was writing about McCarthyism, his words apply equally to contemporary Newtown school-shooting deniers, vaccine paranoids, and the sundry confabulations (birtherism, millions of illegal voters) echoed in Donald Trump's speeches. From the distance of half a century, one phrase leaps off the page: "The paranoid mind is far more coherent than the real world."

The *Boston Globe* recently talked to a supporter of the President in Bellevue, Ohio, who lamented the disappearance of mom-and-pop stores. "You can thank the government for that," he said. Notice how his chosen culprit supplies coherence: a simple explanation for a numbingly complex issue.

Hofstadter's "coherence" is the narrative fallacy, harnessed to the saddle of political anxiety. Behavioral economists have shown us why we're prone to think that way. Their insights go far beyond economics, to politics and ordinary life. Narrative fulfills and satisfies. It answers a human need. The queen died of grief. If only we knew it. ■

GOOD STORY, WRONG ANSWER

This psychological experiment, described in Michael Lewis's book *The Undoing Project,* shows how the desire to create a compelling narrative can keep people from reaching the right conclusions.

Scenario:
"Linda" is "31 years old, single, outspoken and ... deeply concerned with issues of social justice."

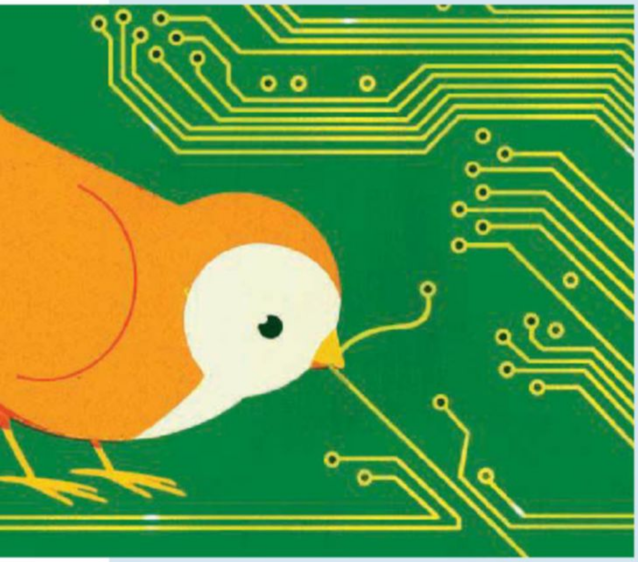
Which is more likely to be true?
(A) Linda is a bank teller.
(B) Linda is a bank teller who is active in the feminist movement.

Correct answer:
(A) We haven't been told what Linda thinks about feminist issues—and by definition, there are more bank tellers than there are feminist bank tellers.

Most popular answer:
Subjects latch on to the feminist label because it makes sense of the other facts they're given—so 85% choose (B).

5 TRENDS TO RIDE IN 2017

Your business and career will benefit if you strategically pursue the smartest of today's ideas. BY VERNE HARNISH



MIMIC MOTHER NATURE

If you're not incorporating the most brilliant ideas from the natural world into what you sell, you're leaving money on the table. Biomimicry is now going mainstream. Forward-looking companies are releasing ingenious products that mirror innovations found in nature, as entrepreneur Jay Harman, author of *The Shark's Paintbrush*, points out. They range from sunscreen that replicates hippos' protective sweat (sans the odor) to hospital wall coatings that emulate sharkskin's antimicrobial properties. Nature has already solved many problems for us; why not take advantage of that?

EMBRACE ARTIFICIAL INTELLIGENCE

Quit worrying about getting replaced by robots and figure out how to use artificial intelligence (AI) to grow your business. Services are coming online that can help even modest-size companies. Finding suppliers who use AI is often the most cost-effective way to get access to the technology. If you're shopping for CRM software, for instance, look for a provider that is heading down this road. And keep an eye out for low-cost options like the Grid, which creates AI-driven websites that design themselves for small and midsize businesses, starting at $96.

JOIN A LEARNING CIRCLE

Most of us absorb far more when seated in a circle of peers who are studying the same thing than from the rows of a traditional classroom or while poring over an online course on our laptops. Instead of going it alone, make this the year you try a self-directed learning group like Circles (at circl.es). It brings together small gatherings of people who want to learn the same thing in private videochat rooms—taking the best features of book clubs into the digital era.

MIX WITH THE BEST

Surrounding yourself with great minds is critical if you want to raise your game. But you won't brush up against top people at the gatherings mere mortals attend. At Genius X, a by-application-only network whose participants pay $100,000 to attend three meetings a year, founder Joe Polish says, "We want them to get a 10x return on their investment." Why waste money on mediocre groups and conferences when you can invest in one great one that will really help you achieve your goals?

RETIRE THE IDEA OF RETIREMENT

Stop planning what you'll do when your career ends and figure out how to continue it—on your own terms. "The second half of your life can be more fulfilling, more rewarding, and richer than the first half," says John Anderson, author of the upcoming book *Living Your Legacy*. People over 50 are launching more businesses than their younger peers, and many corporate types are boomeranging out of retirement and back to their former firms to work part-time. Your future will be far more exciting if you find new ways to keep building on what you have learned and nurture the next generation.

VERNE HARNISH IS THE AUTHOR OF *SCALING UP*.

ILLUSTRATION BY CHRIS GASH

COMPANY SPOTLIGHT

DELOITTE

Deloitte Creates a Distinctive Talent Experience

94%

of employees say Deloitte is a "great place to work."

92

- PERCENT -

of employees say, "I am offered training or development to further myself professionally."

SOURCE: 2016 GREAT PLACE TO WORK® REVIEW™

Deloitte's people are its business; what matters most to their employees throughout its journey, matters most to Deloitte.

"OUR GOAL IS TO CREATE A distinctively Deloitte talent experience," say Mike Preston, Deloitte's chief talent officer. "We want to attract and retain the best talent. To do that, we drive a leadership culture focused on the development and well-being of our people."

Deloitte builds its talent strategy around four themes that it believes are critical drivers of employee satisfaction and engagement:

- **IMPACT:** Finding purpose in the work they do
- **DEVELOPMENT:** Building leadership and professional skills, including milestone programs delivered at Deloitte University, its 107-acre campus in Texas
- **WELL-BEING:** Helping employees integrate both personal and professional ambitions by creating a flexible and nimble work environment that supports mind, body, and purpose
- **INCLUSION:** Fostering an authentic workplace where everyone is valued and respected

To achieve its talent strategy, Deloitte needs to be both bold and innovative, and is leading the way with its Family Leave Program. "We understand that everyone has different needs at different points in their life," says Preston. "One of the ways we remain distinctive is through our decision to lead on leave."

When Deloitte unveiled this groundbreaking new family leave program last fall, employees were elated—and relieved.

They were thrilled that both male and female employees would be entitled to up to 16 weeks of fully paid family leave to support life-changing events such as having a baby or caring for a sick parent or spouse.

There was also the comfort that when these events occurred, the company would have their back.

Six months later, an employee survey shows that 94% of employees who took leave to care for a family member are more likely to stay at Deloitte because of the family leave program and what it says about how the company cares for its workforce.

It's the kind of feedback the leading professional services organization wants to hear as it develops employees to not only serve its clients today but also become the leaders of tomorrow.

"If we want to work with the world's most sophisticated companies, helping solve the world's most sophisticated problems, we have to have engaged people who can deliver in a high-performance culture," says Preston. "That means we need to connect our talent strategy to their needs and create an environment where they can integrate their work life and their personal life and are inspired to unlock their full potential."

BLINK OF AN EYE

A new Silicon Valley company could allow travelers to skip airport lines. BY JEFF JOHN ROBERTS

TECH **THE AIRPORT** of the future sounds like a godsend. Instead of a series of stress-inducing lines, travelers will glide from bag drop to security to the gate without even a boarding pass. Meanwhile, airports will have new opportunities to redesign terminal shops, restaurants, and lounges.

This rosy picture is the vision of Tascent, a company based in Los Gatos, Calif., that makes current generation iris-recognition machines. Tascent says its technology can identify travelers via iris scans in two seconds with over 99% accuracy.

For travelers, the experience involves walking by a two-foot tall module that lights up with a white check mark, indicating if they're allowed to enter a given area. For an airport, iris recognition can replace the time-consuming process of matching an individual to documents, like a boarding pass or passport.

"As opposed to this being just a security solution, this is about convenience, personalization, and efficiency," says Joey Pritikin, vice president of marketing and product management at Tascent, adding that iris recognition is faster and more accurate than other biometric technologies, such as fingerprints or voice recognition.

Pritikin envisions a system in which travelers can move around an airport using their eyes as authentication tools to confirm seats on a flight, enter a private airline lounge, and even clear immigration. The Tascent machines also include facial recognition capacity, which could allow governments to combine iris-scanning data with passport pictures on file.

To allay privacy concerns, the systems can be built as opt-in. That means a traveler would have to give permission for an airline or security service to access eye scans. The company also encrypts identification data and has built other tricks into its system to thwart both potential hackers and impersonators.

So far only a few of the pieces are in place. While airports in London and Dubai are using Tascent's tools, it is only for certain screening activities—not the all-access experience the company envisions. Singapore is also using Tascent's iris-scanning machines in its passport office.

In North America, Pritikin says such integration is probably at least two years away given what he calls the "complex environment" for security. But the seeds are being sown as another iris-scanning company, Clear, is currently providing expedited security services in more than 20 American airports. A private company not tied to the Transportation Security Administration (TSA), Clear uses eye scanning, among other methods, to move passengers to the front of security lines, where they are still subjected to the usual rigmarole of removing shoes and laptops—unless they are also enrolled in the TSA PreCheck program.

Airports can produce some awful experiences for travelers. But more technology is arriving, offering the hope to transform them from cattle pens into something more like super-secure coffee shops.

Tascent's portable eye-scanning devices are appearing in airports. They can record iris scans and verify trusted travelers in two seconds.

COURTESY OF TASCENT

LION ON THE MOVE

THE MAINSTAY OF THE INDIAN ECONOMY, THE COUNTRY'S PRIME MANUFACTURING SECTORS HAVE PROPELLED MAKE IN INDIA'S 18-MONTH JOURNEY AND REINFORCED INDIA'S POSITION ON THE GLOBAL INDUSTRIAL MAP AS AN ECONOMIC POWERHOUSE. THERE HAS NEVER BEEN A BETTER TIME TO MAKE IN INDIA.

FDI

USD 144 Billion – India's highest ever FDI inflow (April 2014 - November 2016)

MAKE IN INDIA

MAKEININDIA.COM

INVEST INDIA

Addressed more than 50,000 investment queries

Facilitating USD 55 Billion investment to create 1.6 million jobs

POWER

50 GW addition in generation capacity (2014-16)

AUTOMOTIVE

4 times growth in Electric & Hybrid vehicles production (2015-16)

FOOD PROCESSING

6 Mega Food Parks operationalized since June 2014; to benefit 30,000 farmers

RENEWABLE ENERGY

1.6 times growth in solar power capacity addition (2014-16)

RAILWAYS

USD 2.3 Billion, the highest ever investment, garnered through PPP projects (2015-16)

TELECOMMUNICATIONS

Reforms for spectrum trading & sharing, spectrum harmonization and spectrum auctioning put in place for the first time (2016)

TEXTILES

Initiatives introduced to provide world-class skilled manpower; 500,000 persons skilled (2014-16)

ELECTRONICS & I.T.

38 new mobile manufacturing facilities with a combined capacity of 20 million units/month, set up since September 2015

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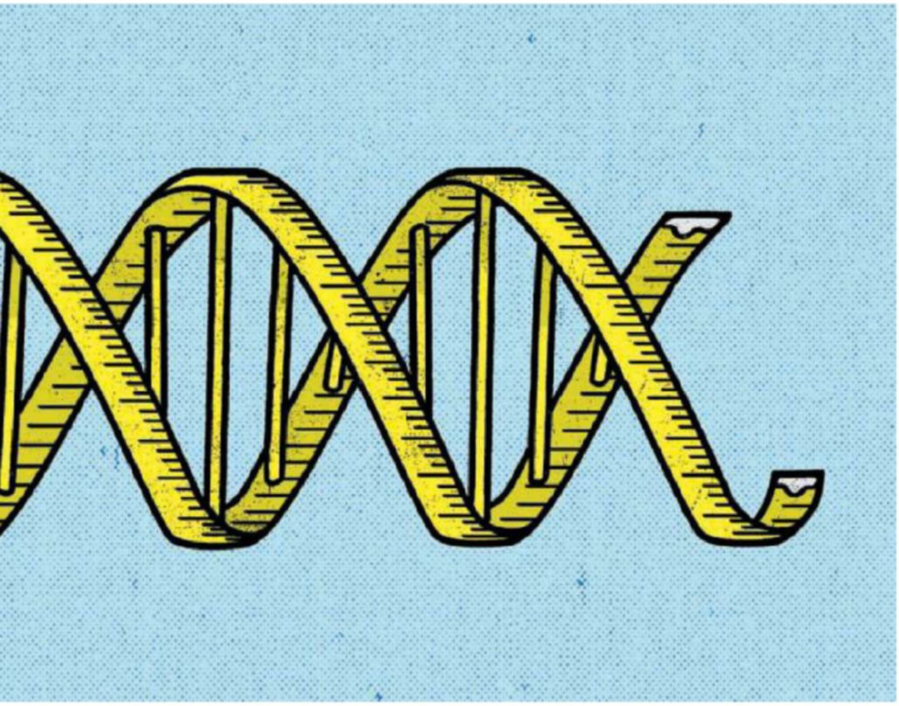


DIGITAL DIET

A health startup is on a mission to challenge the multibillion-dollar diet industry with data.

BY JOHN KELL

BUSINESS IN THE CLOUD

TECH **FOOD ENTREPRENEUR** Neil Grimmer wants Americans to stop bingeing on fad diets.

"Instead of pulling a *New York Times* bestseller diet book off the shelf and giving it a go, people need to understand there may be an answer locked inside of them," Grimmer says. "We've just lost the ability to listen."

With the help of a $32 million investment from Campbell Soup, Zimmer founded Habit, a San Francisco nutrition startup selling a $299 at-home test kit, which crunches a person's unique biological data to produce individually tailored food recommendations. "I believe the future of food is highly personalized," Grimmer says.

The Habit test aims to discover how the body handles carbs, fats, and proteins by asking users to fast for 10 hours and then consume a dense, nutrient-rich shake. Habit then uses blood samples and DNA from a cheek swab to glean details on glucose levels and obesity-related genes, among other factors that could affect metabolism. Results—stored on a secure, cloud-based server—are emailed after a few weeks, and a customer gets one of seven different "habit" recommendations.

Grimmer is a "protein seeker," meaning he needs to eat more protein and consume fewer carbs, according to Habit. The test said he is also lactose intolerant and has issues processing caffeine.

Meanwhile, I lucked out genetically. Habit says I'm a "range seeker." Roughly 50% of my daily intake should come from carbs, 30% from fat, and 20% from protein—a fairly balanced diet. I have no issues with lactose or caffeine.

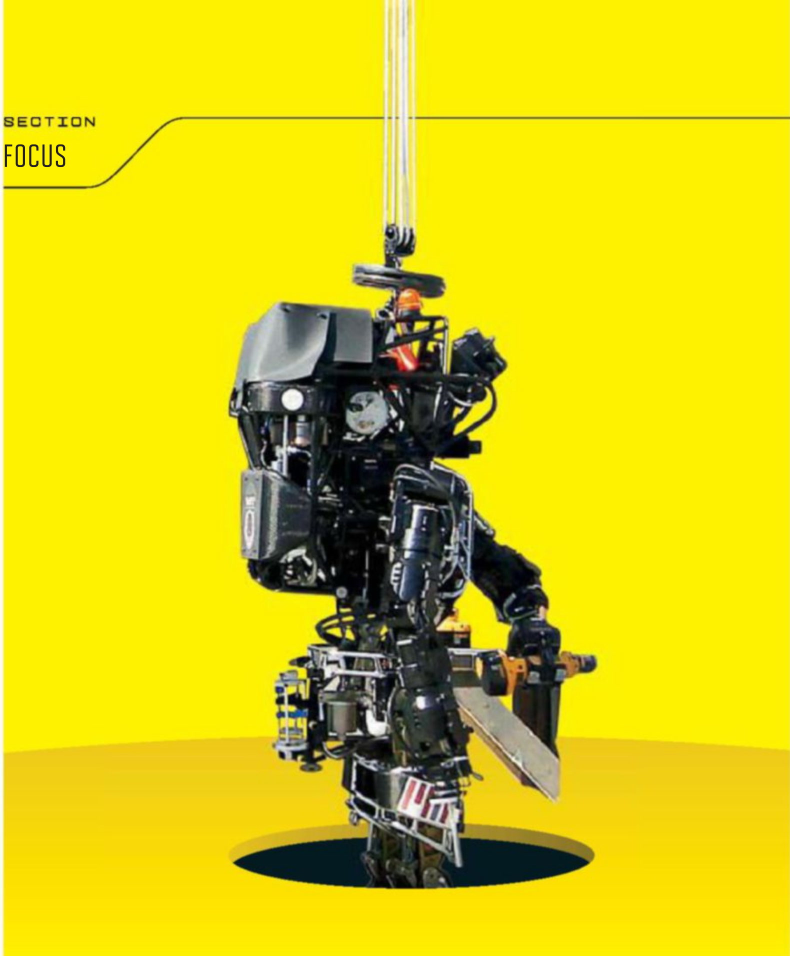
On top of the revenue generated from the test, Habit also sells nutritional coaching sessions and a meal-kit service tailored to an individual's biology. My meals would be filled with ingredients like lentils, salmon, raspberries, and almonds—all recommendations based on what my gut can process effectively. That's a different approach from trying a trendy diet like South Beach or Paleo in the hope of shedding some pounds.

Grimmer has been on a personal foodie quest since going vegan as a teen. He later leaned on carbs to fuel training as an Ironman triathlete, but his diet veered toward extremes. In 2007 he cofounded Plum Organics, a fast-growing children's food brand that was later sold to Campbell Soup for $249 million.

While running Plum to make healthy foods for kids, including his two daughters, Grimmer gained 50 pounds. After seeking out a personal nutrition assessment, he followed a food plan based on his own biology and shed 25 pounds within six months.

Habit, he says, is a way to democratize that process: "When we look back on this period of time when we thought we should all eat the same things, we will view that as the dark ages of nutrition."

ILLUSTRATION BY **DAN PAGE**



Alphabet's top brass have questioned when robots, like this one made by Boston Dynamics, will become profitable.

G IS FOR GRAVEYARD

Several of Alphabet's high-flying "moonshots" have crashed in recent months. BY ROBERT HACKETT

TECH

AS ALPHABET MATURES, it's becoming clearer which of the company's investments are its alpha bets—and which are not.

While most of the Google parent's experimental initiatives make no money at all, several show early signs of promise. Subsidiaries such as smart-home device maker Nest, Internet provider Fiber, and medical disrupter Verily make up the majority of the company's $809 million in non-Google sales.

Still, these "other bets," as the nonadvertising oddities are called, altogether account for less than 1% of the behemoth's annual revenues—and $3.6 billion in operating losses.

Every dollar counts under a new regime of financial scrutiny instituted by financial gatekeeper Ruth Porat. Her revised budgetary strategy aims to salvage, scrap, or—as Porat framed it on an end-of-year earnings call—"calibrate" the company's exploratory gambles. (Alphabet declined to comment for this story.)

The tech giant is famous for its futuristic "moonshots." Here are a few of the ones that flew too close to the sun.

SATELLITES
Alphabet jettisoned perhaps the closest thing it had to a moonshot (in the literal sense) when it agreed to sell its Terra Bella satellite-imaging unit in February. Founded by NASA engineers as Skybox Imaging in 2009, the spacecraft designers are set to enter the orbit of a new owner: space venture Planet Labs.

DRONES
In January, Alphabet revealed it shuttered solar-powered drone division Titan last year. The company said it aims to beam the Internet to remote regions via a network of atmosphere-spanning balloons instead. (See Project Loon.)

DELIVERY
Alphabet's drone delivery program Project Wing has faced turbulence in recent months. Regulatory hurdles, the departure of leader Dave Vos, and the reported cancellation of a Starbucks pilot program have kept the company's unmanned aerial couriers grounded.

ROBOTICS
At the end of 2015, Alphabet began dismantling its robotics division—dubbed Replicant in homage to the sci-fi classic *Blade Runner*—after deeming it far from commercial realization. The company reportedly put Boston Dynamics, the unit's nucleus and maker of animal-like legged machines, up for sale—though it has yet to find a buyer.

MODULAR SMARTPHONES
As early as last year, Alphabet planned to release a cheap, customizable smartphone featuring swappable parts, such as screens and batteries. The modular mobile hardware program, known as Project Ara, landed in the trash heap after failing to move from prototype to production as well as losing its leader to Facebook. (Perhaps some parts aren't so replaceable.)

ANDREW INNERARITY—REUTERS

DATA UNDER CONTROL

Data center infrastructure management (DCIM) optimizes energy, equipment, and floor space in your data center.

BUSINESS AND GOVERNMENT DATA CENTERS process vast volumes of data, and this is only set to increase. In fact, Cisco predicts that global data center traffic will rise threefold between 2015 and 2020.

The unabated surge in information flow threatens to overrun existing data center operations. "Data centers resemble aquatic environments where the data volume has grown from that of a calm swimming pool to the Bering Sea during winter," says Tom Kellermann, CEO of Strategic Cyber Ventures, a Washington, D.C., company.

Organizations are struggling to manage the excess information. Data center managers must handle the growing system demands with limited assets and resources, optimizing energy use, maximizing equipment utilization, and meeting the constraints of floor space. They may need to modify existing data centers, leverage co-location facilities, and consolidate and reposition servers and racks.

Enter data center infrastructure management (DCIM) software. It allows organizations to quickly assess the current state of their data centers, co-location facilities, and "edge" resources to achieve efficiencies. It's no surprise that the DCIM market is growing fast—according to Transparency Market Research the compound annual growth rate is estimated at 21.1% from 2016 to 2024.

FEDERAL GOVERNMENT LEADS DATA CENTER OPTIMIZATION

The government has stepped in to streamline its own data centers. Efficiency requirements set forth by the U.S. Office of Management and Budget in its Data Center Optimization Initiative (DCOI, March 2016) give government data center operators compelling reasons to upgrade and consolidate their facilities and equipment. The DCOI, which evolved out of the U.S. Federal Data Center Consolidation Initiative, targets improvements in energy metering, power usage effectiveness (PUE), virtualization, server utilization, automated monitoring, and facility utilization. The DCOI seeks a reduction in data center spending of $460 million this year as a result of the mandatory improvements.

Private and public-sector data center managers can gain transparency into their operations by using products from Nlyte Software, especially Nlyte Platinum Edition, which includes the Nlyte Enterprise Edition and Nlyte Energy Optimizer modules. With Nlyte Platinum Edition, organizations gain improved insight into computing infrastructure, whether it is in data centers, co-location facilities, or on the IT edge. This results in better management, improved operations, and reduced costs.

"With the increasing importance of IT operations, organizations are now using DCIM to bring the same discipline to the management of computing infrastructure as they have to other foundational parts of their businesses," says Mark Gaydos, CMO of Nlyte Software, based in San Mateo, Calif.

By automating the processes used to manage computing assets across varying locations, organizations tighten the relationship between the business and IT, resulting in greater agility in how IT responds to continuous business needs.

"From the business applications all the way down to the concrete, Nlyte Platinum Edition can help you manage and optimize the resources, assets, and virtual environments running in all your computing locations," says Gaydos. "Trying to manage with spreadsheets and custom-built solutions doesn't provide the transparency, collaboration, and efficient processes to manage today's modern computing infrastructure."

Improved Computing Infrastructure Operations

Powerful software boosts infrastructure efficiency for **Nlyte**'s customers.

THE GLOBAL MARKET FOR DATA CENTER infrastructure management (DCIM) is booming. Its compound annual growth rate is estimated at 21.1% from 2016 to 2024, according to Transparency Market Research.

The performance of Nlyte Software, a Leader in Gartner's October 2016 Magic Quadrant for Data Center Infrastructure Management Tools, mirrors that projection. "Even as a mature 13-year old software company, last year we expanded our customer base by over 20%—including 14 new *Fortune* 1000 customers," says Mark Gaydos, CMO of Nlyte Software, based in San Mateo, Calif. "Organizations are recognizing the importance of tightly managing their computing infrastructure—whether in their own data centers or in co-location facilities."

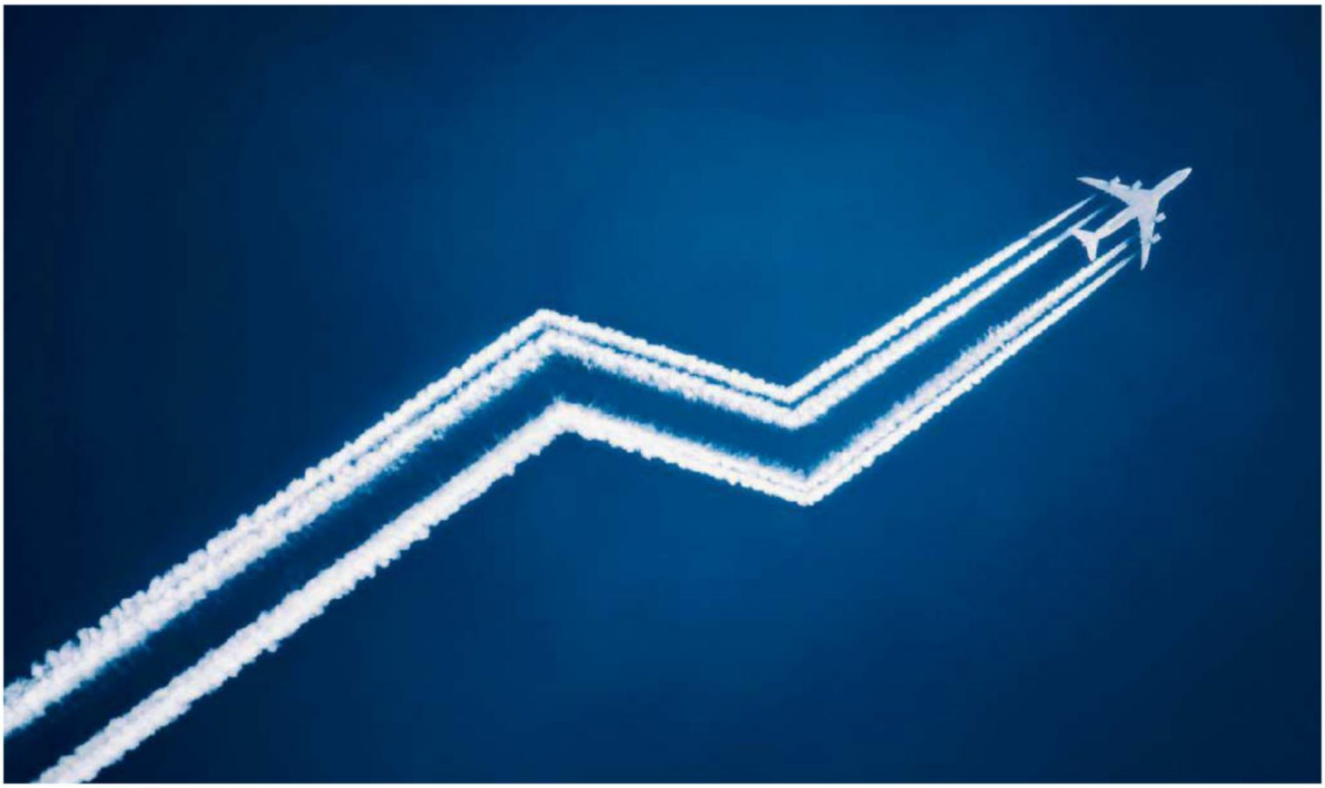
Customer satisfaction is the key driver behind Nlyte's growth. "We have the highest success rate in the industry—a 98% customer retention rate across all industries," says Gaydos. Perhaps that's why hundreds of companies worldwide rely on Nlyte and more U.S. federal agencies use Nlyte Software than any other DCIM product in the federal data center space.

"Many organizations are trying to get by managing their infrastructure with spreadsheets or outdated, legacy tools," says Gaydos. "When they ultimately turn to a mature vendor solution like Nlyte, not only are they surprised by the savings and efficiencies they generate, but they gain access to new best practices used by other organizations."

GARTNER NAMED **NLYTE** AS A LEADER IN IT'S 2016 DCIM MAGIC QUADRANT

Nlyte Software

DCIM market maturity—another reason for Nlyte's success—is following the same path that CRM did. When companies first see a need, they develop in-house or homegrown solutions. Soon vendors emerge to solve the problem, then those vendors mature. Notes Gaydos: "A lot of organizations are moving to the next generation of DCIM, abandoning their home-built tools, and recognizing that Nlyte Software can help them whether their servers and other physical assets are in their own data centers or in co-location facilities."



U.S. STOCKS

AVOIDING A STEEP DESCENT

Airline stocks have roughly doubled over the past few years thanks to cheap fuel and a steadily recovering economy. But how long will they be able to keep investors aloft? BY RYAN DEROUSSEAU

INVEST **IT WASN'T LONG AGO** that Warren Buffett dismissed airlines as businesses doomed to earn meager profits—or none. He even joked, in a 2008 letter to his Berkshire Hathaway shareholders, that the best thing a clairvoyant economist in 1903 could have done for future investors would have been to go to Kitty Hawk and shoot down Orville Wright.

Nine years later one of airline stocks' biggest fans is ... Warren Buffett. Last year, Berkshire Hathaway bought stakes in all four major U.S. carriers—American Airlines, Delta, Southwest, and United Continental—in an investment now worth about $9 billion. What's more, U.S. airline stocks as a group have risen almost 90% since the beginning of 2014. So it's more than fair to ask, What changed Buffett's mind? And is it too late to board this flight?

Buffett is one of many investors who once avoided airline stocks like a CEO avoids flying coach—with ample reason. For decades airlines were trapped in a state of financial turbulence, exacerbated by their vulnerability to oil prices. When fuel costs fell and the economy was strong, margins grew fatter, and airlines flooded the market with new flights ("capacity," in the industry's terminology) and splurged on equipment. When oil prices rose and the economy slumped, profits

turned to losses and debts began to crush the carriers. Planes would fill up in the summer and “be empty in the winter,” says Imperial Capital analyst Michael Derchin. Small wonder that airlines became better known for bankruptcies and poor management than for outsize returns.

The recent hot run for airline stocks has coincided with another period of low oil prices (see chart) and steady economic growth, leaving some to wonder whether aviation’s sad history will repeat itself. Indeed, airlines’ average price-to-2017-earnings ratio remains more than 40% below the S&P 500 average of 18, a sign of investors’ lack of faith.

But there’s a reason bulls think things could be different this time: consolidation. Thanks to a wave of mergers since 2005, the Big Four now command about 70% of the U.S. market. Consolidation has enabled them to control costs, negotiate favorable labor pacts, and cut back on the “fare wars” that used to routinely shrivel their revenues.

Consolidation has also convinced airline managers that they don’t have to scramble for market share by spending on more capacity. In 2015, oil prices tumbled and U.S. GDP grew by 2.6%, but capacity from the three “network” carriers formed by mergers—American, United, and Delta—rose only 2.1%. Conversely, Southwest saw its stock tumble 18% over one stretch of 2016 following its decision to continue expanding while other airlines were restraining growth. Investors will now penalize companies that are “less friendly on capacity,” says Stephens analyst Jack Atkins.

Airlines are also finding it easier to pass fuel costs to customers. The metric analysts love these days is passenger revenue per available seat mile (PRASM). Rising PRASM indicates that the two sides of the economic coin—supply and demand—are in balance. Only United’s PRASM has failed to tick up overall since 2011.

Bill Miller, the famed value investor who manages the Miller Opportunity Trust mutual fund and holds 16% of its portfolio in airline stocks, imagines a new normal in which airlines remain profitable during slumps because of their newfound discipline on capacity. If the airlines show they can withstand the next downturn, Miller says, it could “lead to a significant re-rating” in which investors price airline stocks more like industrial stocks—in other words, at twice the price where they currently trade.

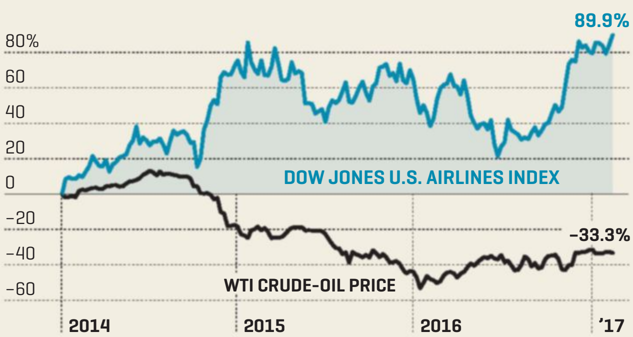
That’s still an “if,” of course; it’s too early for investors to unfasten their seatbelts. Lisa Dong, portfolio manager at Westwood Holdings, currently avoids investing in airlines because of their unusually high debt exposure. Debt helps explain why American and United offer both the biggest upsides and the greatest risks of the Big Four. American’s debt-to-capital ratio is an industry-high 90%, and it’s just beginning to realize cost savings from its merger with US Airways. That’s why its stock trades at a P/E ratio that is 28% below the industry average, even though its stock has jumped 45% since June. United has been bolstered by CEO Oscar Munoz, who has cut costs by increasing the number of planes United leases rather than owns, but its debt-to-capital ratio, at 77%, leaves some investors spooked.

Delta has emerged as the recline-your-seat-and-nap stock among the three network carriers, with the “best balance sheet,” according to Deutsche Bank analyst Michael Linenberg. Many see Delta as the best PRASM manager too; analysts expect it to keep capacity flat and raise prices in the first quarter of this year.

Airlines remain vulnerable to geopolitics, and some investors fret that President Trump could hurt them if he sharply restricts immigration or disrupts trade relations. Still, stock pickers anxious about such issues can pay extra for safety. Southwest has a P/E of 16.5, or 21% higher than the industry average. But it gets 98.5% of its revenues from flights that both take off and land in the U.S.—flights less likely to be delayed by any of globalization’s uncertainties.

FUEL FOR SKEPTICISM

JET FUEL is among the airlines’ biggest expenses, so their profits and stocks tend to rise when oil is cheap and sink when it’s expensive. But the airlines’ new discipline on other costs could help them break that cycle.



SOURCE: BLOOMBERG

COMPANY SPOTLIGHT

TEXAS HEALTH RESOURCES

The Key to a Good Workplace? A Family-Like Feeling

Looking for a great place to work? Look no further.

Jobs.TexasHealth.org

FORTUNE 100 BEST COMPANIES TO WORK FOR 2017

At Arlington's **Texas Health Resources**, employees and management work together and invest in each other to help the company grow and succeed.

JENNIFER DAY HAS ALWAYS had a passion for helping people, so when it came time to choose a profession, nursing was high on her list. Unlike some of her peers, Day wanted to get started as soon as she could. After finishing high school, she enrolled in a Texas Health Resources program that trained grads to become certified nurses' aides. "It was exciting," she says about joining Texas Health at such a young age. "I enjoy the complexity of health care."

Fast forward 16 years and Day is still with the company. She's since graduated from nursing school—Texas Health covered a large portion of her education—and she is now director of critical care and cardiovascular service line at Texas Health Forth Worth. It's been a fruitful journey for Day, but she's not surprised. It's an easy place to work. "It's a family here," she explains. "We're invested in each other."

That family attitude wasn't created by accident, says Michelle Kirby, the company's chief people officer. It's part of Our Texas Health Promise℠: "Individuals Caring For Individuals, Together®." That team-first environment is a big reason why Texas Health was named one of *Fortune*'s 100 Best Companies to Work For. "Our employees' commitment, passion, and feedback has created our amazing culture," Kirby says. "Our core values of respect, integrity, compassion, and excellence are the ties that bind us."

One benefit of the positive work environment is that celebrating achievements becomes an important part of day-to-day operations. The company uses Applause software that makes it easy for staff to recognize a job well done. Coworkers can thank one another, acknowledge milestones, or reward an outstanding performance. "Recognition of individual and team efforts that advance our mission, vision, and values motivates us to continue on our journey to be nationally recognized as an innovative health care system," Kirby says.

While many Americans jump from workplace to workplace, Day expects to be at Texas Health for years to come. One day she'd like to become the company's chief nursing executive, and, with the continued support of her colleagues and senior leaders, there's no reason it can't happen. "They ensure I'm successful," she says, "so I can be confident in my abilities moving forward."

Texas Health Resources®

SOURCE: 2016 GREAT PLACE TO WORK® REVIEW™

STOCKS THAT ARE BETTER-OFF SINGLE

When a merger falls through, investors often shun the jilted companies. They could be missing a great opportunity. **BY LUCINDA SHEN**

INVEST **FEBRUARY MAY BE A MONTH** that celebrates love. But this year it was a month when unrequited feelings and disapproving authority figures doomed at least two would-be power couples.

First, insurers Aetna and Humana abandoned their $37 billion merger after a federal judge sided with Justice Department antitrust regulators and blocked it. Just a few days later, consumer goods giant Unilever rejected Kraft Heinz's $143 billion acquisition offer. All four stocks plunged on the news (Kraft and Unilever shares were still depressed weeks later).

Those failed hookups were the latest in a recent string of missed connections among would-be conglomerators and acquirers. (Drugmakers Pfizer and Allergan, insurer Anbang and hotelier Starwood, and a host of energy companies led 2016's list of star-crossed lovers.) Their shareholders could be forgiven for gloomy reactions. The idea of a merger or ambitious, synergy-promising acquisition is often intoxicating: The combined company can boost profits by pooling resources and axing redundant costs and personnel. In practice, though, the optimism of a corporate wedding often fades as real life intrudes. Fusing corporate cultures can lead to slowdowns, conflicts, and confusion; debts and other costs related to the acquisition become a drag on earnings.

The upshot: Post-merger stocks often underperform. The profit margins, earnings growth, and return on capital of merged companies all fall behind those of their industry peers in the three years following a deal, according to a 2016 study of Russell 3000 companies by S&P Global Market Intelligence. And a recent working paper by UC-Berkeley researchers shows that the stock returns of merged companies three years following the deal are on average 24% lower than returns for rival acquirers that competed for the same targets but lost.

That means that a broken-off merger can be a dodged bullet, says Todd Ahlsten, who oversees $16.5 billion as chief investment officer at Parnassus Investments. Think of a company in merger talks as a house that's on the market, says Ahlsten. Interested buyers discuss upsides (the wonderful school district) and downsides (the horrible plumbing). Similarly, a deal discussion is a kind of company audit, forcing both acquirer and target to take a hard look at their

▲ ILLUSTRATION BY **SAM PEET**

own performance. “You hear what buyers like or don’t like, and you learn what things are value creating and what are not,” he says. The result, says Christian Correa, who comanages the Franklin Mutual Beacon Fund, is that deal breakups often create opportunities to buy shares of a strong company at a low price—especially since the target’s stock often falls. “We get excited,” he says.

It’s hard to find a truly undervalued stock these days, after several months of the Trump Bump rally, but asset managers and stock pickers are still spotting relative bargains. We consulted several pros for their takes on companies that have been involved in broken or thwarted mergers since early 2016 to see which ones could rebound the furthest from their failed romances.

ONE COMPANY that some investors consider better off without its suitor is **Unilever.** As *Fortune* wrote in its March 1 issue, the company has faced pressure to deliver better returns from its socially responsible business model. The rejected Kraft offer could be a catalyst that prods it to do just that. Unilever rejected a deal that placed an 18% premium on its stock price. To keep investors happy, Unilever’s management will have to prove it made the right decision by beating that premium.

Stephen Yacktman, who manages over $16 billion as chief investment officer of Yacktman Asset Management, increased his stake in Unilever at the end of 2016. The company has a lot of potential to grow sales thanks to its international presence, Yacktman says. Moreover, it has fat to trim in the form of layoffs and advertising budget cuts—and those reductions will have a bigger impact for shareholders than they would if Unilever were folded inside a giant like Kraft. Kraft’s operating profit margins were an enviable 23% in 2016. Unilever’s margins were 15%—a sign of how much improvement is possible, says Peter Langerman, comanager of the Franklin Mutual Shares Fund.

Another recent target that may be stronger single: aerospace and defense giant **United Technologies.** The company explored a $90.7 billion acquisition offer last year from competitor Honeywell—at a 22% premium to UTC’s stock—only to call it off in February 2016 because the firms feared they wouldn’t clear antitrust review. Shares of UTC jumped on the offer news, but after the deal was scuttled, they kept rising; they’ve gone up about 20% since then. Investors may have seen the merger offer as a vote of confidence: “If Honeywell thinks it’s a good buy, it helps validate our position,” says Robert Zagunis, a managing director at Jensen Investment Management.

In UTC’s case, responding to antitrust scrutiny might have weakened the company. It “would have been forced to divest really great assets,” says Scott Glover, director of equity research at USAA—most likely parts of its aerospace business, which accounts for 25% of sales. Indeed, that’s the business that makes UTC attractive as a stand-alone. By 2035 the world’s airplane fleet is expected to more than double, and UTC is positioned to capitalize on its relationships with Boeing, Airbus, and the federal government. Zagunis particularly likes the company’s Pratt & Whitney PurePower Geared Turbofan, a quieter and more fuel-efficient aircraft engine.

Pfizer and **Allergan** announced a $160 billion merger in November 2015; they scrapped it last April after controversy erupted over the tax benefits of the merger (which would have enabled Pfizer to move its headquarters from the U.S. to low-tax Ireland). Allergan’s shares are down 22% since the deal was announced and haven’t moved since the breakup. But Parnassus’s Ahlsten expects the stock to recover, partly thanks to Botox, which Allergan produces. He is betting on the injection’s seemingly endless potential treatment applications, ranging from erectile dysfunction to depression. Allergan’s price-to-2017-earnings ratio of 14, measured against the S&P 500’s 18, makes a bet on a Botox bounce look alluringly cheap. ■

THE HIGH COST OF A CORPORATE MARRIAGE

–5.3%
Amount by which profit margins of merged companies trail those of their industry peers three years after a deal closes, according to a study by S&P Global.

–24%
Amount by which stock returns of merged companies trail those of rival bidders three years after a deal closes, according to UC-Berkeley researchers.

COMPANY SPOTLIGHT

ACTIVISION BLIZZARD

A Universe of Fun For Everyone

Inspiring play, competition, and community is what makes this entertainment giant tick.

95% of employees are proud to tell others they work for Activision Blizzard.

94 -PERCENT- of employees say Activision Blizzard is a friendly place to work.

EVERY DAY, ACTIVISION BLIZZARD employees get to work on creating entertainment experiences that shape the lives of millions of people globally. From an Army private in Afghanistan staying connected with his son through *World of Warcraft*, to college friends reuniting online as an *Overwatch* team, to *Call of Duty* fans traveling thousands of miles to cheer on their favorite esports player, Activision Blizzard creates a universe of fun that has something for everyone.

This is what grows out of Activision Blizzard's culture of belonging and inclusivity. It is a company of artists and scientists, LGBT employees and allies, mothers and fathers, military veterans, and people from every walk of life and background. From its annual Veterans Day of Service, to sponsoring London and Stockholm pride events, to making sure pregnant moms get VIP parking and can ship breast milk home from work trips, this is a company where people are celebrated for being themselves.

"Inspiring play, competition, and community is at the core of what we do, for our fans and our employees," says CEO Bobby Kotick. "We want everyone to feel at home on the job, because there are so many opportunities at Activision Blizzard for talented people to make their mark."

With Activision Blizzard's expansion from its game development roots into esports, film, television, and consumer products, the company has grown from 7,000 to 10,000-plus employees in the past 18 months and welcomed new talent from tech, entertainment, and sports to the team. It's an evolution that makes this an even more inclusive and vibrant community.

"There has never been a more exciting time to be part of Activision Blizzard," says Kotick. "As our company community grows, so does our ability to create even greater experiences for fans. The two go hand in hand."

SOURCE: 2016 GREAT PLACE TO WORK® REVIEW™


A STAR ALLIANCE MEMBER
Forget rooftop bars.
Air travel engineered around you
Nonstop you
Experience a flight that transforms ordinary into exceptional: An atmosphere as tranquil as a rooftop bar that encourages optimal relaxation. Enticing cuisine served in the style of a fine restaurant with an impressive view above the clouds. A spacious office, with high-speed Wi-Fi and diverse entertainment options. Refresh, dine, work, delight, sleep: the choice is always yours.
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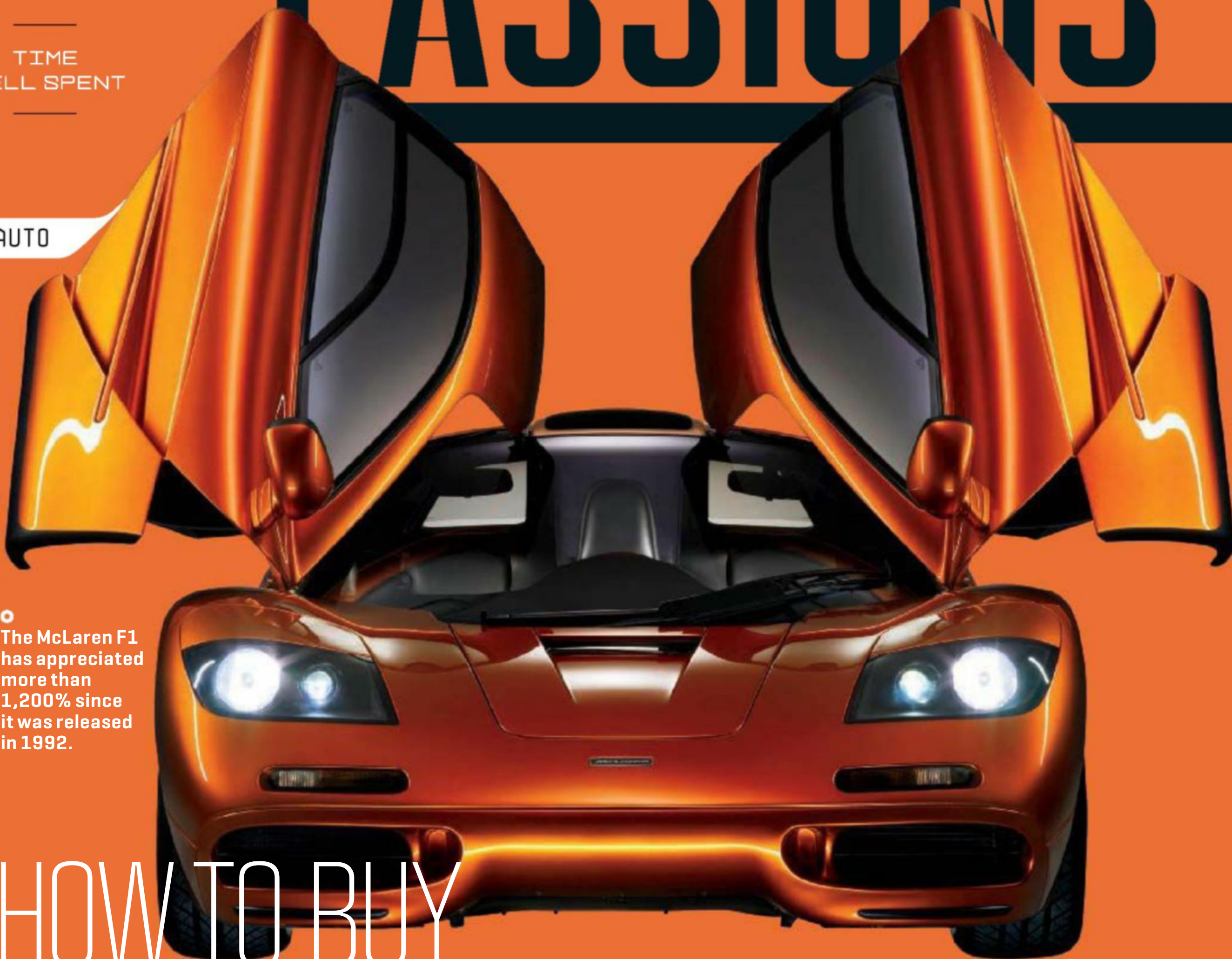
PASSIONS

TIME WELL SPENT

AUTO



The McLaren F1 has appreciated more than 1,200% since it was released in 1992.

HOW TO BUY CLASSIC CARS

Three of the savviest car collectors in the business give their advice on investing with confidence in vintage and exotic cars.

BY DANIEL BENTLEY

JAY LENO NEARLY DIDN'T BUY his McLaren F1, a 627-horsepower hypercar that held the title of world's fastest production car for more than a decade. It turned out to be a sterling investment. "I was the second owner. It was for sale at McLaren, and it was close to a million dollars new. They were asking $800,000, and I thought, 'Well, that's crazy. It should be worth a lot less than that.' But I came back two weeks later, and I bought it."

Twenty years later, his concerns about the price are a distant memory. The last offer Leno received for the car was $12 million. Of course, he's never selling.

Jay Leno

Craig Jackson

Bradley Farrell

Not all car buyers are going to realize such returns. Most are lucky to sell a car for half of what they paid for it. But there's real money to be made in this most thrilling of asset classes.

To help you avoid some key mistakes, *Fortune* spoke with Leno, host of *Jay Leno's Garage* on CNBC; Barrett-Jackson Auction Co. CEO and chairman Craig Jackson; and Bradley Farrell, CEO of the Finest Automobile Auctions. Their advice:

MCLAREN F1: COURTESY OF MCLAREN AUTOMOTIVE LIMITED; LENO: PAUL ARCHULETA—FILMMAGIC/GETTY IMAGES; JACKSON: COURTESY OF BARRETT-JACKSON AUCTION CO.; FARRELL: COURTESY OF THE FINEST AUTOMOBILE AUCTIONS

FALL IN LOVE

FARRELL: I don't talk to my clients and say, "Oh, buy this car based on value," because nobody knows. There's no inside scoop on cars. So I always say find something you're inspired by. Research it, or find a friend who is knowledgeable enough to walk you through that process. Drive it—because it can't be enough that it looks good. And then if you fall in love with it, you buy it.

LENO: If you're buying cars just because you think they'll appreciate—and you couldn't care less about them—well, then you're never really going to be happy. Up until just recently, if you could sell a car for near what you paid for it, then, God, you were a genius, that was unbelievable.

JACKSON: Buy the rarest, best car you can that you love. Over the long term, if you buy good cars they turn out to be very good investments.

INSTANT CLASSICS

Investing in a classic car doesn't always mean buying an older vehicle. It can sometimes mean buying a brand-new car.

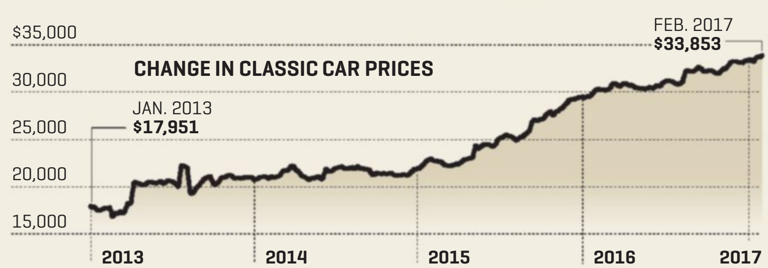
LENO: The McLaren P1 was a little over a million dollars when it came out. They're calling it the first car that has never depreciated because they made only 375 of them. Once those were sold, the prices went up the next day. Now they're $2 million, even ones that are just 18 months old.

Vintage and instant classics [1] McLaren P1; [2] Porsche 993 Turbo; [3] Ford Mustang Shelby GT350R.

JACKSON: When the new [Ford] Mustang GT350Rs came out, they were selling for double the original retail listing. If you want to buy one of these, go ahead of time, talk with the dealerships, and get your name on lists a year or so in advance and buy one at MSRP.

STICK WITH STICK

JACKSON: I hate giving this tip because I'm actually trying to buy some of these for myself, but here you go: The last year of any car with a stick shift in it is going to be a future collectible. As Porsche and everybody else phase out the sticks and have gone to F1-style, double-clutch transmissions, which are



METHODOLOGY: WEIGHTED AVERAGE OF FAIR MARKET VALUE FOR LUXURY AND EXOTIC CARS FROM MODEL YEAR 1991 OR EARLIER. DATA FROM CARGURUS.COM.

McLAREN P1: COURTESY OF McLAREN AUTOMOTIVE LIMITED; PORSCHE 993: NATIONAL MOTOR MUSEUM—HERITAGE IMAGES/GETTY IMAGES; FORD MUSTANG GT350R: COURTESY OF THE FORD MOTOR CO.

a joy to drive, there's still a certain segment that misses the three pedals and running the Ferrari through the gates. Buy the last year of the cars with a stick.

LENO: The Porsche Carrera GT was the last truly analog Porsche. Those were about $450,000 when they came out in 2004. They dropped to about $275,000, and now they sell for close to a million dollars.

GET NOSTALGIC

Vehicles that weren't so desirable to baby boomers when they were first released in the 1980s and 1990s are now finding an audience with Generation X and millennials.

The vehicles, especially odd, niche cars like the *Smokey and the Bandit*–era Trans Am and Ford's Fox body Mustang did particularly well at the Barrett-Jackson auction held this January in Scottsdale.

LENO: I think first-generation [Mazda] Miatas will become collectible because it was a huge hit when it came out [in 1989] and they made a huge impression on people. It was just a fun, light car to drive, in the classic British sports-car tradition. Guys who were maybe 12 or 13 years old when the Miata came out thought it was cool. In the next 15 or 20 years they might want to go back and buy one of those just for the fun of it.

Nostalgia unlocks the highest vintage prices: [1] ***Smokey and the Bandit*–era Pontiac Trans Am;** [2] **first-generation Mazda Miata;** [3] **1937 Bugatti Type 57S.**

PONTIAC TRANS AM, MAZDA MIATA, BUGATTI: NATIONAL MOTOR MUSEUM—HERITAGE IMAGES/GETTY IMAGES

GO BIG

FARRELL: Cars should not really be looked at as alternative assets unless you're dealing with the top blue-chip cars that a collector will always want. In my opinion, [original] Bugattis, even at $3 million, are a steal due to the rarity of the cars. Very few survived in France after the war. There were 8,000 made, and there's only 800 of them left, so they're undervalued.

HOLD YOUR NERVE

FARRELL: [The classic car market] is no different than real estate with its fluctuations. For example, Porsche 993s, particularly the Turbos, are currently selling for around $175,000. I think when the tide comes in, things will start to balance out. Once that happens, I think you'll be able to buy 993s for $100,000 again. But you have to wait to ride that wave back out.

Additional reporting by Kirsten Korosec

INNOVATION + TECHNOLOGY

DRIVING GROWTH IN LOS ANGELES

DEVELOPED BY UCLA'S THINK TANK CITYLAB, THE BI(H)OME IS AN ENVIRONMENTALLY SENSITIVE HOME FOR PEOPLE, BIRDS, AND OTHER SPECIES.

CITYLAB UCLA + KEVIN DALY ARCHITECTS, IN COLLABORATION WITH JON CHRISTENSEN AND URSULA HEISE

AS TECHNOLOGY AND ENTREPRENEURSHIP BOOST THE ECONOMY, THE CITY'S UNIVERSITIES AND COMMITMENT TO WORKFORCE DEVELOPMENT HELP POWER THE TREND.

WHEN THE CITIZENS OF LOS ANGELES VOTED ON NOV. 8 last year, they had more on their minds than presidential politics. A resounding number of Angelenos—just shy of 70%—gave their support to Measure M, authorizing $120 billion in infrastructure investment that will build Metro mass-transit lines connecting far-flung parts of the city, ease traffic congestion, and create 466,000 jobs.

Strongly promoted by Mayor Eric Garcetti, who's running for his second term, Measure M adds a positive note to an already upbeat narrative about L.A.'s economy and its growth. Since 2013, when Garcetti took office, the city has added 135,000 jobs, and its unemployment rate has plunged. L.A. now has more jobs than it did before the Great Recession, and it's expected to add tens of thousands more over the next five years.

A key focus of the city's economic expansion efforts is innovation, and underpinning it, education. "The future of entrepreneurial innovation is right here in Los Angeles," said Garcetti in December, announcing the winners of the 2016 Mayor's Cup, a competition for young entrepreneurs at L.A. universities to pitch creative solutions to L.A.'s challenges. "Our colleges and universities are full of creative people with ideas that can change lives."

The city courts tech companies and entrepreneurs with incentives that include tax subsidies and loans, and Garcetti has identified clean technology innovation as one of his primary growth strategies. In October, that strategy achieved a milestone with the opening of the La Kretz Innovation Campus downtown, a joint venture of the Los Angeles Department of Water and Power and the Los Angeles Cleantech Incubator (LACI).

Los Angeles is increasingly recognized as a leading technology and innovation hub. Last October, TechCrunch called the city "a powerhouse in transportation technology," with SpaceX, Hyperloop One, Faraday Future, and other cutting-edge ventures headquartered here. The 2016 Kauffman Index of Startup Activity ranked L.A. third in the country, up from fourth place in 2015 and ahead of San Francisco and San Jose.

Silicon Beach is booming, growing and expanding throughout L.A.'s Westside. But when advertising marketplace Rubicon Project first moved into its offices in Playa Vista nearly four years ago, "it was a ghost town," says CEO and Founder Frank Addante. "Since then, buildings and offices have popped up everywhere around us, putting us right at the center of the action."

Addante says his mission in founding the company 10 years ago was "to do for the buying and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DRIVING GROWTH IN LOS ANGELES

THIS WALL AT RUBICON PROJECT HEADQUARTERS FEATURES A QUOTE FROM CEO FRANK ADDANTE THAT HE CALLS HIS "PEOPLE STRATEGY."

selling of advertising what Nasdaq did for stock trading, or Sabre for travel reservations." Today, Rubicon Project operates one of the largest exchanges for advertising in the world, reaching over 1 billion consumers across more than 50% of the entire Internet and connecting to approximately 1 billion unique mobile devices. The company auctions off impressions to some 500,000 advertisers in a speed-of-light process that's completed each time a mobile or desktop page or app loads.

Having founded a number of companies in Silicon Valley earlier in his career, Addante "purposely decided" to launch Rubicon Project in L.A. "Playa Vista is absolutely the creative hub of America—from engineering the product to creatively focused innovators. The area has long been a hotbed for top-tier tech talent with the California Institute of Technology, USC Viterbi, and UCLA Samueli all being just a stone's throw away. And, of course, the weather isn't too bad either."

Most observers agree that L.A.'s tech scene could not have exploded the way it has without a steady flow of skilled graduates from the area's highly regarded academic institutions. Los Angeles graduates more engineers than any other metro area in the nation.

UCLA is a major supplier of those engineers and other top talent, but it also generates significant innovation on its own. Among its array of programs, organizations, and incubators aiding student, alumni, and faculty entrepreneurs are Startup UCLA, the Anderson Venture Accelerator, and the UCLA Technology Development Group (TDG).

The university first established an office to commercialize innovation in the early 1990s. Since then, according to Amir Naiberg, associate vice chancellor and CEO and president of UCLA TDG, its breakthroughs have led to a succession of products including an oral medication for treating prostate cancer and a desalination membrane used worldwide to purify drinking water.

Already the recipient of more than $1 billion in research funding annually, the university recently received another $2.2 million that will support educational entrepreneurship programs and early-stage startups, aiming to bring more UCLA inventions to the marketplace, says Naiberg. "Our goal is to be a cornerstone of L.A.'s ecosystem of innovation and entrepreneurship," he says.

Of course, not everyone is going to be an engineer or launch a startup, but industries vital to the city going forward, including advanced manufacturing and healthcare, still require skilled employees. "Nearly 25% of our population has less than a high school education," says Jan Perry, General Manager of L.A.'s Economic and Workforce Development Department (EWDD), which provides a broad range of training, funding, and technical assistance in the areas of business and entrepreneurial support, employment, and youth development. "We must align workforce training and education with workforce needs."

The EWDD partners with L.A.'s Unified School District and the L.A. Community College District to upskill job candidates and prepare them for STEM and STEAM jobs. "Community colleges are nimble and can adapt curriculums quickly," says Perry. "They also offer affordability. You can receive training in something specific and do it in components with stackable degrees, and that opens the door for a lot more people."

Last year, Mayor Garcetti announced $2.4 million in new job-training initiatives to help struggling Angelenos find work in high-demand industries. In September he launched L.A. College Promise with a number of local and national partners, making Los Angeles the largest city in the nation to guarantee eligible high school graduates beginning in the Class of 2017 at least one tuition-free year of higher education through community colleges.

"We're committed to continue building a strong pipeline," says Perry, "for employers, residents, and for our future."

Art and books on display at Myopic Books in Wicker Park.

THE CITY OF BROAD SHOULDERS

Let *Fortune*'s concierge expert show you how to do the perfect weekend in Chicago. **BY ADAM ERACE**

TRAVEL

IN A PRIME LOCATION among Chicago's award-winning restaurants, platinum shopping, and inspiring architecture, you'll find the hip Virgin Hotel, the first property in Sir Richard Branson's hotel line. Its concierge, Chad Edwards, is the man in the know to get the best out of your time in the Second City. ▷▷

CHARLES COOK—GETTY IMAGES

[1] A Street of Good Children cocktail at the Violet Hour. [2] The First Lady architectural boat tour. [3] The Museum of Contemporary Art.

Best new restaurant: One of my personal favorites is the Dearborn. It's modern yet kind of classic, like my mom's taste mixed with a minimalist's Pinterest board: old tiles, industrial light fixtures. The white bean hummus on its meze plate and the bone-in filet mignon are my go-tos.

Exclusive reservation: Outside of a ticketed dinner like Alinea, the hardest table to grab is at Girl & the Goat. It has been open for a few years, but the demand is as high as ever because of chef Stephanie Izard's reputation for quality food. No one I know has ever had anything bad to say about it.

Emerging neighborhood: Every time I'm in Logan Square, I find new places popping up. There's a cozy redone movie theater and tons of little galleries, like Galerie F, which I love, and that's right across the street from East Room, one of my favorite new places for live music in Chicago.

Cocktail spot: The bartenders are very nice and patient at the Violet Hour, a bar that looks like nothing from the outside but inside is intimate and chic, and in a welcoming way. The drink menu is so long, I usually just wind up talking to whoever is behind the bar about what I'm in the mood for, and he comes up with something great and different every time.

Under-the-radar museum: The Museum of Contemporary Art lives in the shadow of the Art Institute, but it's just as world-class. The MCA's collection changes up every few months, so it feels like it's a whole new museum every time I'm there.

Shopping spree: On Milwaukee Avenue between Division and Damen in Wicker Park, where lots of independent boutiques have opened recently, Kokorokoko is a great vintage shop stocked with '90s throwback stuff like *ALF* trading cards and New Kids on the Block tapes.

River activity: The architectural boat tour on the Chicago River is one of the most touristy, popular things to do in Chicago, but it's popular for a reason. I do it every year and take friends. Chicago Line and First Lady consistently do the best job.

The deep-dish dish: In Chicago, you either like Lou Malnati's or Giordano's for pizza; it's like the White Sox or the Cubs. I'm partial to Lou's for the flavor of the sauce. I always recommend the Gold Coast location.

THE $10,000 DAY

We asked Edwards to plan us a singular, spectacular day in Chicago: Start your day with the Blues Brunch at River Roast, an upscale pub on the Chicago River, to get a taste of great food and live music. Then head up to Wrigleyville, where we'll rent you out a rooftop to watch the World Series–winning Cubs start their season. Make your way back south to the Art Institute, but not before a quick stop to the Gold Coast for luxury shopping on Oak Street. Then have the Chicago Helicopter Experience pick you up for a tour of the city before letting chef Grant Achatz seduce your taste buds at Alinea. Finally, we'll charter the *Anita Dee II* yacht for a boat party with DJs William Galvan, Michael Serafini, and Bridget Marie. (Chicago is the birthplace of house, after all.) We'll stock the yacht with Lou Malnati's pizza for everyone.

COCKTAIL: EDEN LAURIN; BOAT TOUR: ADAM ALEXANDER/CHOOSE CHICAGO; STAIRCASE: JIM YOUNG—REUTERS

ILLUSTRATION BY MARTÍN LAKSMAN


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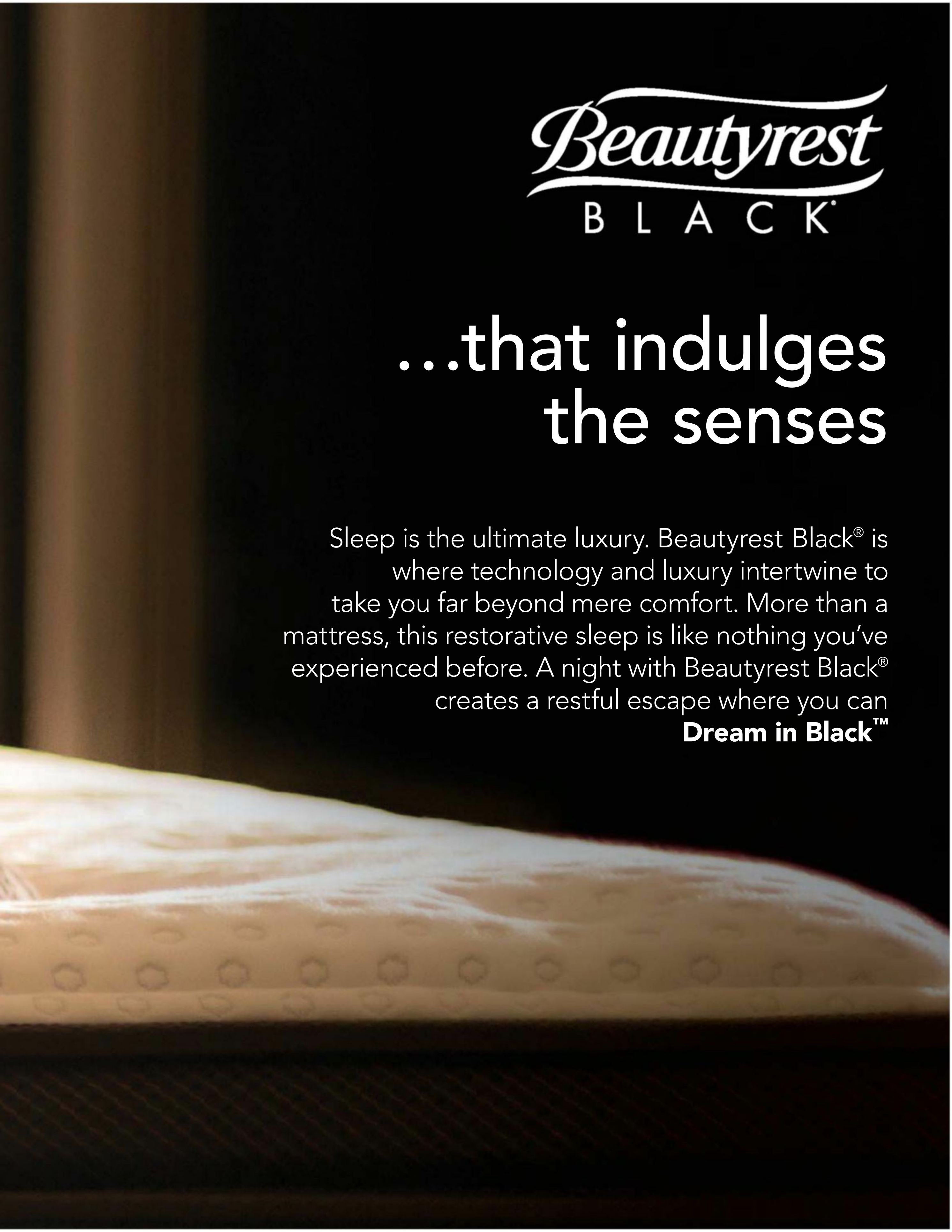
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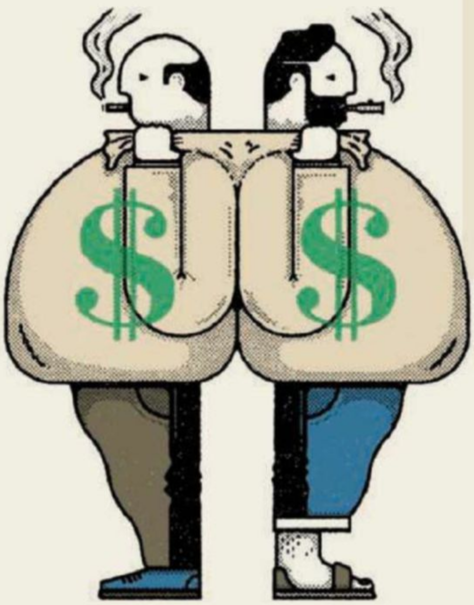


OF VICE AND MEN

What kills more jobs, private equity or venture capital? When it comes to tech, each side says the other—but the money-grabbers are missing the point. BY ERIN GRIFFITH

IN FEBRUARY venture capitalist Michael Moritz penned a scathing *New York Times* op-ed about the evils of private equity that, in theory, hit all the right notes. He bemoaned the PE industry's risky use of debt to acquire companies, its tendency to lay off workers at those companies, and its exploitation of the carried-interest tax loophole to enrich its fund managers. He tied Blackstone Group CEO Stephen Schwarzman's wealth to the populist rhetoric of the 2016 presidential election and criticized Schwarzman's cozy role on President Trump's business council. Moritz even mocked the term "private equity" as whitewashed public relations spin, arguing that the old name, "leveraged buyouts," is more accurate.

One week later, Schwarzman threw himself a 70th birthday party as glamorous and over-the-top as his notorious 60th, a black-tie fete so extravagant (a performance by Rod Stewart, a dinner of lobster and filet mignon, a life-size painting of himself) that it became a symbol of Wall Street excess during the 2008 financial crisis. Another tone-deaf *Bonfire of the Vanities* bash should have been the perfect moment for America's economically challenged citizens to raise their pitchforks and demand an end to the country's growing wealth disparity. But it didn't happen. Mockery of the camels, trapeze artists, and Gwen Stefani performance at Schwarzman's 2017 blowout barely escaped the insider-iest corners of finance Twitter. The country reacted with a shrug.

Instead, an article about Silicon Valley elites investing in doomsday bunkers garnered much more attention, confirming a sneaking suspicion among Moritz's technology-industry peers: Wall Street fat cats are no longer the country's cartoon villains of choice. There is a new enemy, and he or she is in a power center on the opposite side of the country.

The tech industry has plenty of its own billionaire playboys who don't always consider the impact of their "disruption" or show empathy to the victims of it. They're just as guilty of killing jobs—not by shipping them overseas so much as making them obsolete (or at least better suited to robots). That bankers act cynical, power hungry, or greedy doesn't surprise us. But Silicon Valley's mantra to "make the world a better place" in the process only adds insult to injury.

Critics swiftly objected to Moritz's essay. The *Times*' own M&A columnist called it "misguided." A private equity lobbying group noted that startups employ debt too. And finance professionals pushed back on Moritz's job-killer argument, noting that Google, a blockbuster investment for Moritz at his firm Sequoia Capital, has upended the advertising and media industries (and may someday do the same for taxi and truck drivers).

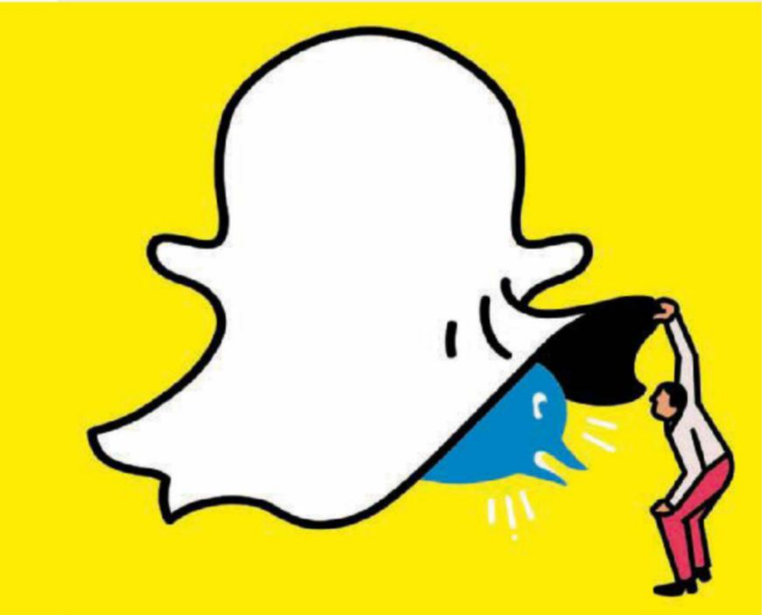
It would be silly to halt technological progress, including potentially lifesaving breakthroughs like self-driving cars, to preserve redundant jobs. But the new Masters of the Universe ought to be concerned about what will happen if the people whose livelihoods they are displacing rise up in protest. Acknowledging the negative effects of their disruptive technologies would be a start.

FOR MORE
Follow Erin Griffith on Twitter (@eringriffith) or at fortune.com/boom.

▲ ILLUSTRATION BY **MICHAEL GEORGE HADDAD**

SNAP IS CLOWN CAR 2.0

The latest, hottest IPO is destined to follow in the footsteps of another social media giant. Hint: It isn't Facebook. **BY DAN LYONS**



IMAGINE SOMEONE trying to sell you a hot new Internet stock with the following pitch: (1) The company's losses are greater than its revenues. (2) Its customer growth is slowing. (3) Though it may tell you otherwise, it competes head-to-head-to-head with Google and Facebook. (4) Its shares carry no voting rights—which means the 26-year-old CEO, who is working in his first job, can never be dislodged. And (5) it's expensive as all get-out.

I write this hoping that you, dear reader, are not among the hordes of optimistic IPO chasers who bought shares of Snap, parent of messaging app Snapchat, on its debut in early March. Because the 1-2-3-4-5 pitch above is a sucker punch.

Snap's bankers depicted the company as the next Facebook and presented Evan Spiegel—Snap's boyishly photogenic cofounder and CEO—as a visionary wunderkind like Facebook founder Mark Zuckerberg. Hmm. Good story.

DAN LYONS is the bestselling author of *Disrupted: My Misadventure in the Start-Up Bubble.*

Here's another good story: When Facebook went public, it was already gushing money, posting a net profit of $1 billion on sales of $3.7 billion in 2011, the year before its IPO. In 2016, Snap lost $515 million on sales of $404 million.

Indeed, if Snap had an analog in the pantheon of social media companies, it wouldn't be Facebook, but rather Twitter—um, and that's not a good thing. Twitter was losing money when it went public in 2012, and it has kept right on doing so. Its stock has slumped to one-third its price on the first day of trading.

Snapchat, which has nearly 160 million daily active users, makes money selling ads—the same stash of digital gold that's gobbled up in bulk now by Google and Facebook. "What Snap offers isn't very unique or defendable," says Jeff Rosenblum, cofounder of Questus, a digital-ad agency based in San Francisco. "I'd say they are going to be fighting very hard for the small piece of the pie that won't be owned by Facebook and Google."

That may be why Snap, in November, started selling sunglasses with a built-in camera for $129 and began calling itself a "camera company."

So, you wonder, do cool, photo-grabbing shades make Snap worth a cool $31 billion? That was the valuation of the newbie public company two days after its March 1 offering.

"I wouldn't touch it with a 100-foot pole," Fred Hickey, editor of the investing newsletter *High-Tech Strategist,* told me. "It's the kind of offering that can only happen after the second-longest bull market in history, when investors are delirious with their invincibility." Or there's this, from a Florida hedge fund manager, who sniffed: "I wouldn't buy Snap stock with my dog's lunch money."

Facebook CEO Mark Zuckerberg once quipped that Twitter was "a clown car that fell into a gold mine." Snap looks a lot like Twitter, only with more hype and hubris. Says Mark Spiegel, who runs Stanphyl Capital, a New York City hedge fund: Snap "will definitely be on my radar screen"—as a candidate for short-selling.

ILLUSTRATION BY **SAM ISLAND**

COMPANY SPOTLIGHT

FIRST AMERICAN

A PEOPLE-FIRST PHILOSOPHY: Taking Care of Employees Pays Dividends

At **First American,** a provider of title insurance, settlement services, and risk solutions for real estate transactions, "People First" is the corporate credo. "If we treat our employees well, we'll take care of our customers, and if we run the business well, we'll take care of our shareholders," says Dennis Gilmore, CEO of the 128-year-old company based in Santa Ana, Calif. "Everything flows from that, and it has for many decades."

TO THAT END, First American prides itself on promoting an inclusive workplace that empowers employees to be their best. It also continually seeks to find new ways to improve the employee experience. "The majority of our business is tied to the real estate market, which is cyclical in nature," Gilmore adds. "And despite the challenges those cycles present, our culture has remained strong."

The company emphasizes the importance of providing outstanding customer service as well, the impact of which can be seen in its recent engagement survey that showed that 93% of First American employees agreed that "First American is truly customer-oriented."

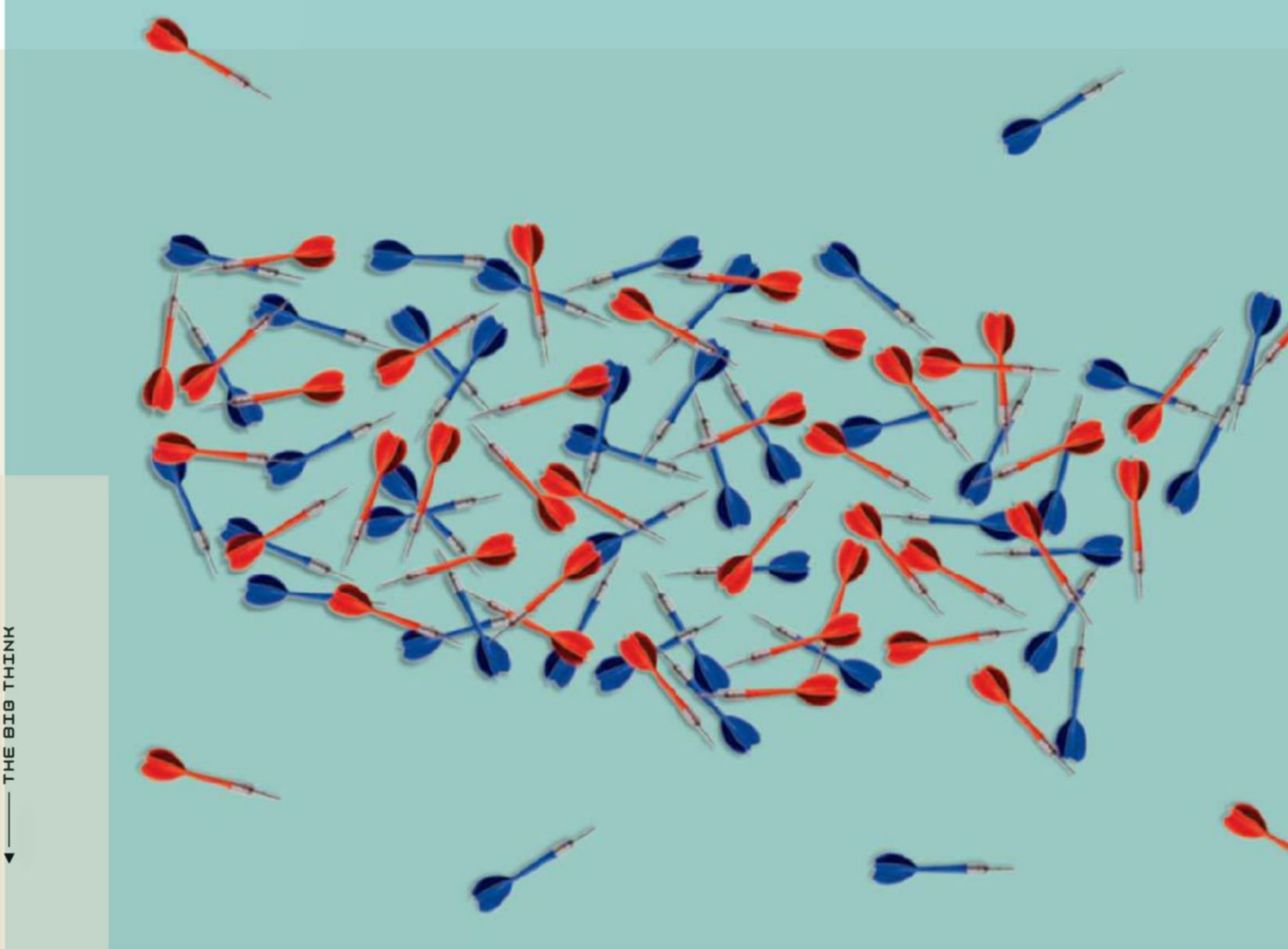
These efforts may help explain why First American is one of only six companies to appear on each of the following four celebrated lists from *Fortune* in 2016: 100 Best Companies to Work For, 100 Best Workplaces for Women, 50 Best Workplaces for Diversity, and the *Fortune* 500.

The "People First" mantra is also reflected in the company's commitment to career development for women, who make up nearly 70% of the First American workforce. In 2012, the Women in Leadership program was launched to support and advance the career paths of women in company wide leadership roles. Since that time, 29% of participants have been promoted, and nearly all are still with the company. "People First" further extends to the company's advocacy and diversity initiatives. In addition to community development and human services, the company's "Caring for Our Community" program supports health causes of interest to women, including breast cancer research and heart health.

Gilmore says the motivation for First American's people-centric philosophy is straightforward and its results are unmistakable. "We don't do any of this because it's in vogue. We do it because it's the right thing to do," he says. "It pays dividends year after year—it makes our company stronger."

FIRST AMERICAN®

First American



WHY POLITICS IS FAILING AMERICA

Beware the political–industrial complex. They rig the game for their benefit. The public interest is the loser. Here's how to fix it.

BY KATHERINE M. GEHL AND MICHAEL E. PORTER

BY NEARLY EVERY MEASURE, America's political industry is thriving. Campaigns are now seemingly endless and put to work an immense roster of canvassers, pollsters, and staff; top consultants are in high demand; media interest is bottomless; and when it comes to elections, overall spending (a normal proxy for an industry's success) is near an all-time high.

There's just one problem. The people who are supposed to benefit from this booming enterprise—the American public—have never been more dissatisfied. The share of Americans who say they have at least a "fair amount of trust in political leaders" hit its nadir last September, according to Gallup. And in February, nearly one-fifth of Americans (19%) said dissatisfaction with government was the single biggest problem the country faced. By contrast, just 9% of those surveyed by Gallup felt "the economy" was America's most pressing concern.

Why is the political-industrial complex

▲ ILLUSTRATION BY **OLIVER MUNDAY**

flourishing while its customers are less satisfied than ever? To answer that question, we've applied the tools of business analysis to American politics. Our conclusion: U.S. politics is an industry—a duopoly that's about as anticompetitive as you're likely to find these days. The result, as a prominent 2014 study by Princeton's Martin Gilens and Northwestern's Benjamin Page shows, is that the preferences of the average voter have a near-zero impact on public policy.

It wasn't always that way. America's political system was long the envy of the world. The system advanced the public interest and gave rise to a grand history of policy innovations. Today, however, it serves as only a barrier to solving nearly every important challenge our nation needs to address.

The Harvard Business School's project on U.S. competitiveness found that Washington has made virtually no progress on any of the essential policy steps needed to restore prosperity and growth. A broken political system has suddenly become the greatest threat to our nation's future.

So how did we get here? In part, by stealth. Over the last several decades, the American political system has been slowly reconfigured to serve not the public interest, but rather the interest of private, gain-seeking organizations: our major political parties and their industry allies. These players have put in place a set of rules and practices that, while largely unnoticed by the average citizen, have enhanced their power and diminished our democracy.

Indeed, America's current political system would be unrecognizable to our founders. Many of its day-to-day components have no basis whatsoever in the Constitution—which offers no mention of political parties, party primaries, caucuses, ballot access rules, segregated congressional cloakrooms, party-determined committee assignments, filibuster rules, and countless other practices that drive today's dysfunction. John Adams, our second President and one of the most astute thinkers among America's founders, even warned the upstart nation against slipping into a duopoly, saying, "There is nothing which I dread so much as a division of the republic into two great parties, each arranged under its leader, and concerting measures in opposition to each other."

PRESIDENT JOHN ADAMS "DREADED" THE THOUGHT OF THE AMERICAN REPUBLIC DIVIDING "INTO TWO GREAT PARTIES, EACH ... CONCERTING MEASURES IN OPPOSITION TO EACH OTHER."

But that, of course, is precisely how things stand now. And the key to fixing it is to first see our political system as the multibillion-dollar industry it is—a business with significant economic benefits for its participants.

At its center, as we said, is the duopoly: the two major parties. Around them has arisen what we call the political-industrial complex—an interconnected set of entities that participate in and support the industry: special interests, lobbyists, pollsters, consultants, partisan think tanks, super PACs, and, yes, the media too. Virtually all the industry players are connected to one side or the other—the right or the left.

Competition in politics appears intense—witness the numerous candidates, sky-high spending, and minute-to-minute media coverage. And as any student of economics will tell you, competition is typically good for customers. *But not here.* That's because the competition to win elections is on the wrong things. And both elections and governing involve an anticompetitive collusion of interests. Hence, the key customers of this industry—the special interests and donors—are largely protected by power brokers on both sides. Increasingly, political competition is designed not to advance the public interest, but rather to cultivate loyal funding sources and motivate partisan primary voters.

Critical suppliers to the industry, such as campaign consultants, pollsters and data gurus, fundraisers, legislative staff, and many think tanks, are closely aligned with the duopoly. So, too, are our television sets divided in two, with brigades of channels reinforcing each side's viewpoints.

Independent candidates face huge challenges in securing the funding and professional infrastructure needed for a modern campaign. (Any challenger outside this two-party system would have a hard time even getting on a debate stage.)

And this is where America's politics seem to break the economic rules: After all, widespread customer dissatisfaction ought to encourage new competition in the marketplace. But in the industry of American politics, there are virtually no upstart entrants. No significant new party has emerged in the U.S. in over a century.

The parties have rigged the electoral process to guarantee division and disincentivize problem solving and progress. Partisan gerrymandering and primaries together are crucial to this structure. A legislator from a gerrymandered district must cater to the partisan primary voters from his or her own party, not answer to the general-election voters, much less to citizens overall or to the public interest. In a party primary in which partisans cast most of the votes, those with moderate views are an endangered species. And a legislator who pursues compromise may be punished by more extreme partisan activists fielding a challenger further to the left or right in the next primary. Moderation has become mere fodder for political attack ads; moderate legislators are a dying breed. There is no more compromise.

The net result is that the duopoly competes to divide citizens, not deliver solutions.

And while the evidence may be strong that this entrenched two-party system has blocked new competitors, artificially restricted and narrowed voter choice, and colluded to set rules that ensure their near-total market share, antitrust regulators aren't likely to break it up. (Unfortunately, antitrust statutes don't apply to politics.)

That said, there are good, practical ideas for political reform that will help citizens retake control of their political system. Here, a brief playbook:

▸ **Institute nonpartisan primaries.** The current primary system shifts campaigns (and governance) toward the extremes. But opening up primaries to all citizens would force all candidates to appeal to a general electorate, rather than just the far left or far right of their party. Under a nonpartisan system, there would be one primary that included all candidates no matter their affiliation. The top two vote-getters—or better yet, the top four—would then advance to the general election.

▸ **Institute nonpartisan redistricting.** Gerrymandering is the process of drawing legislative district boundaries that create a strong artificial advantage for the party in control. It reduces competitive seats, leads to extreme candidates, and minimizes accountability of elected officials.

AMERICAN POLITICS BREAKS THE ECONOMIC RULES: WIDESPREAD CUSTOMER DISSATISFACTION OUGHT TO ENCOURAGE COMPETITORS TO MOVE INTO THE MARKETPLACE. BUT NO SIGNIFICANT NEW PARTY HAS EMERGED IN THE U.S. IN OVER A CENTURY.

This has to change.

▸ **Don't let private parties control the House and Senate rules.** Partisan control over day-to-day legislating and governance must be significantly reduced. If rules and practices that block compromise and collaboration are eliminated, it will be much easier to have an open, bipartisan discussion about the legislative fixes the country needs.

▸ **Reduce barriers to entry for independent candidates.** In this rabid partisan atmosphere, it won't be easy recruiting qualified and talented independent and moderate candidates to run for office. But to encourage this, we must first build an election and financing infrastructure that begins to level the playing field.

▸ **Embrace the Senate Fulcrum Strategy.** A relatively fast, efficient, and effective way to help break the current political gridlock is to elect three to five centrist independent U.S. senators with a problem-solving mind-set and agenda. They can act as a swing coalition that potentially denies either party a majority and force change from the center (see centristproject.org for details).

Some of these steps are already starting to gain traction. California and Washington have instituted nonpartisan primaries. Recent court rulings against partisan gerrymandering are a promising start as well. And groups are forming to support moderates and independent candidates. But taking back our political system will require a large-scale, sustained effort, including significant political philanthropy. We call on the business community—which understands how fundamentally important competition is—to help restore healthy competition to advance the public interest in American politics.

Donald Trump capitalized on the deep dissatisfaction with Washington to get elected President in a campaign marked by extreme divisiveness. Yet Trump could not have won without being part of the duopoly. The industry structure has not changed, and it needs to. It's time to restore our democracy. Our competitiveness—and the future of all Americans—depends on it.

Katherine M. Gehl is the former president and CEO of Gehl Foods as well as a political innovation activist and speaker. Michael E. Porter, professor at Harvard Business School, is a competition and strategy expert. They will release a full report on this topic in April (see www.hbs.edu/competitiveness).

COMPANY SPOTLIGHT

PROTIVITI

Cultivating a Great Place to Work Drives Success at Protiviti

FORTUNE 100 BEST COMPANIES TO WORK FOR® 2017

For the third year in a row, the company has earned a spot on *Fortune*'s list of 100 Best Companies to Work For.

97% of employees say that Protiviti is a friendly place to work.

NINETY-THREE PERCENT of Protiviti employees feel that they are given a lot of responsibility.

"**IT'S ONE OF OUR** company goals," says Joseph Tarantino, president and CEO of the global consulting firm. Launched in 2002, Protiviti started with 700 professionals formerly with Arthur Andersen's internal audit and risk consulting practice. Since then, Protiviti's management team has worked strategically to create a workplace that emphasizes teamwork, personal empowerment, creative mentoring, and global opportunities.

Today, the firm employs 4,000 people in more than 70 offices in over 20 countries. It's growing at about 20% a year, both in revenue and in number of employees.

Roughly 70% of Protiviti's employees were born after 1980, making them firmly part of the millennial generation. Their intelligence, initiative, and desire to make a difference are considered a plus at Protiviti, where the firm's workplace environment reinforces these qualities.

Every employee, for example, gets over 100 hours of training each year. Training is facilitated with global teams so that employees get to work with colleagues from different cultures. An online university offers on-demand courses and access to other learning tools, and a sabbatical program lets employees take up to three months to explore personal, educational, or charitable projects.

Mentoring is taken seriously. From day one, every employee is connected with three coaches. The peer advisor is responsible for helping the employee get the lay of the land. The career advisor shares career advice and feedback, while the senior executive advisor provides motivation and inspiration.

"It is a bit like a greenhouse," says Scott Redfearn, executive vice president of global human resources, noting that once recruited, people are nurtured and can grow, put down roots, and even transplant to new locations, if they want.

The work itself is compelling, with employees seeking solutions to the critical problems faced by companies every day, says Tarantino: "It could be a cyber issue or a data breach, a regulatory compliance issue or enhancing internal controls."

One measure of success: The employee turnover rate has been steadily dropping for the last 10 years. "We listen to our employees and act on what they are telling us," says Redfearn. "Our people value their ability to shape this organization."

protiviti®

Face the Future with Confidence

SOURCE: 2016 GREAT PLACE TO WORK® REVIEW™

100 BEST COMPANIES TO WORK FOR 2017

BY MICHAEL C. BUSH AND SARAH LEWIS-KULIN

• **SINCE 1998,** *Fortune* has been publishing a list of employees' 100 favorite companies in the country. The result has been a two-decade tour de force showcasing industry-leading benefits, like Adobe's six-month paid maternity leave, and mind-bending perks, like Publix's holiday bonus of up to a month's wages for supermarket employees. ▷▷

ILLUSTRATIONS BY **JONATHAN CALUGI**

▷▷ But far more important than any lavish policy or fancy freebie, employees in the organizations on this list say they trust their coworkers and managers.

These companies aren't just being generous, of course. Over the years our research and consulting firm, Great Place to Work, and many other scholars have consistently found that the workplaces that score high on metrics of trustworthiness also finish first in profitability, revenue growth, stock performance, and other key business measures. See page 137 for an in-depth look at an investor who uses the list to beat the market.

Despite their success, the 100 Best aren't perfect. Our research finds major disparities among the experiences of frontline employees, as well as by gender, race, and full- or part-time position. And many are still dominated by one demographic group, which can cause large swaths of company populations to feel they are unable to achieve the same levels of success.

That's why starting this year and going into the next, we're raising the bar for how we calculate what makes a great place to work—and putting a new focus on the companies that are bringing out the best in everybody, from the boiler room to the corner office. Our new methodology, which will be rolled out in full for the 2018 list, emphasizes the consistency of employees' experiences, regardless of who they are or what they do, rather than looking primarily at companywide averages.

Of course, many of the list's current companies are already inclusive places to work. And evidence shows that also helps them leave competitors in the dust.

In studying the 100 Best and the nonwinning contender companies for 2017, we found that the more consistent and inclusive an organization is on key factors related to trust, and the more diverse it is demographically, the more likely it is to outperform peers in revenue growth. Notably, companies that score in the top quartile of success on these metrics enjoy three times the growth of companies in the bottom quartile, as illustrated in the chart below. (See page 89 for more on our methodology.)

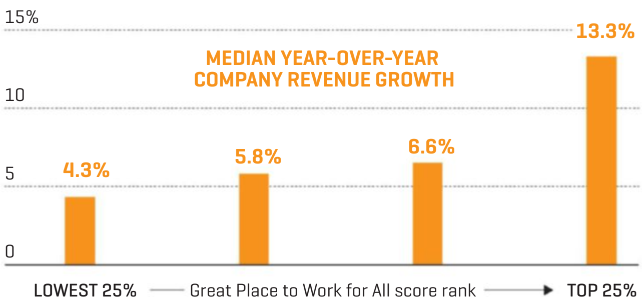
The country's top workplaces are increasingly aware of the need to eliminate differences in employees' experiences.

Take Salesforce, ranked eighth on this year's 100 Best list. The enterprise software company, led by CEO Marc Benioff, famously invested $3 million in 2015 to address its gender pay gap. The move, along with a host of other equality efforts, has reaped results. Salesforce is becoming a beacon for talented women in technology, and it's enjoying the fruits of a more fully engaged workforce. The percentage of women employees who say they want to work at Salesforce for a long time has jumped from 85% in 2014 to 93% today. And 92% of female employees now say people look forward to work at Salesforce, up from 85% in 2014. Perhaps not surprisingly, the company has been growing faster than its rivals.

Writ large, there's never been a greater need for these kinds of strong and ethical workplaces. In the past decade our global political and economic system has left many feeling disenfranchised, financially precarious, and angry about rising inequality.

As social divisions widen, there's a need for a new deal that addresses these insecurities. Here, business can help. The best workplaces in today's climate are organizations where everyone feels heard, fairness reigns, social bonds are forged across boundaries like race and class, and people are inspired to reach new heights.

In short, Great Places to Work *for all* are the future. It's a future that can't get here fast enough.



SOURCE: GREAT PLACE TO WORK

We've tracked the companies that perform the best on measures of inclusivity, trust, pride, and camaraderie—a new metric we're calling the Great Place to Work for All score. During the past year we found that organizations that placed in the top 25% by this measure saw higher revenue growth than the ones in the bottom 25%.

MICHAEL C. BUSH and **SARAH LEWIS-KULIN** are CEO and vice president, respectively, at Great Place to Work, the longtime research partner for *Fortune*'s annual list of the 100 Best Companies to Work For, and other best workplaces lists. Great Place to Work also provides executive advisory and culture consulting services to businesses, nonprofits, and government agencies in more than 50 countries on six continents.

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ADDITIONAL REPORTING BY KRISTEN BELLSTROM, LAURA ENTIS, ERIKA FRY, POLINA MARINOVA, ANNE VANDERMEY, VALENTINA ZARYA, AND CLAIRE ZILLMAN

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4. BAIRD

5. EDWARD JONES

6. GENENTECH

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94. Nordstrom
95. Baker Donelson
96. Orrick Herrington & Sutcliffe
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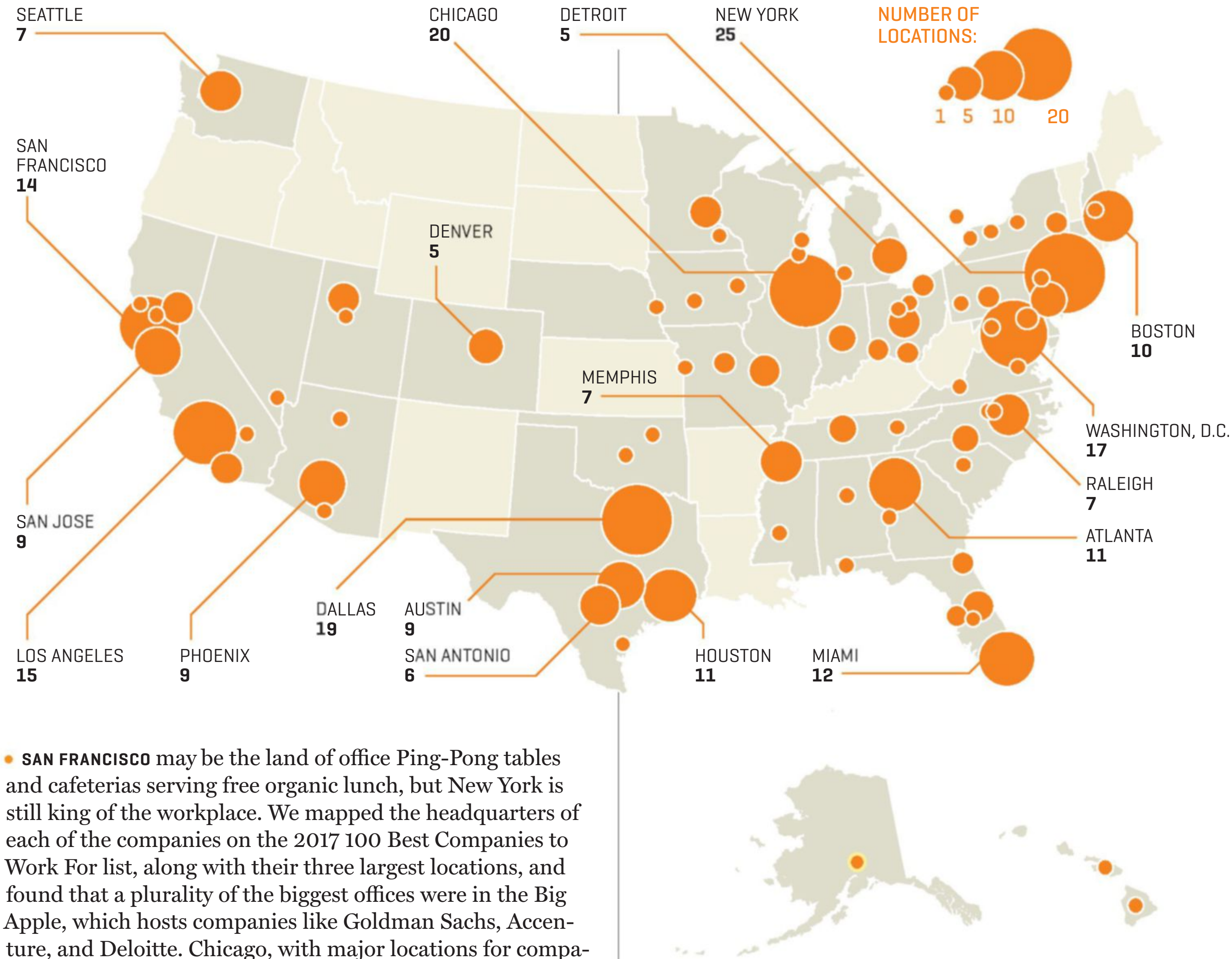
98. PCL Construction
99. FedEx
100. Allianz Life Insurance Co. of North America

• THE 100 BEST COMPANIES TO WORK FOR •

WANT TO WORK AT A BEST COMPANY? YOU'VE GOT OPTIONS

MOST U.S. STATES ARE HOME TO AT LEAST ONE MAJOR OFFICE OF THIS YEAR'S CROP OF THE NATION'S BEST PLACES TO WORK.



• **SAN FRANCISCO** may be the land of office Ping-Pong tables and cafeterias serving free organic lunch, but New York is still king of the workplace. We mapped the headquarters of each of the companies on the 2017 100 Best Companies to Work For list, along with their three largest locations, and found that a plurality of the biggest offices were in the Big Apple, which hosts companies like Goldman Sachs, Accenture, and Deloitte. Chicago, with major locations for companies including Baird and Mars, was the runner-up (though fewer companies had headquarters there). The takeaway for job seekers? Most of the largest cities in the U.S. and the majority of states host at least one major office of a Best Company to Work For. No Ping-Pong tables required.

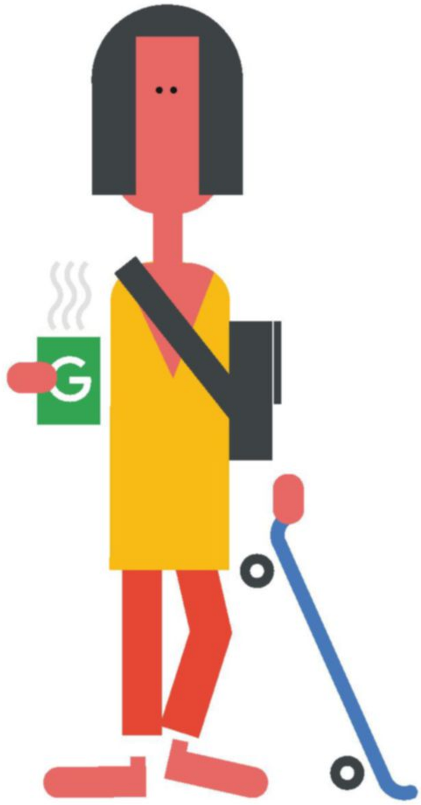
▲ MAP BY **NICOLAS RAPP**

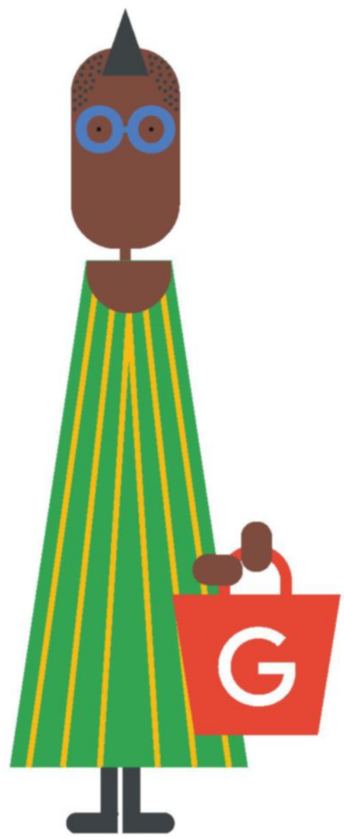
01

GOOGLE

HQ	Mountain View, Calif.
EMPLOYEES	72,053*
JOB OPENINGS	1,000+

FOR THE SIXTH YEAR RUNNING, Google has landed the top spot on our list of the country's Best Companies to Work For. The $75 billion tech titan is famous for luxe perks like free gourmet food and laundry services, of course. But it also takes a rigorous analytical approach to morale. It boosted its parental-leave policies, for example, after finding that mothers were leaving at higher rates. And then there's the culture: Town halls held by black Googlers, support for transgender workers, and unconscious-bias workshops (already attended by 80% of staff) help foster what employees say is a "safe and inclusive" workplace at this hive of high performers.





*EMPLOYEE COUNT FOR ALPHABET, GOOGLE'S PARENT COMPANY.

COURTESY OF WEGMANS

“

WE LOOK FOR PEOPLE WHO GENUINELY CARE ABOUT OTHERS AND ARE HAPPY TO SERVE IN WHATEVER WAYS ARE NECESSARY. WE CAN TEACH JUST ABOUT ANY OTHER SKILLS THEY NEED.”

DANNY WEGMAN, CEO, WEGMANS FOOD MARKETS

02

WEGMANS FOOD MARKETS

HQ.......... Rochester, N.Y.
EMPLOYEES......... 46,800
JOB OPENINGS....... 2,000

EMPLOYEES SAY “there’s a lot of love and caring” at this 100-year-old family-owned grocery chain, where workers have flexible schedules, ample promotion opportunities, and “feel like family.” But it’s the “small things that make a difference,” like free cakes on birthdays and hot chocolate in the winter for anyone who works outside.

03

BOSTON CONSULTING GROUP

HQ..................... Boston
EMPLOYEES........ 12,000
JOB OPENINGS.... 1,000+

COLLEAGUES at this global consultancy relish the chance to work with other all-stars. Opportunities for growth are “unmatched,” benefits like $5 co-pays are “off the hook,” and hard work is balanced by an emphasis on self-care (think sabbaticals, fitness centers, and telecommuting)—taking the edge off the usually “daunting” industry.

04

BAIRD

HQ................ Milwaukee
EMPLOYEES.......... 3,311
JOB OPENINGS......... 119

BESIDES ITS famous “no assholes” policy, the investment firm gets high marks for a company culture that values integrity and teamwork. At Baird, founded in 1919 and privately owned, two-thirds of employees are currently shareholders. The feeling, says one, is that “everyone is playing the same game and we are all equal contributors.”

05

EDWARD JONES

HQ................... St. Louis
EMPLOYEES........ 43,090
JOB OPENINGS...... 1,680

THIS INVESTMENT giant, with $980 billion in client assets, makes loyalists out of its staff: Full-timers get more than 100 hours of training per year, and more than a third of hires are internal. “Everyone is willing to help someone else be successful,” one staffer says. That might be why 3,000 of its employees have been there more than 20 years.

▲ ILLUSTRATIONS BY **JONATHAN CALUGI**

06
GENENTECH

HQ .. South San Francisco
EMPLOYEES 14,815
JOB OPENINGS 1,268

THE BIOTECH GIANT has a "casual intensity" vibe, says one staffer. "We are a very fun company, but at the end of the day we all know our part in the mission"—making drugs for life-threatening illnesses. Every time a medicine is FDA approved, employees ring a bell at the same time in celebration. [That happened four times in the past year.]

07
ULTIMATE SOFTWARE

HQ............. Weston, Fla.
EMPLOYEES 3,860
JOB OPENINGS 450

"THE LOVE for one another is felt throughout this organization," one employee says. Thanks to "wonderful benefits, supportive management, and an amazing work environment," the HR software maker's employees feel "so lucky" to work there. Added motivation: Every employee gets restricted stock units on his or her first day.

08
SALESFORCE

HQ .... San Francisco
EMPLOYEES 22,070
JOB OPENINGS 1,292

In surveys, 97% of employees said they feel "proud" to tell people they work at Salesforce.

CEO MARC BENIOFF is the "soul of the company" and "truly leads by example" in "making the world a better place," employees say, praising his full-throated embrace of diversity in a tumultuous political climate. Staffers gush about the "Ohana" culture ("family" in Hawaiian) that embraces equality, service, and innovation. Besides donating subscriptions for its technology to nonprofits and educators, it grants employees seven days off to volunteer each year and has given away more than $137 million.

FROM THE RECRUITER

"We ask our receptionists for their impressions and direct feedback. Any hint of arrogance or condescension is considered unacceptable, and any candidate who fails our 'receptionist test' does not receive a job offer."

CHERYL FARNSWORTH
TALENT ACQUISITION MANAGER, BAIRD

09
ACUITY

HQ....... Sheboygan, Wis.
EMPLOYEES 1,244
JOB OPENINGS 70

EMPLOYEES feel "a sense of purpose and responsibility" at this Midwestern casualty insurer. It installed a permanent 65-foot Ferris "Charity Wheel" inside its headquarters for local fundraising events, and staffers can vote to direct its charitable giving. Other perks: a 45-foot climbing wall and a jeans-friendly dress policy.

JEFF RUMANS—COURTESY OF SALESFORCE

10
QUICKEN LOANS

HQ..................... Detroit
EMPLOYEES........ 13,690
JOB OPENINGS......... 849

WORKERS at the "vibrant" online home lender ride hoverboards around its colorful headquarters, which features a basketball court that overlooks downtown Detroit. It gifted employees over 1,500 event tickets last year. (The founder owns the Cleveland Cavaliers.) And its mission of providing home loans gives staff a "great feeling."

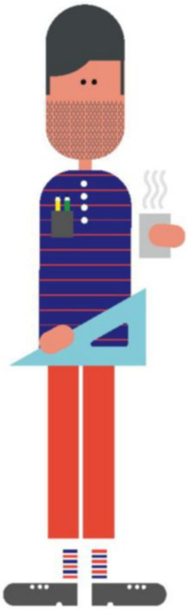
The office spaces at Detroit-based Quicken Loans feature unique sculptures, vibrant colors, and open, collaborative work areas.

11
KIMLEY-HORN

HQ............. Raleigh, N.C.
EMPLOYEES.......... 2,840
JOB OPENINGS......... 279

YOUNG EMPLOYEES at this design consultancy say the opportunities for growth and support for newbies are "awesome" and senior staff don't feel like "bosses" but "peers and friends"—the chairman of the board takes interns out to lunch. Veteran staff like it too. The company matches 401(k) contributions by 200%, for up to 4% of pay.

KIMLEY-HORN NEWBIES GET TO TAKE COWORKERS TO LUNCH GRATIS.



12
KPMG

HQ............ New York City
EMPLOYEES...... 174,000
JOB OPENINGS...... 1,780

EMPLOYEES of this global professional services firm tout the "constantly challenging environment" in which staff is "empowered to continue learning." Workers spend upwards of 50 hours in training per year on average, and 14,700 have official mentors. "There could not be a better place to launch a career," says one staffer.

13
INTUIT

HQ .. Mountain View, Calif.
EMPLOYEES........... 7,905
JOB OPENINGS......... 315

BESIDES the on-site gyms open 24/7 and up to $650 in fitness credits, the personal finance software titan also provides 45 bikes for cycling commuters. The job is a "blessing," says one employee, and Intuit's leaders live company values "daily." At tax season, CEO Brad Smith rolls up his sleeves and answers customer calls alongside staffers.

COURTESY OF QUICKEN LOANS

14 KIMPTON HOTELS & RESTAURANTS

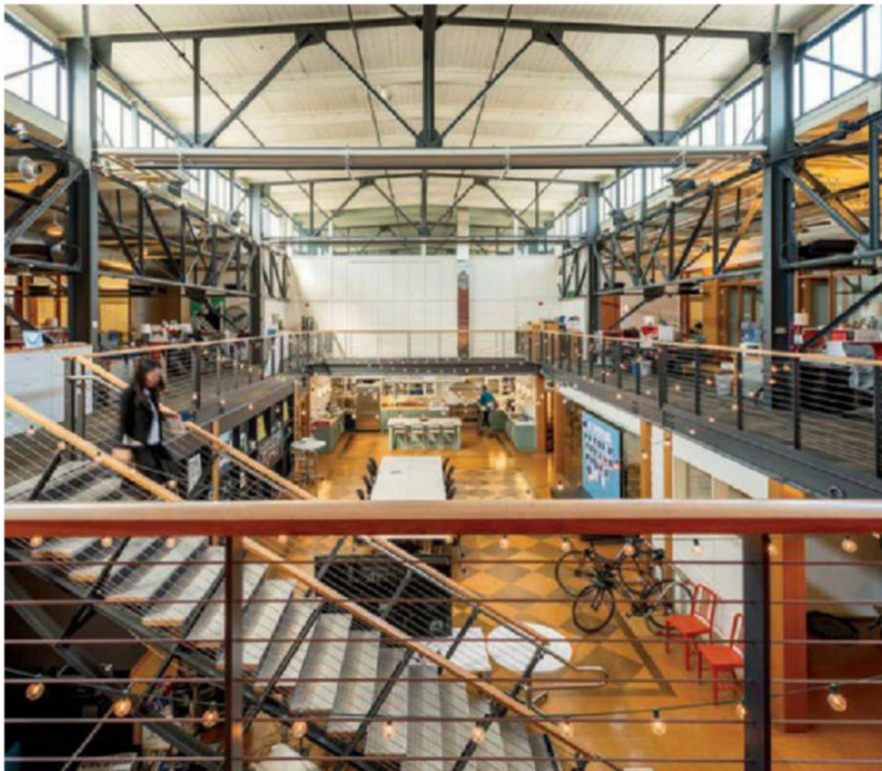
HQ........... San Francisco
EMPLOYEES.......... 8,142
JOB OPENINGS......... 650

THE PET-FRIENDLY hotel chain's employees love the support for diversity, flexible work schedules, lack of hierarchy, and promote-from-within culture. (It doesn't hurt that hotel staff can bring their dogs to work and stay in any hotel for just $50 a night.) "Uniqueness is valued," says one staffer. "Opinions are always listened to."

15 SAS

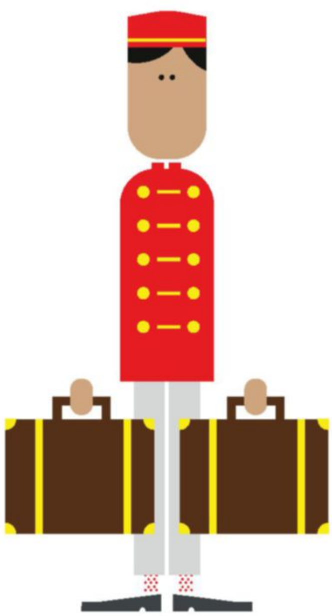
HQ.................. Cary, N.C.
EMPLOYEES........ 14,063
JOB OPENINGS......... 121

THE DATA analytics firm pulls out the stops to make employees stress less: It offers childcare, dry cleaning, haircuts, and a pharmacy—all on-site. SAS's trademark flexible scheduling helps too. "They simply want to make life easy and carefree for us," says one employee, "because that's the key to innovation."



The San Francisco offices of Capital One, where employees applaud a renewed emphasis on innovation.

AT **KIMPTON**, BENEFITS INCLUDE PET BEREAVEMENT LEAVE.



16 BURNS & MCDONNELL

HQ........ Kansas City, Mo.
EMPLOYEES.......... 5,499
JOB OPENINGS......... 575

THE 100%-employee-owned engineering, architecture, and construction firm is praised for its tight-knit, collaborative teams, where "selfish behavior gets you nowhere." Generous performance incentives also keep the company's employee-owners rowing in the same direction: "Every employee has a purpose," one says.

17 CAPITAL ONE

HQ............. McLean, Va.
EMPLOYEES........ 45,319
JOB OPENINGS...... 2,000

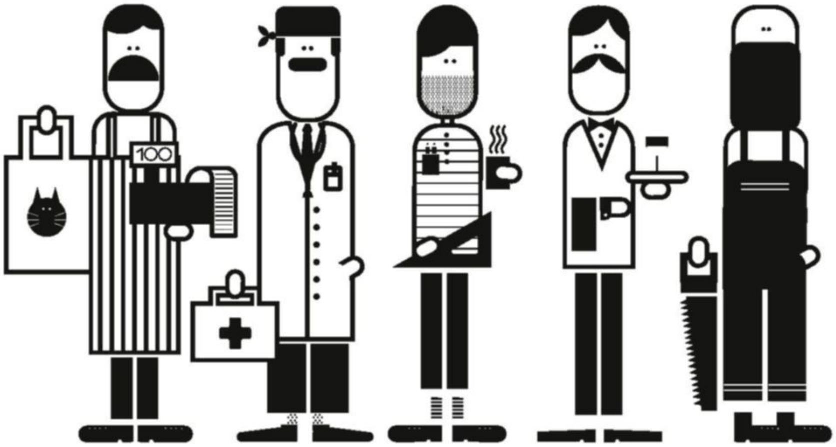
EMPLOYEES at the financial services firm are excited about the "innovative" direction the company is heading in (it has an in-house accelerator and has added free Wi-Fi and coffee at some branches). And staffers feel "no pressure to fit into a cookie-cutter 'banker' mold," one says. "Diversity of thought and person is encouraged."

18 WORKDAY

HQ...... Pleasanton, Calif.
EMPLOYEES.......... 6,715
JOB OPENINGS......... 302

THIS HR TECH company aims to provide seamless people management (including at the U.S.'s largest employer, Walmart, in a newly inked deal). But its sense of civic mission goes further and helps make it easy to "find your calling" here. When "Workmates" volunteer for 25 hours, the company grants $500 to the cause in their name.

PATRIK ARGAST—COURTESY OF CAPITAL ONE



HOW TO GET ON THIS LIST

HERE'S WHAT GOES INTO CREATING OUR RANKING OF THE 100 BEST COMPANIES TO WORK FOR—AND WHY WE'RE SHAKING UP THAT PROCESS IN A MAJOR WAY.

BY MICHAEL C. BUSH AND SARAH LEWIS-KULIN

TWENTY YEARS AGO, when Great Place to Work produced the first 100 Best Companies to Work For list for *Fortune*, only the most forward-thinking business leaders appreciated the concrete value of creating employee-friendly workplaces. Today, countless studies acknowledge the link between culture, trust, and business success. And for most companies, the mission of creating a great workplace has become an integral part of their strategy.

After its debut, *Fortune*'s list played a role in changing the way American companies viewed their greatest resource—their human capital. And at the same time, it helped more American employees view their places of work as a chance to be personally fulfilled. Now we are making change to the list that we hope will reflect a new vision of the American workplace—one where employees have a level playing field and companies realize the full human potential of their workforce.

In the 2018 list of the 100 Best—for which we are currently accepting applicants—many elements will stay the same: Our methodology will continue to place the most weight on what employees themselves report about the workplace. As in the past, the primary data affecting each company's ranking will still be the results from an anonymous Trust Index Employee Survey, focusing on measuring leaders' credibility and the respect and fairness with which people are treated.

Going forward, however, higher expectations will be placed on each company to ensure that employees' experiences are consistent, regardless of their function and personal background—a standard we refer to as a "Great Workplace for All." Employers' effectiveness will be considered in light of the complexity of their organization, leveling the playing field among companies of different sizes, locations, and workforce populations.

Great Place to Work will continue to evaluate the programs each company offers and the extent to which they systemically create a great culture. Rankings will also consider how companies use their cultures to be financially successful today and be ready for growth, change, and innovation in the future. And since we know great workplaces require commitment from the top, additional weight will be placed on evaluating executive teams' leadership effectiveness—including their ability to connect authentically with their people, and their skill in communicating a clear path to success. All these elements will be assessed not only via information provided by the company itself, but also validated by employees through our survey. In developing this approach with CEOs and C-suite executives at the 100 Best, we found that these metrics, which gauge inclusivity as well as overall satisfaction, are the ones leaders are eager to hold themselves accountable to. And that's good news for all.

METHODOLOGY: To identify the 100 Best Companies to Work For, each year *Fortune* partners with Great Place to Work to conduct the most extensive employee survey in corporate America, with feedback from more than 230,000 people. Each company's score is based on Trust Index survey feedback from a random sample of employees. People anonymously assess their workplace, including the quality of their leaders, support for their personal and professional lives, and their relationships with colleagues. Survey results are compared with peer organizations of like size and complexity and are highly reliable statistically. In addition, Great Place to Work scores a Culture Audit management questionnaire from each company, which reports details such as compensation and benefits, hiring practices, recognition, training, and diversity programs. To become Great Place to Work Certified and to be considered for this and over a dozen additional lists published by *Fortune*, go to greatplacetowork.com/100Best.

19 → 32

19
STRYKER

HQ.............. Kalamazoo
EMPLOYEES........ 25,000
JOB OPENINGS......... 875

THE MEDICAL device maker—whose offerings touch orthopedics, surgery, nanotechnology, and spine treatments—is stacked with "amazingly talented" high achievers, coworkers say. "It takes someone who is willing to go above and beyond with a smile on their face" to make the products that "change patients' lives."

21
PUBLIX SUPER MARKETS

HQ.......... Lakeland, Fla.
EMPLOYEES...... 178,752
JOB OPENINGS...... 5,675

THE LARGEST employee-owned company in the country, this grocery chain with a "family" feel gives staff a "great opportunity to retire worry-free" through a stock ownership plan (part-timers participate too). Hefty holiday bonuses don't hurt either. The result: Employees stick around. The company has dozens of workers over the age of 90.

PUBLIX HOLIDAY BONUSES CAN EQUAL A MONTH'S PAY.

24
DAVID WEEKLEY HOMES

HQ.................. Houston
EMPLOYEES.......... 1,585
JOB OPENINGS......... 120

THE TEXAS homebuilder conducts interviews with job candidates' families so they can ask the company questions about what it's like to work there. Founder David Weekley himself is still the chairman of the company, which prides itself on a welcoming, team-centric culture, which staffers say offers "a strong sense of inclusion."

20
CHG HEALTHCARE SERVICES

HQ........... Salt Lake City
EMPLOYEES.......... 2,448
JOB OPENINGS........... 65

A LEADER in the quickly growing health care staffing industry (think placing temporary nurses and doctors), CHG wants its own workers to be "happy, healthy, and satisfied." To that end it offers incentives for health assessments, a free on-site health clinic staff can visit without using personal time off, and even pet insurance.

FROM THE RECRUITER

"No matter how awful your last company, job, or boss may have been, do not speak negatively of them! This is the No. 1 mistake I see constantly during interviews. There are ways of answering the question professionally without going into negative details."

MITRA O'CONNELL
RECRUITER, CAMDEN PROPERTY TRUST

22
CAMDEN PROPERTY TRUST

HQ.................. Houston
EMPLOYEES.......... 1,622
JOB OPENINGS........... 83

EMPLOYEES FEEL the love at the Houston-based real estate investment trust, where hugging is a tradition and "everyone welcomes you and your ideas with open arms." Gravy: Staff can stay in one of the company's furnished apartments for just $20 a night on personal vacations, and their kids can get up to $4,500 a year in paid college costs.

23
PWC

HQ........... New York City
EMPLOYEES...... 223,468
JOB OPENINGS...... 3,600

THE $36 BILLION professional services firm's employees love its "impeccable reputation" and "countless opportunities for growth, travel, and leadership" experiences. PwC hired more than 5,500 new grads in the past year and pioneered a student loan pay-down benefit, in which employees can get $1,200 a year toward their loans.

25
COOLEY

HQ.................. Palo Alto
EMPLOYEES.......... 1,956
JOB OPENINGS........... 60

EMPLOYEES PRAISE this Silicon Valley law firm for its "team first" mentality and "laid-back" culture, where no one bats an eye if you wear jeans to work. "You could walk into a conference room and not be able to tell the staff from the most senior partner," says one employee. "Everyone is encouraged to be themselves."

28 REI

HQ: Kent, Wash. • **EMPLOYEES:** 13,014 • **JOB OPENINGS:** 205

"UNIFIED BY A COMMON PASSION," employees say this co-op prioritizes the planet over profits—70% of which go back to members, staff, and community causes. People here gush that the outdoorsy outfitter truly "practices what it preaches." Black Friday is a paid holiday, and every employee gets two extra paid days off per year to go outside and "get inspired." There are also gear discounts and paid sabbaticals once employees hit the 15-year mark.

31 TEXAS HEALTH RESOURCES

HQ........ Arlington, Texas
EMPLOYEES........ 18,815
JOB OPENINGS...... 1,206

EMPLOYEES SAY the company mantra—"Individuals caring for individuals together"—is a promise that staff "can actually live by." The religiously affiliated health care organization operates hundreds of hospitals and other medical facilities, and staffers praise management for being honest, ethical, "humble," and "genuine."

26 HILTON

HQ.............. McLean, Va.
EMPLOYEES...... 169,315
JOB OPENINGS...... 3,474

THE NEARLY 100-year-old global hotel chain earns accolades for "endless opportunities" for advancement and recently started paying for employees' GEDs. "Hilton believes in me," says one staffer. "You get the feeling that you really matter." Benefits include up to $10,000 reimbursement for adoption and generous parental-leave policies.

27 VETERANS UNITED HOME LOANS

HQ.......... Columbia, Mo.
EMPLOYEES.......... 1,991
JOB OPENINGS......... 123

THE NATION'S largest dedicated VA lender has a team of "genuine, passionate, and loving people" and a "community minded" culture. More than 90% of staff give away at least 1% of their paychecks. And there's a concierge desk that employees can call for tasks like sending appreciation gifts to coworkers or requesting a standing desk.

29 EY

HQ........... New York City
EMPLOYEES...... 212,852
JOB OPENINGS...... 2,500

THE BIG FOUR professional services firm gets rave reviews from employees for its "phenomenal" flexibility that allows staffers to "work when and where they want" so that they have the freedom to enjoy life's little things (such as attending children's recitals) and the big ones (taking 16 weeks off for parental leave).

30 NUGGET MARKET

HQ....... Woodland, Calif.
EMPLOYEES.......... 1,818
JOB OPENINGS........... 96

HUGS, SMILES, and high fives "set the tone" at this family-owned grocery chain. "We're like the Disneyland of grocery stores," says one staffer. Even part-timers pay zero health premiums, and everyone gets a 4% 401(k) match. Here managers feel like "just another friend at work" who "happen to assign what you do."

32 HYATT

HQ.................... Chicago
EMPLOYEES...... 100,000
JOB OPENINGS.... 3,500+

WITH 40,000 workers and hundreds of hotels in the U.S. alone, Hyatt still feels like a "home away from home" for employees. Staffers say "amazing" benefits (like free on-site dry cleaning and complimentary or discounted hotel stays) help promote an environment of "fairness, love, and respect" and a feeling of "family" at the company.

© MARY GRACE MCKERNAN—COURTESY OF REI

33
MARRIOTT INTERNATIONAL

HQ.......... Bethesda, Md.
EMPLOYEES...... 218,512
JOB OPENINGS..... 57,564

EMPLOYEES SAY that "you're only limited by yourself" at this multinational hospitality company, where "unlimited opportunities to grow" have helped keep nearly 13,000 Marriott staffers at the company for more than 20 years. It has homed in on diversity too: 58% of frontline and middle managers are women, and 36% are minorities.

34
PINNACLE FINANCIAL PARTNERS

HQ................. Nashville
EMPLOYEES.......... 1,235
JOB OPENINGS......... 118

THE FINANCIAL services firm landed a spot on our Best Workplaces to Retire From list (all employees get restricted stock and annual cash incentives), as well as our Best Workplaces for Millennials list (say hello to 35 paid days off). About 99% of staff say they're proud to tell others they work here, and 99% praise leaders' honesty.

35
USAA

HQ............. San Antonio
EMPLOYEES........ 28,738
JOB OPENINGS...... 1,320

THE VENERABLE financial institution, which has served military families since 1922, combines meaningful work with serious benefits. An 8% 401(k) match, six weeks of vacation, and flexible scheduling are icing on the cake for employees, who say they're proud of the "pure" and "rich" mission that makes it feel like a "noble cause to work here."

36
ST. JUDE CHILDREN'S RESEARCH HOSPITAL

HQ................. Memphis
EMPLOYEES.......... 4,180
JOB OPENINGS......... 240

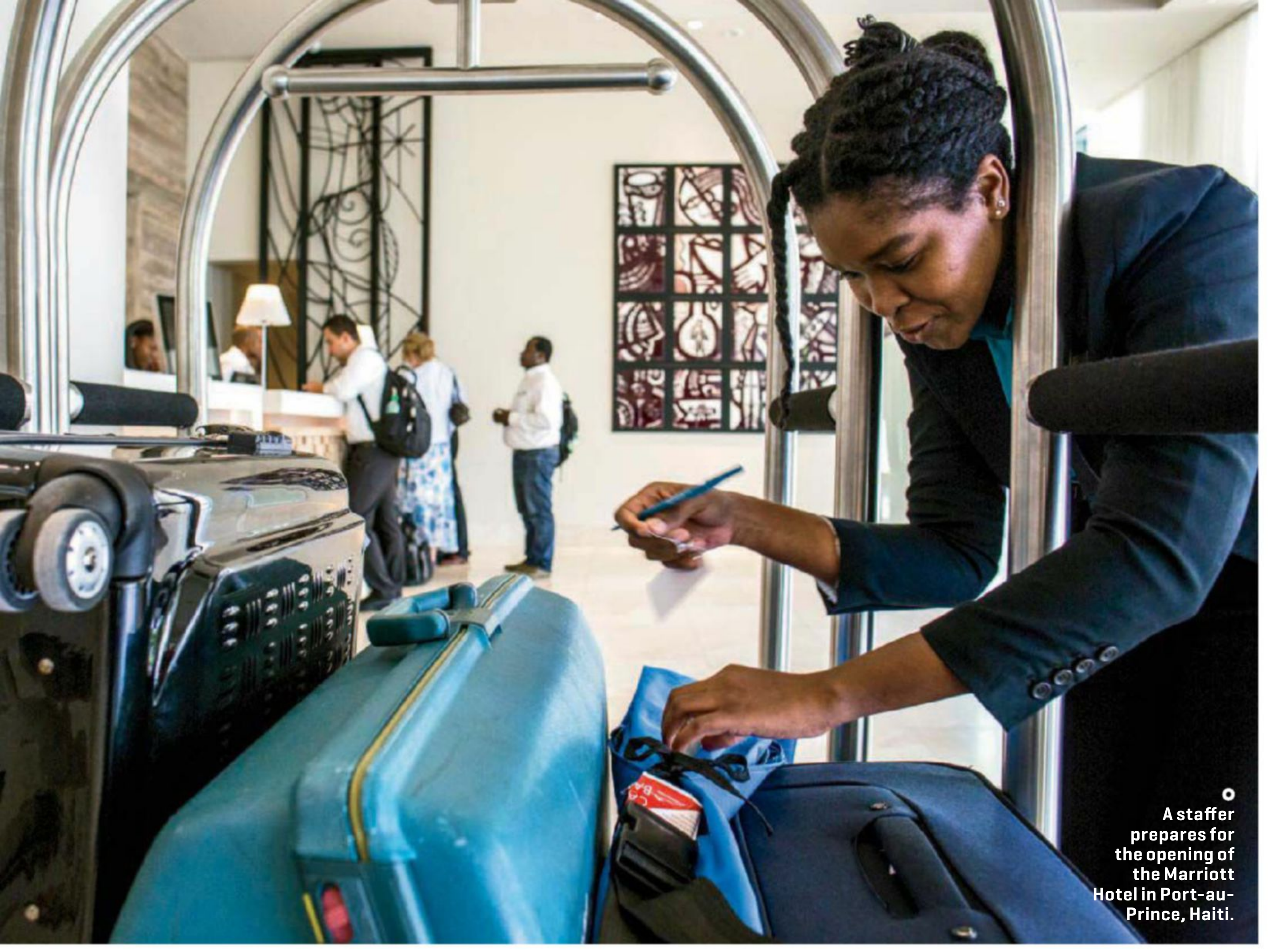
IT'S HARD to find a more meaningful mission than the one at this research hospital, which aims to help children with catastrophic diseases and works to develop treatments. Employees call it "a life-changing organization" that they "couldn't be more proud to be a part of," with "genuine" leadership and an "uplifting" atmosphere.

LEGENDS LIST

TWELVE COMPANIES HAVE BEEN ON OUR LIST EVERY SINGLE YEAR. THEIR NAMES CUT ACROSS INDUSTRIES, BUT THEY HAVE ONE THING IN COMMON: THEY TAKE GENEROUS CARE OF THEIR PART-TIMERS.

BY CLAIRE ZILLMAN

• **OVER THE COURSE** of its 20-year history, *Fortune*'s Best Companies to Work For list has featured a total of 452 different employers as firms have found their way on the list, then off, and sometimes back on again. But 12 companies have remained constant, meaning they have made the list every year for 20 straight years. We'll call them "the Legends." Who are they? Cisco, REI, Wegmans, TDIndustries, Publix, Marriott, SAS Institute, W.L. Gore & Associates, Whole Foods, Goldman Sachs, Four



A staffer prepares for the opening of the Marriott Hotel in Port-au-Prince, Haiti.

Seasons, and Nordstrom.

The group is a study in variety, from financial giants to a family-owned grocer, but they each possess some of the hallmarks of a Best Company: Goldman and REI offer fully paid sabbaticals; SAS, Marriott, Cisco, and Publix offer on-site childcare; six of the 12 give employees paid time off to volunteer. Eight of the 12 allow for job sharing, 11 offer compressed workweeks, and 10 provide college-tuition reimbursement.

But there's one thread that runs across all dozen companies: Their generous treatment of employees is not reserved for full-time staffers. Many aspects of it extend to part-time workers too.

For some of the Legend companies, part-timers are a tiny portion of their overall workforce. But seven of the 12 are either a retailer or a hotel, meaning they employ sizable part-time workforces in labor-intensive service industries. Whole Foods, for instance, reports a part-time staff (as of 2016) of almost 27,000. Nordstrom has almost 30,000; at Publix there are more than 100,000.

All the Legend companies offer their part-time workers health insurance, a benefit that just 19% of the U.S.'s private part-time workforce receives, according to government figures. The Affordable Care Act (ACA) requires that all employers with 50 or more workers offer health care coverage to employees who average at least 30 hours a week. Some of the Legend companies abide by that 30-hour threshold, but others require far fewer. At Whole Foods, workers can get company-sponsored health insurance with just 20 hours a week.

Paid time off is another benefit that some Legend companies dole out to part-timers, and it's also scarce in the larger labor force, with just 30%, 36%, and 40% of overall part-timers having access to paid sick days, vacation time, and holidays, respectively. But at Nordstrom, all part-time workers receive 19 paid days off. At Marriott, they get 18; at REI, 16. ▷▷

▲ PHOTOGRAPH BY **MARK PETERSON—REDUX**

A Cisco employee in a server room at the company's headquarters.

▷▷ There are other, less quantifiable perks for part-timers too. At Publix, part-time workers are eligible for employee stock-ownership plans that provide retirement savings at no cost to the individual. At Four Seasons, part-time employees receive free stays at the company's hotels.

At Wegmans, many part-time workers end up building careers with the company, so the 100-year-old supermarket chain thinks of them no differently than full-time staff, says Becky Lyons, director of health and wellness. Last year, more than 50% of the 23,500 positions Wegmans hired for were filled by internal candidates, and of its 92 store managers, a majority started working for Wegmans as teenagers. The store covers 85% of health care premiums for part-timers, gives them six paid days off annually, and makes them eligible for a scholarship program that paid out $5 million in tuition in the current academic year. Those benefits serve as tools to retain these workers, allowing the company to pull from an experienced talent pool to fill full-time positions, Lyons says. The turnover among Wegmans' part-time staff is 25%, about half the average for the food retail industry.

Wegmans hits on a reason the trend of offering benefits to part-time workers seems to be growing, even outside this rarefied group. Some companies that recently expanded their parental-leave policies—Hilton, No. 26 on the Best Companies list, and Ikea, No. 72—made the benefit available to all employees, no matter their employment status. Employers are learning that these perks are ultimately cost savers, since they build loyalty among workers, which reduces turnover expenses, says Teresa Boyer, a professor at Rutgers School of Management and Labor Relations. She says companies' growing reliance on big data has shown them how expensive "churn" can be, even among part-time employees.

The ACA is a factor too, says Beth Livingston, a professor of human resources studies at Cornell University. Because it requires companies to provide health insurance to some hourly workers, it "pushed the conversation of what a part-time worker is and what they deserve."

37
NUSTAR ENERGY

HQ .... San Antonio
EMPLOYEES 1,630
JOB OPENINGS 61

THIS PIPELINE and terminal operator is lauded by employees for generous benefits, perks like free gym memberships, and an average of 24 hours per year in paid volunteer time. Employees feel a sense of "community pride and compassion," says one. There are also staff celebrations to mark most holidays, including Elvis's birthday.

38
ARI

HQ ..... Mount Laurel, N.J.
EMPLOYEES 2,298
JOB OPENINGS 42

TRAINING EMPLOYEES is a strong suit at this transportation management company. ARI sponsored 126 degrees last year—reimbursing $1.4 million in tuition. There are ample opportunities for growth and promotion, giving employees the sense that anyone "can become the next Chris Conroy," the company's CEO.

COURTESY OF CISCO

COMPANY SPOTLIGHT

HILTON

Uniting a Global Organization Around a Shared Purpose: People Serving People

In less than three years, Hilton has hired more than

10,000

veterans, military spouses, and their dependents.

Hilton University offers team members 2,500 learning resources, from which **3.5 million** courses have been completed.

Being selected as a Best Company to Work For is a validation of what **Hilton**'s team members think of the company and its culture.

"**WE'RE A BUSINESS OF** people serving people," states Hilton president and CEO Christopher J. Nassetta. "We have approximately 360,000 team members who wake up every day in 104 countries and territories around the world dedicated to delivering exceptional experiences for our customers."

Across that global network, the publicly traded corporation oversees more than 4,900 properties comprising more than 800,000 rooms operated under 14 brands, from its flagship Hilton Hotels & Resorts to its newest brand, Tapestry Collection by Hilton. "We don't think of our business as simply lodging; we're a company that truly embraces hospitality," Nassetta asserts. "We're all about people, and we rally our global team around our mission to be the most hospitable company in the world."

Fulfilling that purpose means maintaining a physical infrastructure, providing a variety of valuable amenities, and having a positive impact on local communities. "That ecosystem revolves around our team members," Nassetta says, "each one of whom feels that they are part of something bigger than themselves."

Hilton begins the process of being a great place to work by hiring and training a diverse workforce that uses a global set of best practices. The challenge, however, is recognizing the distinctions within every community, including local cultures, customs, and languages, while sustaining the company's core purpose. "In such a large organization, aligning our team members around who we are and what we stand for is mission critical," Nassetta explains. "And it's not always easy, but this is the single most important thing our leadership team does every day."

One key, he adds, is Hilton's adherence to distributed leadership, whereby the management at each of the individual properties is empowered to make decisions that affect their team members' ability to deliver superior customer service. "Those regional and local leaders know best how to bring our purpose to their communities, so it's vital that we provide them with the framework to develop the best talent and make sure they understand what we're aiming to achieve," Nassetta says.

Hilton offers its team members numerous programs to help them personally learn and grow. Among them are parental leave, adoption assistance, veteran hiring, a diversity and inclusion initiative, women's development, travel discounts, and GED assistance.

"If we treat our team members well, and they treat our guests well, then ultimately the business does well," Nassetta contends. "A hotel is just a building. What gives it life when a customer walks through the door is what our team members deliver. That is everyone's purpose."

SOURCE: 2016 GREAT PLACE TO WORK® REVIEW™

39
NVIDIA

HQ..... Santa Clara, Calif.
EMPLOYEES.......... 9,431
JOB OPENINGS......... 981

EMPLOYEES laud the "accessible" and "visionary" management at this IT company, where big dreams for artificial intelligence are backed by what workers say are strong ethics and integrity. Investors are happy too: The stock tripled in 2016. "We're on the edge of tomorrow," says one staffer. "Why wouldn't I want to be part of this?"

40
WORLD WIDE TECHNOLOGY

HQ.................. St. Louis
EMPLOYEES.......... 3,766
JOB OPENINGS......... 211

THIS SYSTEMS integrator provides supply-chain technology to 45% of *Fortune* 500 companies. Employees say its core values, like passion and integrity, are "considered in every part of the business." And they love the perks as well, like on-site medical care, treadmill desk stations, and the occasional free massage.

41
HILCORP

HQ.......... Houston
EMPLOYEES.......... 1,490
JOB OPENINGS.......... 8

Employees working on a project for Hilcorp, where bonuses average more than a third of pay.

THE OIL AND GAS PRODUCER'S employees say they enjoy independence alongside team spirit and competitive compensation. Annual bonuses average 36%, but a 60% bump is hardly unheard-of. Everyone is encouraged to "work like you own the company," where "decision-making is pushed to the frontlines." Cash buy-in plans allow workers to own a piece of the company's projects and its eventual profits—a model that staffers say "rewards hard work."

FROM THE RECRUITER

"It can be just as detrimental to show up to an interview at a small tech startup in a tailored suit as it can be to not show up in one for an interview with a big finance firm. Do your research and use your best judgment."

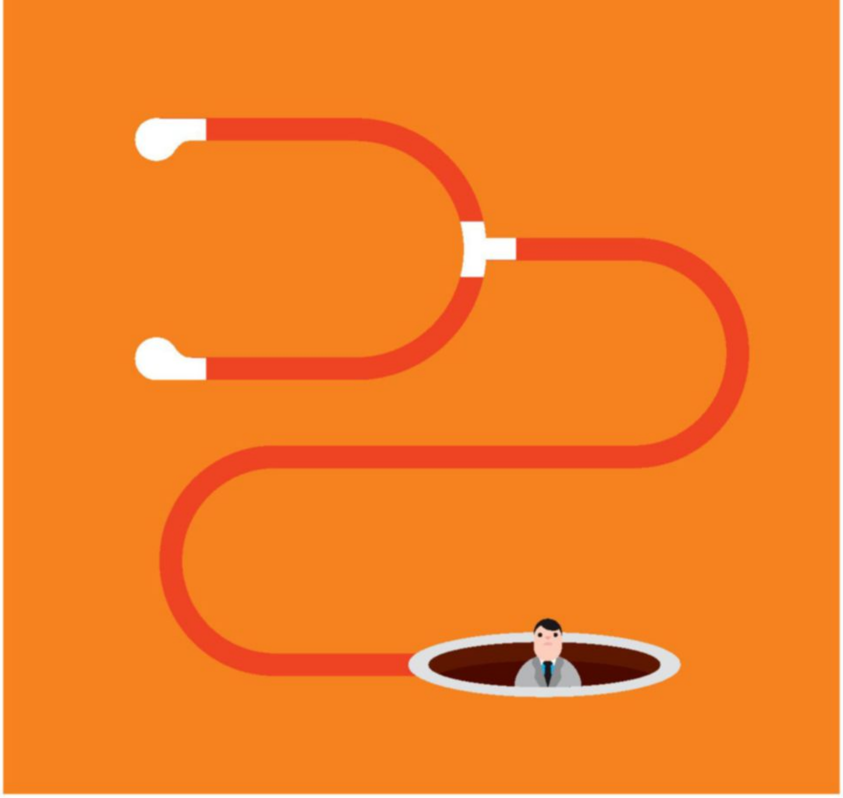
BETH HOGGARD
TALENT ACQUISITION MANAGER, KIMPTON HOTELS & RESTAURANTS

42
VMWARE

HQ.................. Palo Alto
EMPLOYEES........ 19,357
JOB OPENINGS...... 1,307

STAFFERS PRAISE the "amazing community presence" at this maker of cloud and virtualization software—that includes 40 hours of paid volunteer time and service learning treks to assist nonprofits. Plus, starting last year, all new birth and adoptive parents (including dads) became eligible for 90 days of paid leave.

JUDY PATRICK—COURTESY OF HILCORP



CORPORATE WELLNESS PROGRAMS: HEALTHY ... OR HOKEY?

COMPANIES SPEND BILLIONS OF DOLLARS GETTING EMPLOYEES TO DO EVERYTHING FROM LOSE WEIGHT TO PRACTICE MINDFULNESS—BUT DOES IT REALLY MAKE WORKERS MUCH HEALTHIER?

BY ERIKA FRY

DEXTER SHURNEY, chief medical director at Cummins, an Indiana-based engine company, was hired to reinvent the wheel.

He joined the company in 2013 after being approached by CEO Tom Linebarger with a puzzle and the desire to try something new. For years Cummins had preached the gospel of "wellness" to its 55,000 employees. Workers were encouraged to complete health risk assessments and undergo biometric screenings; they could rack up points and earn discounts on their insurance premiums by logging physical activity and attending health-related lunches. There was just one problem. It didn't seem to make a difference.

Year after year, Cummins's health care costs continued to rise. So did the prevalence of disease at the company. Its largely Midwestern workforce suffered from problems typical of an aging population—obesity and related chronic conditions—and its long-running efforts to promote wellness hadn't changed that. "We're paying a lot for this stuff," Shurney says, but he couldn't help wondering, "What are we getting?"

Linebarger challenged the team to approach the organization's health with the same rigor and Six Sigma precision that Cummins applied to its engines—pushing them to get to the root causes of the company's exploding health care costs.

Shurney knew health was "produced" between doctor's visits, but how best to nurture it among Cummins's global employees was something he spent the next year, steeped in research and consultation with experts, trying to figure out. The result is hard to describe—and it's a work in progress, he stresses—but it seems that he's edging closer to what has become something of a holy grail in his line of work: a wellness program that actually moves the needle.

EMPLOYEE WELLNESS programs have long been billed as something of a magic bullet—a low-cost means to a happier, healthier, more present, more productive workforce: a win-win-win-win. (There are also studies out there—albeit controversial ones—that suggest that the workplaces with the best wellness programs significantly outperform the stock market.)

It's a tantalizing promise, and over the past decade businesses large and small have rushed to cash in. Part of the push, of course, has come from a big, swinging stick: soaring employer health care costs. But part has come from a carrot too: The Affordable Care Act allows employers to tie up to 30% of a worker's insurance premium (or 50% in the case of smokers) to health outcomes such as weight loss and smoking cessation achieved in wellness programs. (In other words, employees who don't meet health goals pay more.)

The result is that workplace wellness programs are now practically universal in corporate America—a fixture of modern work culture ▷▷

ILLUSTRATION BY **ROBERT SAMUEL HANSON**

▷▷ as familiar as the on-site cafeteria or the 401(k) plan. And the wellness industry behind them has created an $8 billion industry.

While enthusiastic in their uptake of such programs, however, corporations have generally been content to outsource them—and then pay little attention—to an assortment of vendors and consultants. And that's where the promise of a head-turning return on investment meets a less handsome reality.

Indeed, in some cases, such wellness initiatives seem to be piling on both employer and employee expenditures. As health care costs have continued to climb, many companies have simply doubled down, signing up for increasingly sophisticated and robust wellness add-ons. Incentives for employees to participate now average $651 per year, according to one industry estimate, as workers are offered a bevy of new self-improvement services.

Wellness programs, in fact, have morphed into hydra-headed beasts of "well-being"—with corporations relying on vendors not just to promote exercise, but also to help employees attain mental, emotional, spiritual, and even financial health. (In Fidelity's 2016 Employer-Sponsored Health and Wellbeing Survey, 76% of 128 large employers reported having a "financial security" component.)

Employee attitudes toward this workplace movement are often more complicated than those of employers. Some are wary of sharing health data; others are busy or overworked and resent the added burden—it's just another thing they have to do. For these reasons and others, employee participation in corporate wellness programs—even when they're paid for it—is pretty low. Engagement ranged, for example, from 10% (life coaches) to 53% (completing a basic health questionnaire) in the Fidelity survey.

Meanwhile, whether wellness programs actually work—either by significantly improving health outcomes or by reducing health care costs—has become a subject of surprisingly fierce and unresolved debate. Though the industry has churned out plenty of data in its support, the most credible research—including a federally commissioned Rand report from 2013—suggests mixed, if not ambiguous, results.

While one can certainly point to success stories—Johnson & Johnson touts big savings from its 38-year investment in employee wellness—low participation, along with the diversity of programs and the generally squishy science of "wellness," has made calculating the industry's average ROI and general effectiveness challenging and contentious.

Ron Goetzel, a senior scientist at Johns Hopkins Bloomberg School of Public Health and a vice president at IBM Watson Health, believes well-designed, properly implemented, and rigorously evaluated wellness programs can make a difference. (Culture and strategic communications are key.)

But Al Lewis, the industry's most vocal critic—he's also an industry defector who now runs an "employee health literacy" company called Quizzify—says they're an utter waste of money. And worse: potentially harmful. He's not bothered by "wellness done for employees"—gym reimbursements, healthy snacks around the office—but rather what he calls "wellness done *to* employees." He includes in that category

ONE CRITIC SAYS PAYING FOR WORKER GYM MEMBERSHIPS IS FINE—HE'S WORRIED ABOUT "WELLNESS DONE *TO* EMPLOYEES."

weight-loss requirements (or resulting penalties) imposed on workers and annual biometric screenings that flout standard guidelines.

On the plus side, such assessments allow employees to become acquainted with their own health risks (high cholesterol, elevated blood sugar), and they establish a baseline that makes it possible for them to track their progress toward meeting health goals over time.

But Lewis and others contend that these frequent screenings are superfluous and expensive and can lead to false positives and overtreatment. The state of Nebraska was criticized, for instance, for encouraging all its employees to undergo a colonoscopy. (The U.S. Preventive Services Task Force, as a rule, recommends the screening procedure only for those over age 50.)

• **IT WAS THIS** sort of overreach that inspired Shurney and Cummins executives to think twice about their approach to health and wellness.

And after a yearlong research effort, the company is slowly rolling out a new program to Cummins employees and their families. The aim is to change lifestyles through better management of seven factors—physical activity, sleep, nutrition, stress reduction, substance abuse, water, and sunshine—and Shurney has put together what he calls "a continuum" of services to address this goal.

In his research, Shurney discovered that employees know far less about these things than they think they do—for instance, few understand the relationship between sleep and obesity or realize that chicken has far more cholesterol than peanut butter—and he worked with the American College of Preventive Medicine to develop a curriculum for them. That education happens in the company's clinics, but it has proved especially potent in Cummins's Comprehensive Health Improvement Plans—intensive, seven-week lifestyle-training programs in which employees have seen dramatic reductions in weight and cholesterol levels.

Shurney says Cummins is on track to reverse Type 2 diabetes in 10% of identified employee patients this year. And given that drugs are the fastest-rising cost in the system, that wellness investment may just pay off for the company after all.

43
CREDIT ACCEPTANCE

HQ....... Southfield, Mich.
EMPLOYEES.......... 1,700
JOB OPENINGS......... 175

ACCORDING to its employees, "everyone is valued" at this Detroit-based auto lender, where more than 70% of staff take advantage of flexible scheduling at least once during the year, and opportunities to grow are "just awesome." "No matter where you started," says one staffer, "you have the resources to reach your goals."

Employees of Atlantic Health's central sterile supply department at its Morristown, N.J., medical center pose for a photo.

46
ATLANTIC HEALTH SYSTEM

HQ........ Morristown, N.J.
EMPLOYEES........ 11,926
JOB OPENINGS......... 613

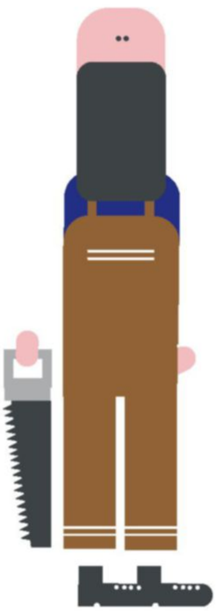
EMPLOYEES RAVE that "people from all walks of life" find themselves with a "unique chance for growth" at this New Jersey–based hospital system. Staffers are eligible for up to $5,000 in annual tuition reimbursements, and Atlantic Health's partnerships with different universities mean that courses are sometimes even offered on-site.

44
TDINDUSTRIES

HQ....................... Dallas
EMPLOYEES.......... 2,223
JOB OPENINGS........... 77

THIS EMPLOYEE-OWNED construction company handles systems like plumbing and heat at major developments. Management gets high marks: "They treat you like a human being, not a tool." And after five years, employees get to have their faces included among the nearly 1,000 staff portraits of "lifers" adorning the headquarters lobby.

EVERYONE AT **TDINDUSTRIES** OPERATES ON A FIRST-NAME BASIS.



45
SCRIPPS HEALTH

HQ................. San Diego
EMPLOYEES........ 14,746
JOB OPENINGS......... 942

STAFFERS at this nonprofit health system love that their CEO answers their emails within 12 hours. Chief executive Chris Van Gorder is thought of as a "passionate patient and community advocate," who one employee says is "setting the bar high for integrity, respect, and mutual accountability."

FROM THE RECRUITER

"We look for candidates who are interested and passionate about the position they are interviewing for. It can be a red flag if someone leads with compensation and benefits questions" too early in the process.

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SAS TALENT ACQUISITION TEAM

COURTESY OF ATLANTIC HEALTH SYSTEM

47
NAVY FEDERAL CREDIT UNION

HQ .... Vienna, Va.
EMPLOYEES 14,153
JOB OPENINGS 310

"WE MAKE a difference in the lives of millions of special people," effuses one worker at this credit union for members of the U.S. armed forces and their families. Employees say they're proud to "serve those who serve our country" and that values like "respect," "fairness," and "equality" permeate this workplace.

49
THE CONTAINER STORE

HQ .... Coppell, Texas
EMPLOYEES 4,895
JOB OPENINGS 291

THE SPECIALTY retailer's mantra that "One great person equals three good people" creates a culture that "brings out the best" in employees, who feel that "everyone matters" here. Staffers say they're "valued and respected," and they enjoy higher hourly wages than the industry average.

FROM THE RECRUITER

"Since most everyone has smartphones, the common practice for enthusiastic potential hires is to respond to emails almost immediately. It's my recommendation to reply ASAP to stay ahead of the pack."

TINA NGUYEN
WORKFORCE PROJECT MANAGER, SCRIPPS

50
MARS

HQ .... McLean, Va.
EMPLOYEES 13,193*
JOB OPENINGS 481

EMPLOYEES at this food and candy maker (whose brands include Snickers, Uncle Ben's rice, and M&M's) live by the company's "Five Principles": quality, responsibility, mutuality, efficiency, and freedom. Staffers say the values are a "guiding light," influencing even "how we act in our personal lives, making us the best version of ourselves."

52
W.L. GORE & ASSOCIATES

HQ .... Newark, Del.
EMPLOYEES 9,889
JOB OPENINGS 66

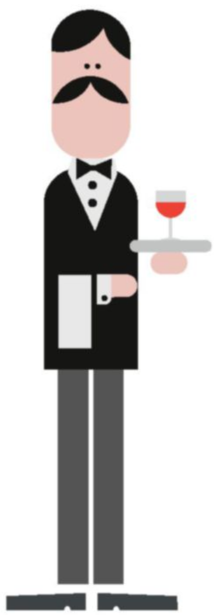
THERE'S a promote-from-within culture at this manufacturing company, which makes Gore-Tex fabrics, medical devices, and more. Nearly half of its hires in the past year were made internally. Employees say they can "literally move to any role in the organization" with the right skills and training—which Gore will help pay for.

48
THE CHEESECAKE FACTORY

HQ .. Calabasas Hills, Calif.
EMPLOYEES 36,957
JOB OPENINGS 2,300

LEADERSHIP'S support for its people is "second to none" at the restaurant chain, where staff praise "warmhearted" management for "their amazing flexibility" and "keeping everyone positively motivated." The company stresses employee development, and all external management hires start at a junior level to better learn the culture.

CHEESECAKE FACTORY STAFF TASTE ALL NEW ITEMS TWICE A YEAR. ↘



51
PLANTE MORAN

HQ .... Southfield, Mich.
EMPLOYEES 2,165
JOB OPENINGS 135

THE ACCOUNTING firm's management philosophy is summed up by the golden rule. No, really—new hires even receive miniature rulers when they start the job. "It's more than a symbol," says one employee. "Caring for others is the cornerstone of our culture."

53
PERKINS COIE

HQ .... Seattle
EMPLOYEES 2,208
JOB OPENINGS 30

THIS LAW FIRM cultivates a culture of "mutual respect." Leaders are lauded for openness, honesty, and inclusivity. Managing committee members aim to visit each office four times yearly to deliver on their commitment to "transparency, candor, and sharing information." Sabbaticals and extra paid time off for long-timers sweeten the deal.

*INCLUDES U.S. EMPLOYEES ONLY.

"THE WORLD IS BECOMING MORE INTERCONNECTED EVERY DAY, WHICH IN SOME WAYS MAKES IT MORE CHALLENGING TO BALANCE OUR PERSONAL AND PROFESSIONAL LIVES. AS A RESULT, WE PLACE A MAJOR EMPHASIS ON HELPING TEAM MEMBERS BE FULFILLED ACROSS ALL ASPECTS OF THEIR LIVES—FROM THEIR CAREERS TO THEIR FAMILIES TO THEIR EXPERIENCES."

CHRISTOPHER NASSETTA, PRESIDENT AND CEO, HILTON

54 NATIONWIDE

HQ................. Columbus
EMPLOYEES........ 34,232
JOB OPENINGS...... 1,000

GIVING BACK is so valued at this insurance company that it gives workers extra paid time off for donating blood at the permanent on-site Red Cross center. Employees who "take pride" in working for a "good corporate citizen" even give to each other: Over three years, an optional payroll deduction has collected and paid $162,000 to staff in times of need.

58 WHOLE FOODS MARKET

HQ: Austin • **EMPLOYEES:** 86,645 • **JOB OPENINGS:** 3,600

"RESPECT" is one of the "key ingredients" at this famously green grocery chain, which makes employees "feel welcome," "appreciates" their contributions, and pays staffers in stores "fairly" with gain sharing and bonuses when they come in under budget on labor costs.

Customers at a new Whole Foods store in Missouri check out the extensive cheese selection.

55 JM FAMILY ENTERPRISES

HQ .. Deerfield Beach, Fla.
EMPLOYEES.......... 4,203
JOB OPENINGS......... 269

THE PEOPLE who work at this diversified automotive company are treated as the company's "most important asset." That's motivating, say coworkers, whose colleagues "work hard to show thanks" for "all that the JM Family does" for them—including a pension plan, 12% profit sharing, perks like free haircuts, and discounts on new cars.

56 CHILDREN'S HEALTHCARE OF ATLANTA

HQ..................... Atlanta
EMPLOYEES.......... 8,664
JOB OPENINGS......... 390

EMPLOYEES SAY this children's hospital goes out of its way to create a "fun," "positive," and "encouraging" environment for staffers, with plenty of "appreciation" so they're always motivated "do their best" to further the company mission: "Keeping kids healthy and safe."

57 ENCOMPASS HOME HEALTH & HOSPICE

HQ....................... Dallas
EMPLOYEES.......... 8,232
JOB OPENINGS......... 961

"EVEN IF I WON the lottery, I would continue working for Encompass," says one employee at this health care provider. Workers say the "compassionate" culture at this company is driven by its "amazing" and "approachable" CEO, April Anthony, who staffers say is "the real deal."

59 SAP AMERICA

HQ..Newtown Square, Pa.
EMPLOYEES.........17,705
JOB OPENINGS......... 212

THERE IS a "relentless tide of optimism" at the U.S. offices of this "dynamic" software titan, where "every challenge is viewed as a learning opportunity." With SAP's worldwide headquarters in Germany, employees stateside feel they're part of a "global community," where "anyone in the world" is willing to lend a helping hand.

WHOLE FOODS: COURTESY OF WHOLE FOODS MARKET; NASSETTA: SIMON DAWSON—BLOOMBERG VIA GETTY IMAGES

COMPANY SPOTLIGHT

FEDEX

FedEx Puts People First And Reaps the Benefits of Their Satisfaction

A strong corporate culture provides employees with a sense of pride and opportunities for growth.

89% of employees say they are proud to tell others they work at FedEx.

87% of employees say they feel good about the ways they contribute to the community.

AT FEDEX, employees see the company as more than just a package delivery service.

"The people who work here know they are connecting people and possibilities around the world," says Judy Edge, corporate vice president of human resources. "They know that it's somebody's wedding dress or somebody's priceless manuscript."

Indeed, FedEx works hard to keep people at the heart of its operations. With more than 400,000 team members serving 220 countries, that's a big job. Yet the company holds to a basic philosophy: If you take care of your people, they will take care of service and the profits will follow.

That care begins with a diverse and inclusive workforce, training that values the input of all employees, and a corporate culture that emphasizes teamwork. While jobs range from sales and IT to airplane pilots and package handlers, FedEx employees find that they have company support in crafting careers that allow them to move up the corporate ladder.

Edge is a good example. Having started in customer service 34 years ago, she has worked her way through a variety of company positions until she arrived in the FedEx C-suite in 2007. That kind of opportunity for personal advancement applies to dock workers seeking to become commercial drivers, office workers who want technology training, or even team members who need to relocate to a different state for family reasons.

"The result," says Edge, "is that you can have many different careers without ever leaving the umbrella of FedEx." Employees appreciate the company support of their development, and 85% say they want to work at FedEx for a long time.

Giving back and making a difference are woven into the FedEx business model. As part of its global leadership program, FedEx trains small groups of employees, then works with not-for-profits in other countries to put those employees' new skills to work. Its corporate giving strategy, FedEx Cares, includes initiatives in sustainable transportation, road safety, and disaster relief delivery—areas well aligned with core FedEx business strengths.

FedEx reinforces its commitment to excellence with employee awards for improving safety, boosting efficiency, and making the extra effort. One example: a driver who not only delivered a medical device to an elderly customer but returned after work to install it, then cut the grass because it needed mowing.

SOURCE: 2016 GREAT PLACE TO WORK® REVIEW™


Thank you.
We process over 12 million shipments a day to 220 countries and territories using 650 aircraft and 200,000 vehicles. But, it's our 400,000+ team members who put it all together and deliver every day.
FedEx
FORTUNE
100
BEST
COMPANIES
TO WORK FOR®
2017
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60 → 63

• THE 100 BEST COMPANIES TO WORK FOR •

60
ADOBE SYSTEMS

HQ..................San Jose
EMPLOYEES........ 14,612
JOB OPENINGS...... 1,500

PEOPLE at this software company, which makes ubiquitous programs like Acrobat and Photoshop, say they "proudly" stand behind its "bold vision" to "change the future of creativity." Staffers praise the company's "endlessly interesting" work and its "passion for the arts," which "inspires" and "motivates" employees.

61
SOUTHERN OHIO MEDICAL CENTER

HQ..... Portsmouth, Ohio
EMPLOYEES.......... 2,419
JOB OPENINGS......... 124

RATHER THAN betting on luring already established hotshots to Ohio, this hospital excels at developing its own rock stars: 40% of hires last year were internal, and tuition reimbursements averaged more than $7,000. The result is that staffers "take the extra minute to go the extra mile" for both patients and coworkers, who feel like "family."

FROM THE RECRUITER

"Avoid swearing. While this may seem obvious, it happens more often than you'd think—and not only can it be offensive, but you can make the interviewer question your judgment with clients or customers."

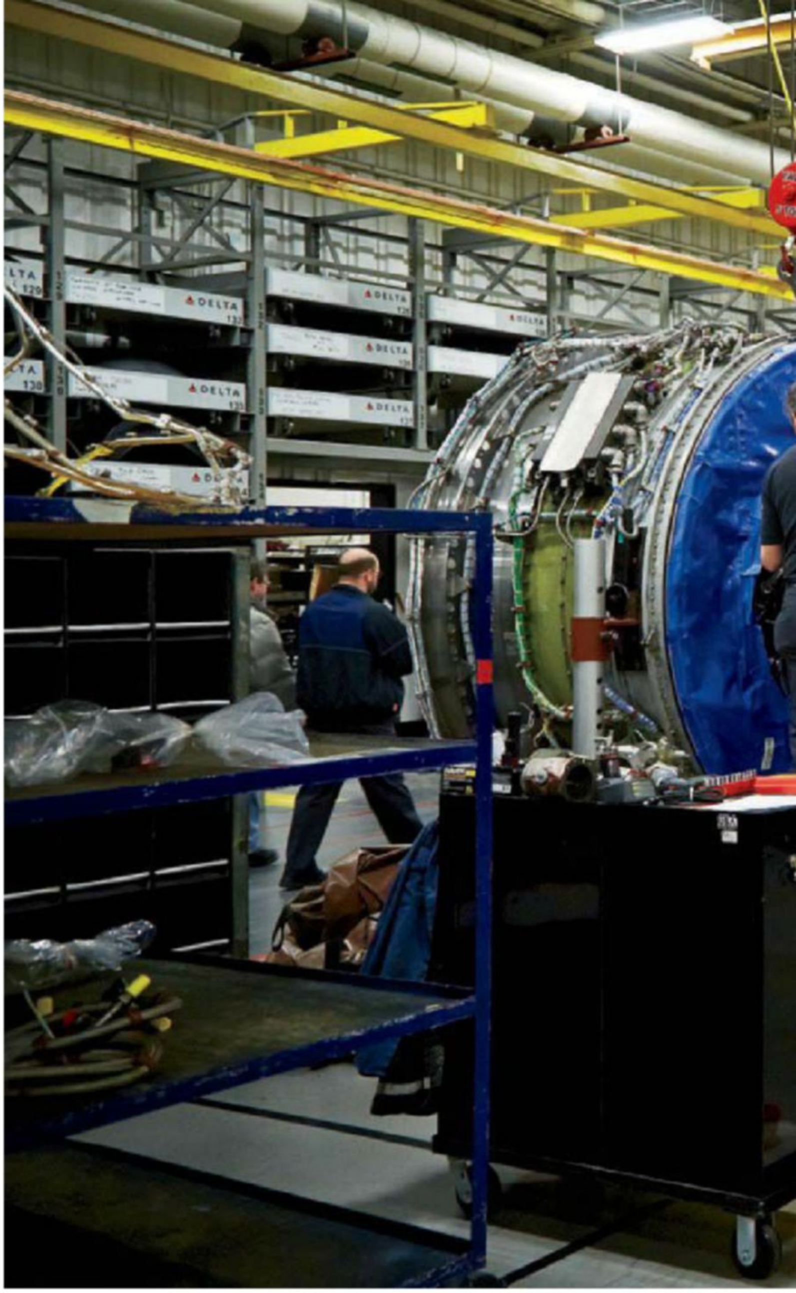
++

ANGELA NIEMIEC
RECRUITING MANAGER, PLANTE MORAN

62
GOLDMAN SACHS

HQ........... New York City
EMPLOYEES........ 30,863
JOB OPENINGS...... 1,000

THE "TYPE-A" people at this investment banking firm value their "intelligent, motivated" colleagues, as well the growth opportunities within the bank's "meritocratic" culture. "Nothing holds you back at Goldman Sachs," says one staffer here. "Hard work is rewarded."



63 DELTA

HQ.. Atlanta
EMPLOYEES.................................. 85,553
JOB OPENINGS............................... 10,000

IN AN INDUSTRY KNOWN FOR COST CUTTING, CRANKY PASSENGERS, AND BOOM-AND-BUST ECONOMIC CYCLES, **DELTA** MAKES ITS FIRST-EVER APPEARANCE ON OUR LIST. HOW? A STRONG CULTURE, GOOD BENEFITS—AND PROFIT SHARING BY THE BILLIONS.

BY JEFF JOHN ROBERTS

THE NEXT TIME you have a bad day at work, imagine you're instead in an airport surrounded by hundreds of frustrated customers demanding to know when they'll get home. Or try explaining an unexpected layover to a plane full of grumpy passengers. That sort of pressure is why the airline industry is among the most stressful of work environments. But in the case of Delta Air Lines, many employees don't ▷▷

Working on a jet engine at Atlanta's Hartsfield-Jackson airport.

▲ PHOTOGRAPH BY **GREGORY MILLER**

▷▷ just tolerate their jobs. They love them.

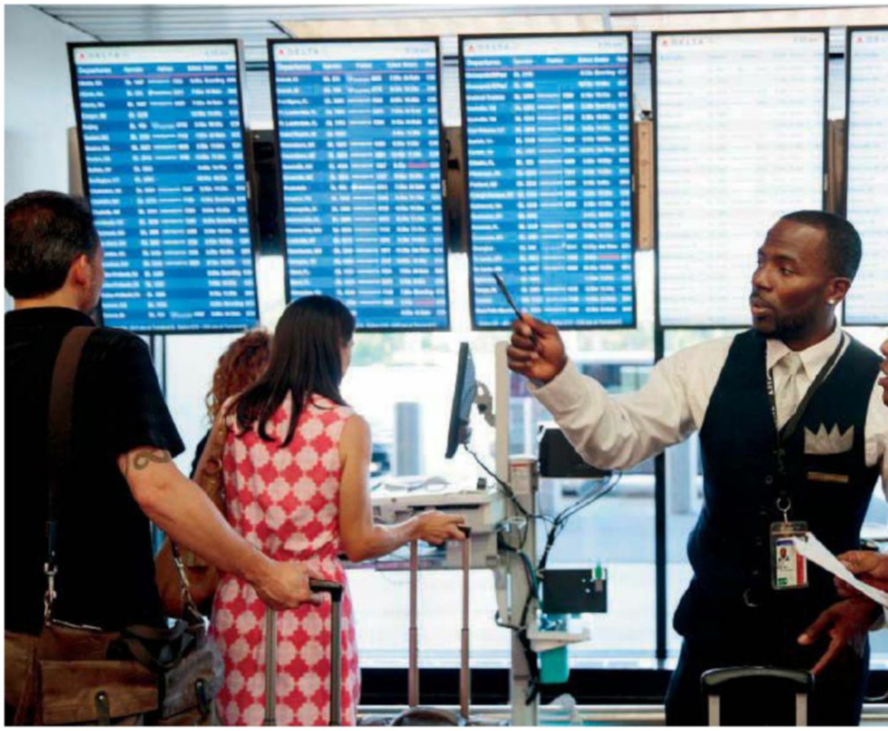
Among the companies that made the cut for *Fortune*'s 100 Best Companies to Work For list, the most surprising may well be Delta, which is on the list this year for the first time; it's also the first airline to make the cut in a dozen years. Unlike staff at many other firms on the list, Delta's employees deal with the public on a regular basis, and they work in an industry known for ruthless cost cutting and economic shocks. Meanwhile, Delta doesn't offer free haircuts or massages or other lavish perks that are familiar in fields like finance and technology. In fact, only about 5,700 of the company's more than 85,000 employees work at headquarters—the rest are scattered in the air or on the ground at airports around the world.

So how did the company do it? The answer lies in a shrewd compensation scheme, a strong set of values dating back to the company's founder, and a deliberate effort to double down on those values in recent years.

In February, Delta handed out more than $1 billion in profit-sharing bonuses to its employees. Again. It was the third year in a row the carrier handed out more than a billion in bonuses to its employees. (As they are every year, the checks were distributed on Valentine's Day.)

The profit-sharing program, which this year paid out 10% of pretax earnings to employees, was established in 2005, when Delta was still clawing its way out of bankruptcy and wanted to align employee interests to the financial success of the airline. Delta isn't the only airline to share profits with employees, but its bonus program is widely regarded as the most generous—for an airline or any blue-chip company. "We promised that at the point where the company would turn it around, our employees would receive the first fruits of those efforts," says Delta CEO Ed Bastian, a 19-year veteran who helped set up the program in his previous role as CFO.

The profit sharing, combined with high pay for the industry, has resulted in an aversion to outside cultural influences—most notably, unions. While Delta's pilots and flight dispatchers are unionized, it is the only major carrier without a union for flight attendants, baggage handlers, reservation agents, and other groups.



That held true even after Delta merged with the heavily unionized Northwest Airlines in 2008; employees for the combined companies voted down unionizing. Bastian says there was room for only one company's culture—Delta's. "We didn't treat this as a merger of equals," he says. "Companies make the mistake of wanting everyone to feel great. We were very clear about the Delta brand, while the Northwest culture was contentious, with strikes and unrest." The unions were initially skeptical, he says, but "buy-in happens. It's taken years, but it's a success."

As for the Delta culture itself, the company relies on the "Rules of the Road," a booklet outlining a set of principles and values developed in 2007 for executives but now given to every

DREW ANGERER—GETTY IMAGES

A Delta employee helps travelers at LaGuardia Airport in New York City last August after Delta flights around the globe were grounded because of a system outage.

CEO Ed Bastian in the Delta Sky Club's open-air lounge at Atlanta's Hartsfield-Jackson airport.

SCOTT AREMAN—COURTESY OF DELTA

employee. The rules draw heavily on the folksy maxims of Delta principal founder C.E. Woolman, who preached empathy for customers, humility, and respect for the competition. Sample Woolman sayings include "Let's put ourselves on the other side of the counter," and "The only monotonous thing about the aviation industry is the constant change."

Delta culture also includes a letter for all new hires that welcomes them to the "family," and a program called Velvet 360 that last year let nearly 8,000 frontline employees meet directly with senior executives to ask them about the state of the business.

Every big company, of course, likes inspiring mottoes and is quick to talk up the benefits of such transparency. But in Delta's case, the proof of a positive corporate culture becomes apparent in the high-pressure situations for which the airline industry is famous.

Last August, disaster struck at Delta when a colossal computer outage grounded flights around the world for a day, leaving travelers stranded at airport gates everywhere. It was a horrible experience for Delta employees and their passengers, and it is exactly the sort of thing that causes an airline's monthly consumer satisfaction scores to crater. But oddly, that didn't happen at Delta. Instead, the airline's scores went up in the wake of the outage.

Bastian credits this unusual outcome directly to the company's culture, which led employees to deal with the outage with empathy and good cheer and even resulted in some passengers expressing support for the Delta workers during the ordeal.

To encourage this "we're in it together" sense of solidarity, Bastian makes a point of flying coach in Delta's planes and being visible to the company's frontline workers several times a week. Delta's leaders also maintain a strong presence on social media, videos, and elsewhere on the Internet in order to reduce the sense of distance at a company where more than a third of the workforce is always on the go.

But while culture is important, the more conventional advantages of a job—namely, pay and benefits—are most important to keeping Delta's workers happy. So instead of free haircuts or all-you-can-eat kale buffets, Delta focuses on compensating its workers well, with good salaries and the profit-sharing plan, as well as a generous 401(k) program that matches contributions up to 9%.

Bastian says the company is going through a review of benefits its next-generation employees most value, and it may add things here and there—but within limits. "We're a 90-year-old company—401(k)s for us are a big deal," he says.

But he points out that Delta employees do get one very special perk. "We have the best benefit there is, which is free travel around the world," he says. Indeed. Last year, employees and their guests flew more than 4 million flight segments (they fly standby) courtesy of their employer. We're guessing that most of them would probably say it beats a kale buffet.

COMPANY SPOTLIGHT

NATIONWIDE

Helping Associates Grow Fosters Loyalty, Passion and Business Success

At **Nationwide**, relationships matter. Engaging in honest two-way dialogue and nurturing talent create a workforce that's driven to succeed.

93% of employees say "I feel good about the ways we contribute to the community."

91 – PERCENT – of employees say "I'm proud to tell others I work here."

SOURCE: 2016 GREAT PLACE TO WORK® REVIEW™

IN THE NINE YEARS that Cathy Lanning has worked at Nationwide, she has risen through six positions, including directing marketing strategy for Nationwide Bank at its launch, and setting up the marketing analytics group for the company's insurance, investment, and banking businesses.

"I've been able to build businesses, reinvent teams, and create new tools," says Lanning, now senior vice president, strategic partnerships for Nationwide. "I feel so lucky to work in a company that not only fosters and encourages associates' growth, but really enables it."

At the Columbus, Ohio-based company, engagement is seen as vital to employee retention, and key to business success. "It's incredibly important to us that our associates feel valued and have the opportunity to contribute, grow, and have impact," says Gale V. King, executive vice president and chief administrative officer. "Empowering and valuing associates helps inspire equally strong relationships with our members and partners."

Formal leadership development programs and informal mentorships help identify and encourage associates' potential. Lanning, once a mentee, now mentors 12 women and is a member of the Women's Associate Resource Group, one of many ARGs devoted to the interests of specific groups such as veterans and disabled employees. Nationwide "is a relationship-based company," says Lanning.

"Everything begins with honesty and trust," says Nationwide CEO Steve Rasmussen. The company seeks the same kind of candor from associates, who are asked to provide feedback annually. Nationwide also encourages frank dialogue about issues outside the company that are affecting associates, even when they're controversial. These exchanges, called Catalyst for Change, are particularly powerful in opening constructive dialog about matters impacting our country, says King.

The company has been recognized for its culture, and it's commitment to diversity and inclusion. It offers a comprehensive benefits package, and helps time-pressured associates balance their professional and personal lives by allowing flexible work options. "Many women talk about tradeoffs, but I don't feel I have to make tradeoffs here," says Lanning, a mother of two. "I'm entrusted to determine how to allot time, and it's completely freeing.

"When you go to work every day in this environment, you realize it's truly a special place," she says. "It's a culture that would be hard to replicate."

64
DELOITTE

HQ............ New York City
EMPLOYEES........ 78,642
JOB OPENINGS...... 4,890

EMPLOYEES at this professional services firm love the company's "commitment" to work/life balance. Staff here average 42 paid days off per year, and there's a sabbatical program too. "You can take ownership of your own time and do what works best for you," says one employee. "We really do, from the top down, honor having a life."

65
ALSTON & BIRD

HQ..................... Atlanta
EMPLOYEES.......... 1,575
JOB OPENINGS........... 24

"IT'S THE PEOPLE" who make this law firm great, say staffers, who love its "energy," "sense of humor," and "collaborative" ethos—plus the 15 paid hours a year for community service and its mock courtroom for training. The "positive work environment" is "contagious," says one employee. "Everyone wants each other to succeed."

66
ACTIVISION BLIZZARD

HQ............ Santa Monica
EMPLOYEES.......... 9,472
JOB OPENINGS......... 508

THIS GAMING and entertainment company has what employees say is an "epic" environment that's "100% nerd without any restraint." Coworkers here can geek out in employee affinity groups, which include fencing, brewmastery, and skateboarding. And animators can get continuing education training in juggling, clay modeling, and more.

67
CISCO

HQ................... San Jose
EMPLOYEES........ 72,255
JOB OPENINGS...... 3,200

BRIGHT THINKING is rewarded at the networking giant, where winners of its hackathon receive $25,000 in prize money (and $25,000 in seed money). Employees also relish the "freedom to innovate" and "make a meaningful difference." In 2016, staff logged 227,213 volunteer hours.

68
QUIKTRIP

HQ.. Tulsa
EMPLOYEES.. 20,460
JOB OPENINGS.. 103


A QuikTrip employee in Kansas fills the pastry case as the store gets ready for its morning customers.

COURTESY OF QUIKTRIP

EMPLOYEES BUILD CAREERS at this convenience-store operator, which has unusually low staff turnover. More than 600 people have been at the company for more than 20 years. Part of the secret sauce is healthy profit-sharing bonuses, along with job counseling and tuition reimbursement. Says one staffer: "This company makes everyone feel important."

69

AMERICAN EXPRESS

HQ............ New York City
EMPLOYEES........ 56,400
JOB OPENINGS...... 1,804

EMPLOYEES at the financial services giant, founded in 1850, feel an "extreme sense of pride" working for one of the world's "most respected" brands. Benefits like 100 days paid parental leave (and up to 140 days for birth moms) come with the chance to offer "best-in-class service." Says a staffer: "It's more than a job. It's a higher calling."

FROM THE RECRUITER

"I love when a candidate can articulate their passion for the health care field and compassion toward the patients they serve. Some stories I have heard through the years have been very touching."

++

AMIE SORGE
OHIOHEALTH RECRUITMENT CONSULTANT

72

IKEA HOLDING U.S.

HQ... Conshohocken, Pa.
EMPLOYEES........ 14,927
JOB OPENINGS......... 206

THE HOME GOODS icon's "egalitarian" and "inclusive" culture is one in which "everyone's opinions matter." No matter their background, "people feel valued for the contributions they make." (More than half of staff are minorities, and 47% are women.) And to promote equality, each location has a "diversity and inclusion ambassador."

73

NOVO NORDISK

HQ.........Plainsboro, N.J.
EMPLOYEES........ 42,847
JOB OPENINGS......... 125

U.S. EMPLOYEES of the Danish-owned pharmaceutical power player say the company's Scandinavian roots create a culture that's "different in a very good way." There's a "friendly" and "honest" environment, and the management team is "focused on the physical and emotional well-being" of people who work there.

74

RACKSPACE

HQ.............. San Antonio
EMPLOYEES.......... 6,184
JOB OPENINGS......... 178

"YOU DON'T have to check yourself in at the door" at this cloud-services company, where employees praise the "relaxed" atmosphere and freedom of "individual expression." That culture is still going strong, Rackspace says, even after the company changed ownership in November.

70

ROCHE DIAGNOSTICS

HQ..............Indianapolis
EMPLOYEES.......91,700*
JOB OPENINGS 245

"NO ONE has it better than us," says one employee at this medical diagnostics company, with "outstanding" benefits, perks like an on-site summer camp for staffers' kids, "wonderful" work/life balance, and "courageous and intelligent" coworkers. The result: The average tenure here is an impressive $10\frac{1}{2}$ years.

71

AUTODESK

HQ....... San Rafael, Calif.
EMPLOYEES.......... 8,771
JOB OPENINGS......... 230

"INNOVATION is rewarded" at this design software company, where employees can "make their mark" working on the tools designers use to "create a more beautiful world." To encourage creative thinking, employees who have new patents granted are given bonuses of up to $2,000.

HYLAND OWNS SEVEN VACATION HOMES EMPLOYEES CAN USE FOR FREE.

75

HYLAND

HQ.......... Westlake, Ohio
EMPLOYEES.......... 2,227
JOB OPENINGS......... 172

THE CEO of this software developer initiates spontaneous work breaks, which can mean anything from cornhole tournaments to dodgeball competitions. There's a Montessori preschool on-site for staffers' kids, and people love the "decidedly noncorporate environment" and "supportive" executives who "know you by name."

*EMPLOYEE COUNT FOR ROCHE GLOBAL GROUP.

76
BUILD-A-BEAR WORKSHOP

HQ.................. St. Louis
EMPLOYEES.......... 4,330
JOB OPENINGS........... 39

"MOST FUN EVER!" says one employee at this "people-centered" teddy-bear retailer, where work feels like an "awesome adventure," with "rewarding" roles and "open, welcoming" coworkers. Employees feel as if they "literally sell happiness," which might be why there were more than 150 applicants per management job opening last year.

77
CARMAX

HQ................. Richmond
EMPLOYEES........ 22,447
JOB OPENINGS...... 2,000

THE USED-CAR retailer takes employee success seriously, assigning all new hires to mentors when they start. The "nurturing" work environment "helped me become a better person," says one staffer. And the more than 40 average annual hours of training are "amazing." Confidence is "instilled and constantly promoted."

78
SLALOM

HQ..................... Seattle
EMPLOYEES.......... 3,993
JOB OPENINGS......... 300

SLALOM'S VALUES "aren't just words on paper"—at this management consulting firm, people say they "truly believe" in the company principles. From the top down, people work to "do what is right, always" in a culture that "celebrates authenticity." Last year Slalom expanded access to its popular sabbatical program for all employees.

79
FOUR SEASONS HOTELS AND RESORTS

HQ..................... Toronto
EMPLOYEES........ 41,201
JOB OPENINGS...... 1,159

STAFF at the luxury hotelier are "proud" of their "great reputation" around the world for stellar customer service. And guests aren't the only ones who get the five-star treatment: Staff go "above and beyond" to help coworkers in need, and every employee gets to stay at Four Seasons hotels on vacation for free (food is 50% off too).

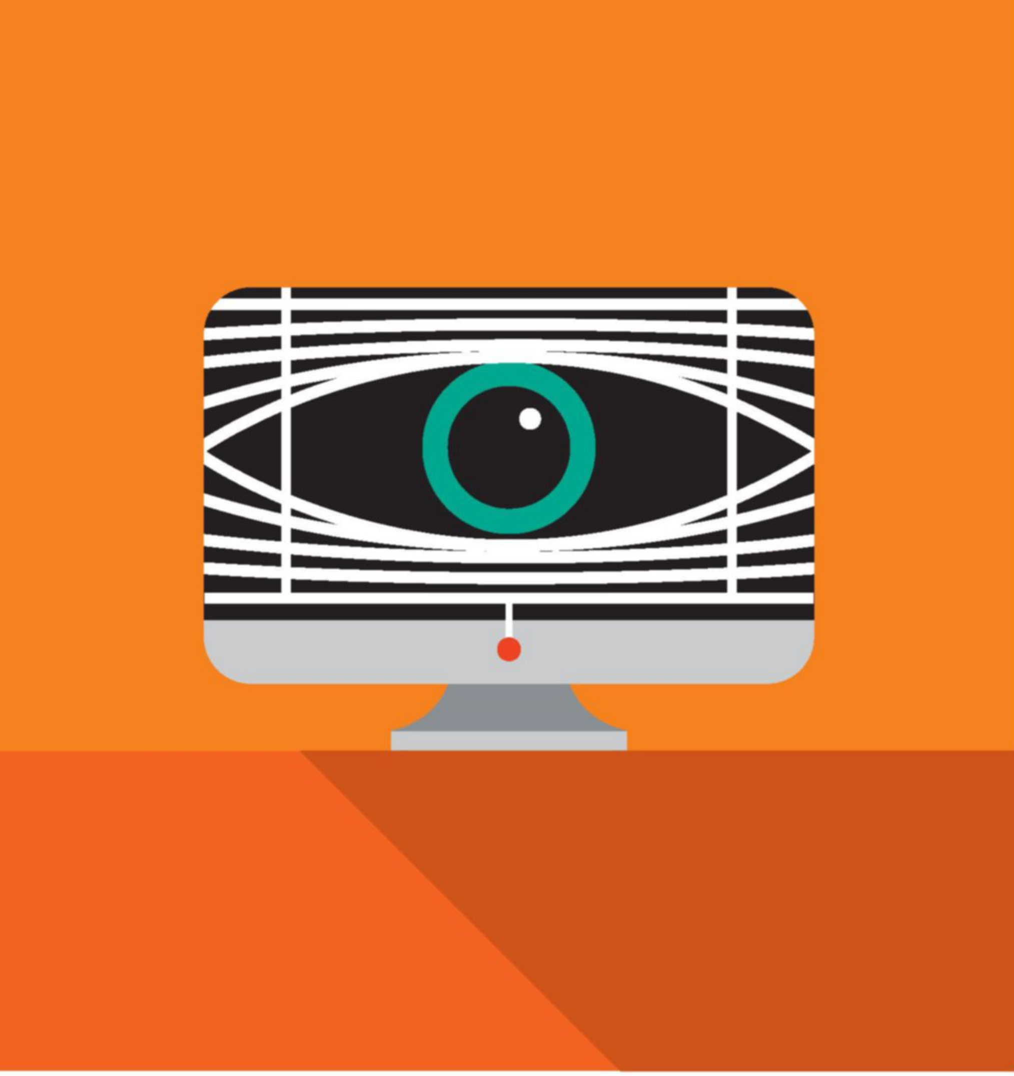
SURVEILLANCE

CHANCES ARE, SOMEBODY IS WATCHING YOU IN THE OFFICE—AND TECHNOLOGY IS RACING AHEAD FAR FASTER THAN LAWS AND PRACTICES TO RESTRAIN IT. THAT UBIQUITOUS EYE IS THEORETICALLY **MEANT TO PROTECT YOU,** BUT IT SURE DOESN'T FEEL THAT WAY.

BY ROBERT HACKETT

• **EVERY DAY** when I boot up my company-issued laptop, I am greeted by a warning: "This computer system is the property of Time Inc. and is intended for use by employees and authorized agents of Time Inc. in accordance with its stated policies. Use of this system constitutes consent to monitoring and no expectation of privacy in such use."

We live in the golden age, if you could call it that, of electronic surveillance. Whether it's the National Security Agency harvesting millions of emails, or police and property owners in cities



mounting cameras in public seemingly every five feet, or advertisers trailing you as you move around the web, you're deluded if you think somebody *isn't* following you at any moment. Even your TV may be peeping if you own a Vizio.

Why should the workplace be any different? There, as my own example suggests, many companies at least let us know they're watching. Yet most of us forget, and ignore the fact that organizations are amassing copious information—our every login time, every website visit, every keyboard punch—on our actions and movements every single day. "They're collecting everything you do," says Avivah Litan, an analyst at research firm Gartner. "It can get pretty creepy," she says.

The many ways companies keep tabs on employees are dizzying. On physical premises, businesses use closed-circuit cameras to capture video, contactless card readers to manage access and log hours, and audio recordings to check up on customer service. Some go as far as parsing emails and texts, raising flags whenever a trigger word—or today even a concept, since artificial intelligence may be employed—is spotted. GPS tracking, commonly available in company-owned vehicles, now extends to company-issued phones and even, on occasion, ID badges.

The limits are blurry at best. Phone tracking, precisely, begot a lawsuit in 2015 when a California company called Intermex allegedly fired a salesperson for refusing to use a phone app that would have let the company monitor her location at all hours. (The suit was reportedly settled last year.)

In a notable case in 2016, the *Daily Telegraph*, a British newspaper, installed heat and motion sensors underneath staffers' desks. The purported goal was to make the office "as energy efficient as possible," but some employees suspected that management wanted to track their hours to help identify candidates for downsizing. (The devices were removed after the newsroom revolted.)

And even if a company isn't trying to spy, the ubiquitousness of cameras and now drones that watch and record all sorts of processes can create its own inadvertent dragnet. The supervisor on a construction site in Los Angeles fired two workers after a drone monitoring the site happened to catch them having sex on their break. The workers threatened to sue, arguing that the company failed to disclose the hovering eye beforehand. The company settled, according to its lawyer, Todd Wulffson of Carothers DiSante & Freudenberger.

These days, snooping doesn't require fancy gadgets. Sites like Facebook and Twitter reveal a lot to bosses about how their staff spend their off-hours, and sometimes on-hours, whom they associate with, and where their political loyalties lie. "Social ▷▷

▲ ILLUSTRATION BY **ROBERT SAMUEL HANSON**

▷▷ networking has created an almost indirect type of monitoring," says Carothers lawyer Mark Spring. (Sign of the times: The website of a top employment law firm recently featured a question from an executive asking if she can fire a worker she saw in a political protest covered on TV.)

Of course, one side's snooping is another side's protection. If you're a customer of a brokerage, given the long history of misdeeds in that industry, you may well be pleased that every email, instant message, and phone call is being recorded. Nir Polak, CEO of Exabeam, a cybersecurity startup that analyzes employees' metadata, says there are two main reasons customers buy his firm's monitoring product. The first is because an external attacker can compromise workers' identities, hacking and impersonating them and using their credentials to run amok. The software can help pick out the "imposters roaming around in your IT environment," Polak says.

The second is the fear of employees going rogue. Call it the Snowden factor. Say you're a company developing intellectual property in another part of the world. Manufacturing firms, for example, must keep tabs on outsourced work, making sure no one is stealing, say, source code. "That's what happened with globalization," Polak says.

As a rule, the software masks identifying information, Polak says: "Only when something is deemed to be a threat do you get approval from the chief privacy officer or part of the legal team to be able to break the glass"—decrypting more granular personal data—"and see who the individual is," he adds.

Given the ease of gathering data, companies are often unsure of how much or what to collect. Mike Olson, a senior information security analyst at outdoor-gear retailer REI, says there are few standards defining what's okay. And does the company even want all that data to begin with? What if it can be used against the company in a wrongful-termination lawsuit or an age-discrimination case? Just because you can collect, does that mean you should?

European countries generally have greater respect for privacy than the U.S., says Bart Willemsen, a research director at Gartner and a former chief privacy officer based in the Netherlands. He talks up "data minimization"—collecting data only for a specific purpose, rather than gathering everything you can and finding a use later. It's a nice idea. But as the monitoring technology gets ever cheaper and more powerful, it's not hard to tell which direction this trend is headed in.

80
PROTIVITI

HQ ...... Menlo Park, Calif.
EMPLOYEES 4,000
JOB OPENINGS 144

"THE COMPANY truly wants everyone to be successful," say employees at this global consultancy, where everyone gets a peer adviser (who introduces new hires to the culture), a career adviser (who guides professional development), and an executive adviser (who helps employees grow their professional network).

81
CADENCE

HQ .... San Jose
EMPLOYEES 6,811
JOB OPENINGS 557

THE SEMICONDUCTOR technology company regularly conducts analyses to ensure that women employees are getting paid fairly. "This company is very good at rewarding employees solely on what they deliver," says a staffer. "We are a team of equals." More than 40% of employees have been here for 10 years or more.

82
FIRST AMERICAN FINANCIAL CORP.

HQ .... Santa Ana
EMPLOYEES 19,375
JOB OPENINGS 355

THIS FINANCIAL services company "truly cares about community," say its team members, 1,100 of whom participated in 36 breast-cancer races and helped raise more than $217, 000 for research and treatment of the disease last year. Employees also have the option of purchasing company stock at a 15% discount.

83
TEKSYSTEMS

HQ .... Hanover, Md.
EMPLOYEES 5,469
JOB OPENINGS 1,000

THE IT STAFFING and services firm's culture is rooted in "relationships" and "appreciation." The company shows its thanks by sending flowers to the parents and spouses of top performers. On the company's 30th anniversary, it gave employees $250 for each year they had been at the company.

A Ping-Pong tournament at Workday's Pleasanton, Calif., headquarters last year.

COURTESY OF WORKDAY

MEET THE WORKPLACE CULTURE WARRIORS

EMPLOYEES ALREADY LOVE THEM, BUT THESE BEST COMPANIES ARE STILL RETHINKING HOW THEY DO BUSINESS, HOW THEY HIRE, AND EVEN THEIR CORE VALUES. HERE'S HOW **W.L. GORE, WORKDAY, AND SAP AMERICA** ARE SHAKING UP THEIR OFFICES AND STAYING AHEAD OF THE PACK.

BY JOHN KELL

IF YOU ASK Terri Kelly what she does to make W.L. Gore such a great place to work, she'll say she has it pretty easy: "This is something our founders thought through almost 60 years ago." Since Kelly took the helm in 2005, Gore has made *Fortune*'s list of Best Companies to Work For every year—but to be fair, it had already been on every year since we started the ranking in 1998 (see our Legends list for more).

With a track record like that, Gore might seem an odd candidate for a dramatic culture overhaul. But a little over two years ago, Kelly and her executive team began to see some concerning trends. Employees were anxious that slow decision-making and a lack of risk taking might be weighing on Gore's entrepreneurial endeavors. It's a problem any company the size and age of W.L. Gore—a 10,000-employee firm founded in 1958—is likely to face at some point. The question was, How much of Gore's successful infrastructure would Kelly upend to fix it?

▷▷ The firms on *Fortune*'s 100 Best Companies to Work For list are lauded for their carefully cultivated workplace cultures. But often the companies with the longest track records of success have them not because they're consistent, but because they're constantly reinventing the way they work. This year, W.L. Gore is far from the only strong company shaking things up. Software maker Workday is launching a revamp of its process for employee feedback, and business technology giant SAP America is rewriting its playbook on diversity. All three are examples of how, in a fast-moving corporate landscape, even the best companies can't rely on what worked in the past to keep working in the future.

At Gore, which made its name inventing materials like the waterproof fabric Gore-Tex, the risk of an innovation slowdown was particularly serious. Kelly quickly worked to streamline decision-making and helped create an in-house team called the Innovation Center of Expertise to shepherd promising employee ideas. The company also encouraged the formation of small startup teams that were free to explore new ventures. And because most ideas won't result in a successful new business, Gore gave team members the ability to return to their old duties if they weren't enjoying the entrepreneurial world. "That created a ton of enthusiasm for some folks who were frustrated" in the existing structure, Kelly says. "I'm pleased with what's happened."

Another company with good reviews that's convinced it could do more: human resources software company Workday. The company is in the middle of a broader pivot away from what Greg Pryor, vice president of leadership and organizational effectiveness, calls "performance management" (focused on penalizing low performers) and toward "performance enhancement" (focused on boosting employee efforts). "That's only a one-word difference," Pryor says, "but it's an important shift."

As a result of the company's introspection, Workday recently implemented a pilot program upending its system of employee feedback. In March the company started surveying staff weekly, so management is better attuned to how they are feeling about their goals and performance.

Pryor says the system is particularly well-suited to millennial workers, who crave feedback and dialogue and whose numbers in the company are growing.

And then there's business software maker SAP America (German tech giant SAP is its parent company). Its cultural challenge is a familiar one: promoting diversity in a fairly homogenous industry. In 2013, SAP promised that women would hold 25% of all leadership positions globally by the end of this year. Impressively, the company says it is currently at 24.6% and is confident it will hit that target.

To get there, SAP changed how it recruits, homing in on the application process and diving into job postings to ensure job descriptions used gender-neutral language. The hope was that recruiters would find more women applying to those roles if SAP removed signs of unconscious bias.

Tweaks to the hiring process happened at all levels, from partnerships with schools to hire new grads to attempts to lure more diverse executive talent. SAP believes those employees will prevent the company from becoming stultified in its thinking. The inclusiveness push "really is a core strategy to be relevant," says Jewell Parkinson, head of human resources at SAP North America.

Of course, while SAP has made progress in parity, it can't yet declare mission accomplished. Like almost every company, it still has work to do—but one sign that it's a great place to work rather than an okay one? It knows it.

"

COMMUNICATION IS LEADERSHIP. SIMPLY PUT, WE WANT EVERY SINGLE EMPLOYEE IN OUR COMPANY TO KNOW ABSOLUTELY EVERYTHING. WE'LL PROBABLY NEVER ACHIEVE THAT, BUT BY TRYING, WE'LL COME CLOSER THAN WE WOULD HAVE OTHERWISE."

MELISSA REIFF, CEO, CONTAINER STORE

SLAVEN VLASIC—GETTY IMAGES

84
MAYO CLINIC

HQ .... Rochester, Minn.
EMPLOYEES 63,480
JOB OPENINGS 3,123

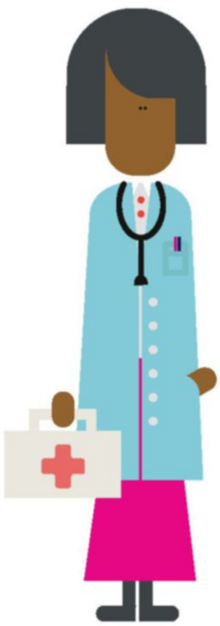
EMPLOYEES at the Mayo Clinic, one of the largest nonprofit medical centers in the world, say it's "not just a place to work—it is a place of hope." Besides being a leading source of care in a variety of specialties, it also offers perks like ice cream parties and "social committees" that add to a "positive" and "healing" environment.

Sheetz spent millions last year on raises and boosted starting salaries.

87
SHEETZ

HQ .... Altoona, Pa.
EMPLOYEES 16,079
JOB OPENINGS 3,870

"THERE ARE TIMES I laugh most of my way through my shift," says one employee at this "high-energy" and "quirky" convenience-store chain, where coworkers "are like family" and managers are "always in a good mood." Last year, Sheetz announced a $15 million raise for store employees, and it's converting more of them to full-time jobs.



MORE THAN 100 YEARS OLD, THE **MAYO CLINIC** IS STILL INNOVATING.

85
REGENERON PHARMACEUTICALS

HQ .... Tarrytown, N.Y.
EMPLOYEES 5,500
JOB OPENINGS 498

"DEDICATION, PURPOSE, impact, world-leading science"—those are some of the reasons people want to work at this biotech firm, which aims to combat a range of diseases and has four FDA-approved drugs. In a "world driven by the dollar," says one employee, it's "refreshing" to be at a company where the "bottom line is with patients."

86
OHIOHEALTH

HQ .... Columbus
EMPLOYEES 21,889
JOB OPENINGS 1,166

EMPLOYEE RECOGNITION at this hospital system is "unmatched," with staff award nights ("To be nominated is an honor," people say) and paid shopping trips for workers' 20th anniversaries. "This company makes you feel valued and appreciated," says one employee.

88
ACCENTURE

HQ .... New York City
EMPLOYEES 375,000
JOB OPENINGS 2,850

OPPORTUNITIES to "learn and grow" are "endless" at the professional services company, where employees work on "cutting-edge" projects that have the "potential to change the world." The "rapid pace of learning" is "incredible," and people "don't get bored." Plus, there's balance: More than 75% of staff have used flexible scheduling.

▲ PHOTOGRAPH BY **GREG MILLER**

STRATEGIC TRANSPORTATION COMES TO THE SUPPLY CHAIN

MOVING ON

FOR COMPANIES THAT MANAGE supply chains, transportation used to be a vendor function, and a necessary expense. As long as freight arrived intact for a fair price, expectations were largely satisfied. But those days are gone.

Today, moving goods from point A to point B is just the beginning of what's expected from the freight transport industry. These days, companies shipping goods are looking less for traditional vendors and more for long-term, strategic allies who can turn big data into big savings and better customer service.

What's emerging, observers say, is a deeper, more tight-knit relationship between shippers and third-party logistics (3PL) specialists. It's shaping up to be a powerful force that is optimizing routes, tightening up systems, and transforming supply chains from end to end.

"Both parties are moving away from a transactional relationship and more toward meaningful partnerships, with shippers relying on 3PLs to provide innovative solutions and a true competitive advantage," according to the "2017 Third-Party Logistics Study" by Capgemini Consulting and C. John Langley, professor of supply chain management at Penn State University.

Partnering strategically means a lot more than commissioning a truck to drive a certain route on a given day. Today—recognizing that transportation specialists have the data and analytical tools to make the most informed decisions—55% of companies that hire 3PLs are empowering those partners to make transportation mode decisions, rather than simply follow orders that dictate which mode must be used, according to the study.

Empowering 3PLs to manage transportation operations for them is paying big dividends for companies whose core competencies lie elsewhere. In fact, those who work with Transplace, a Dallas-based transportation management company, typically save 10 to 20% on the total landed cost of transportation.

By leveraging Transplace's software-as-a-service technology and managed logistics services, companies are able to optimally design routes, select transportation carriers and streamline the customs process for cross-border shipments.

Transplace's Transportation Management

CSCMP Council of Supply Chain Management Professionals
Educating and Connecting the World's Supply Chain Professionals.™

System gives companies greater visibility of their entire supply chain and access to critical data that allows them to more effectively plan and execute at both the network and shipment level and boost margins by carrying less inventory. And when the time comes to ship a load, Transplace's customers have access to more than 25,000 carriers.

"Combining powerful logistics technology with a 3PL's network, expertise, and processes, companies are able to better manage their logistics network than they would on their own," says Frank McGuigan, president and chief operating officer of Transplace.

Today's new partnerships come at a time when the $1.4 trillion logistics industry is rife with aggressive moves to win new business by delivering more value. Logistics firms invested $173 billion in mergers and acquisition deals in 2015, marking a 100% increase from 2014, according to the Capgemini study. International M&A quadrupled from $28 billion to $115 billion over the same one-year period.

Through industry consolidation and investments in technology, transportation providers are carving out strategic advantages, according to Rick Blasgen, president and CEO of the Council of Supply Chain Management Professionals. He sees traditional players buying up tech-savvy newcomers to gain a technological leg up. What's more, freight brokers are leveraging high-powered computing to book every available truck and rail car, sometimes in a matter of seconds.

"All that electronic connectivity allows them to position equipment, tender that load, and make that contract in a much quicker fashion," says Blasgen.

As shipping has come to entail far more than just moving freight, inefficiencies are no longer seen as necessary costs of doing business. Trucks seldom roll empty anymore when they're tapped into networks that exist to keep them loaded up, no matter which direction they're driving.

In this environment, trucking firms are well positioned to take advantage—as long as they're plugged into the right opportunities. That's been the case for Thomasville, N.C.–based Old Dominion Freight Line, a transpor-

WHEN THE TIME COMES TO SHIP A LOAD, TRANSPLACE'S CUSTOMERS HAVE ACCESS TO MORE THAN

25,000

CARRIERS.

tation firm with 18,000 employees and 226 service centers across the United States.

Old Dominion has grown revenues by an average of 12.3% annually since 1997. (The national growth rate for less-than-truckload was 7% in 2015.) Delivering data and transparency has been integral to OD's success, and customers receive ongoing support via freight analysis to inform their supply chain decisions concerning everything from optimizing the location of distribution centers to improving packaging.

"When you're looking at a lot of shipments going to a lot of different places, now it's about your supply chain, your inventory costs, and how fast the carrier can help you turn that," says Chip Overbey, OD's senior vice president for strategic development.

"For most midsize to larger companies, their cost is in their inventory and how fast they turn it," says Overbey. "Freight cost is important, but that's not where the preponderance of their cost is. It's in their cost of goods."

By putting big data to use, OD has become a sector leader in ways that directly pay off for its customers. Consider freight claims: At 0.3%, OD maintains one of the industry's lowest rate of lost or damaged shipments. This record stems from years of analysis and improvements to prevent problems.

OD customers also depend on the company's 99% on-time delivery rate. That degree of reliability, the result of careful analysis of what causes delays, enables companies to plan ahead and keep inventory levels as low as possible.

Driven largely by advances in technology, the 3PL market continues to see consistent annual growth to the tune of 7%, on average, since 2009, according to Armstrong & Associates, a Wisconsin-based 3PL consulting firm.

"Technology will continue to play a significant role in the evolution of the 3PL market," states CSCMP's *2016 State of Logistics Report*. "A key deliverable will be increased visibility and control into end-to-end logistics operations."

As these partnerships mature, empowerment is proving to cut both ways. Although logistics providers have a seat at the decision-making table, when it's time to choose modes and carriers, they're also equipping clients with an unprecedented ability to see into an ever more transparent supply chain. With improved visibility comes greater decision-making power, such as opting to redirect shipments based on downstream market signals captured in real time.

As transportation partnerships evolve to become more long-term and multifaceted, manufacturers and others are exhibiting heightened confidence that they can cut back on costly internal IT infrastructure.

Only 61% of shippers say they believe their organizations need to develop IT storage, processing, and architecture. That's down from 76% in 2014, perhaps due to the rapid proliferation of cloud-based alternatives, according to the Capgemini study.

"There is significant demand among shippers, in general, to look to their 3PLs as a source of capable IT technologies," the study states. "Although the 'tangible' services provided by 3PLs may be viewed in terms of operational and execution-based capabilities, competencies in the IT area are fast becoming differentiating factors when shippers are making selection decisions."

OLD DOMINION'S CUSTOMERS DEPEND ON THE COMPANY'S

99%

ON-TIME DELIVERY RATE.

To grow market share over the long term, according to *Transportation and Logistics in a Changing World*, a Boston Consulting Group report from October 2016, transportation specialists will need to go beyond what's working today and capitalize on six megatrends that will disrupt the industry: the rapid development of emerging markets; urbanization; sustainability; infrastructure congestion and scarcity; e-commerce; and digitization.

In the meantime, transportation specialists are moving to expand and solidify their value propositions. "The top providers are refining their market positioning to become one-stop 3PLs and target specific industries," states CSCMP's *State of Logistics Report*.

Shippers appear interested: 58% say they plan to outsource more operations to 3PLs this year, according to the 2016 *Third-Party Logistics Study*. Clearly they're investing where they see promise in a new type of partnership with long-term potential.

89 → 93

• THE 100 BEST COMPANIES TO WORK FOR •

89
AMERICAN FIDELITY ASSURANCE

HQ .... Oklahoma City
EMPLOYEES 1,757
JOB OPENINGS 78

THEY REALLY want this to be your last job: Pension plans, cushy 401(k) contributions, and bonuses for everyone at this life and health insurance company make people feel as if they're "in it for the long term." Employees can also get their car washed on-site, pick up prescriptions at the medical clinic, and work with a personal trainer at the office gym.

90
BRIGHT HORIZONS FAMILY SOLUTIONS

HQ ..... Watertown, Mass.
EMPLOYEES 20,323
JOB OPENINGS 1,530

IT'S THE CHILDCARE provider's "special mission" that drives its employees, who feel as though they're "shaping our children's future." The company also offers workers a 50% discount at Bright Horizons centers. Says one staffer: "There's no other company that would allow me to be with my children while building a career that I love."

91
AFLAC

HQ ....Columbus, Ga.
EMPLOYEES 10,324
JOB OPENINGS 211

PEOPLE AT this insurance company, founded in 1955, gush over the "family feeling" that permeates the workplace: "We celebrate each other's accomplishments; we suffer through each other's loss and hardships." Staffers praise the "strong, positive" culture "nurtured" by the CEO, Dan Amos, a "true servant leader."

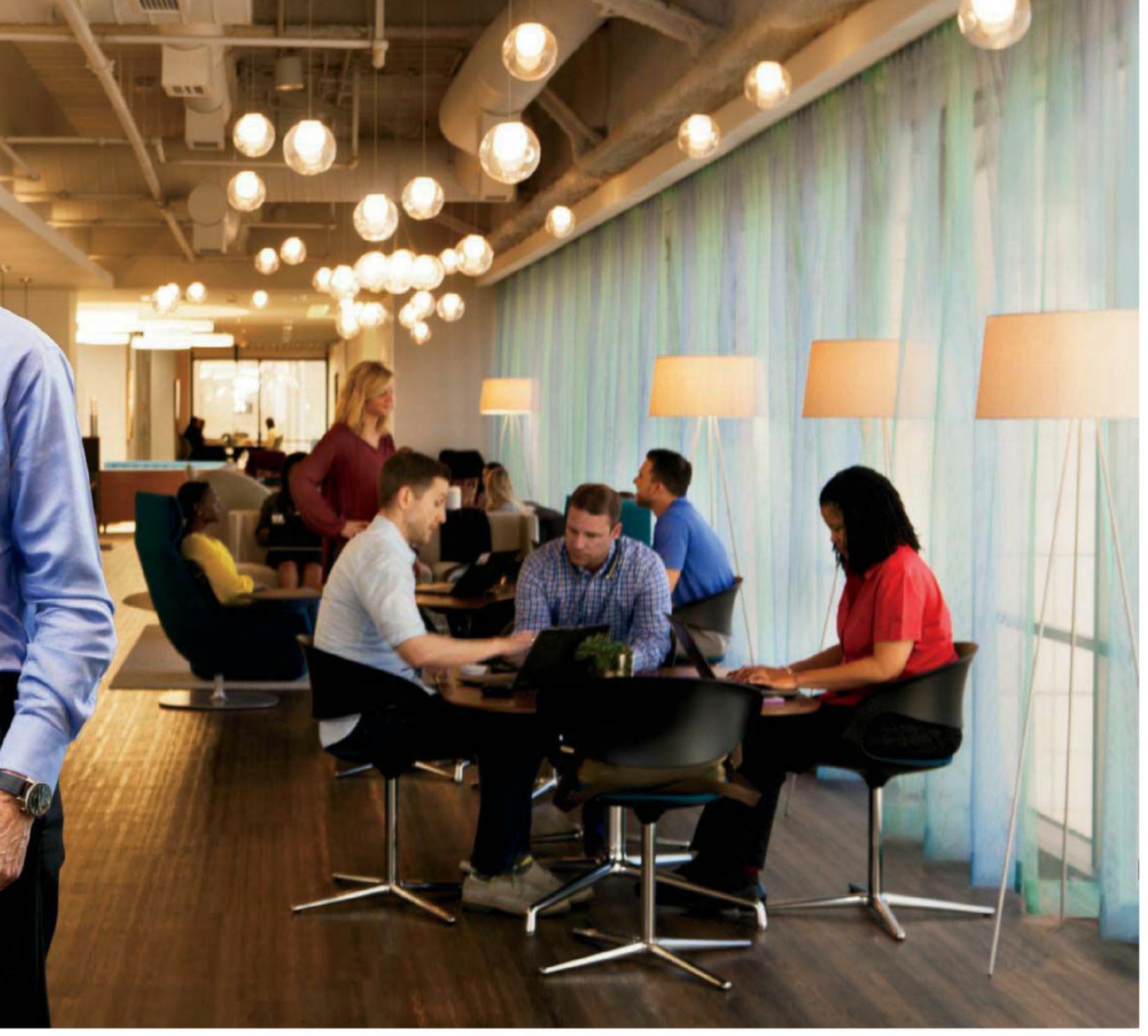
92
METHODIST LE BONHEUR HEALTHCARE

HQ .... Memphis
EMPLOYEES 11,203
JOB OPENINGS 850

EMPLOYEES say the leaders at this not-for-profit hospital system are "expert in communication," hosting regular town halls where management "answers the tough questions" and "really listens to what's going on." The takeaway, staffers say, is that "they treat employees like they make a difference."

93
AT&T

HQ .... Dallas
EMPLOYEES 269,000
JOB OPENINGS .... 1,800+



WHEN ONE OF THE COUNTRY'S LARGEST EMPLOYERS INVESTS BIG IN TECHNOLOGY, IT CAN'T JUST HIRE ALL NEW PEOPLE TO RUN IT. NOW, THE TELECOM TITAN FACES ONE OF THE BIGGEST CHALLENGES IN ITS 132-YEAR HISTORY:

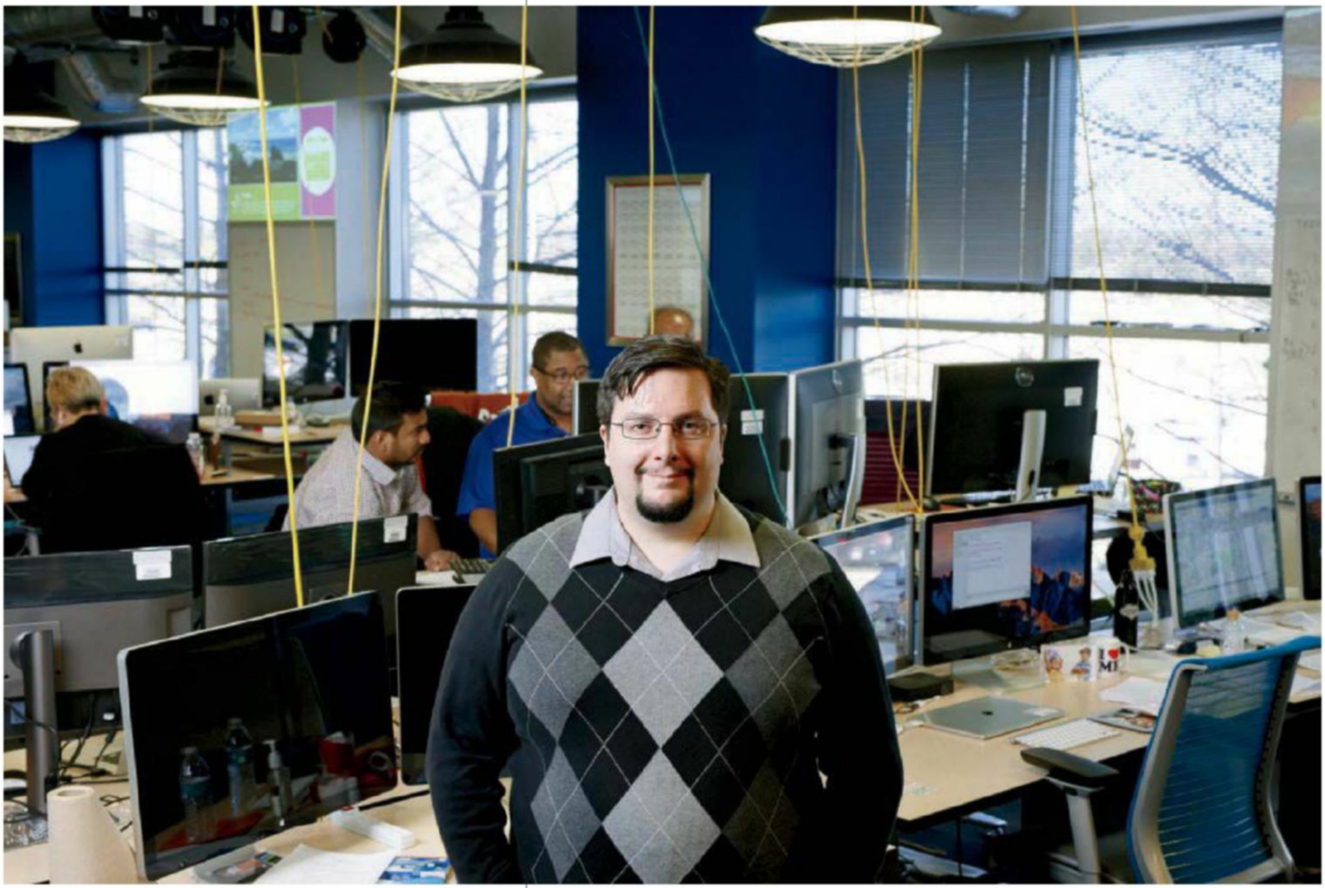
CAN AT&T RETRAIN 100,000 PEOPLE?

BY AARON PRESSMAN

NATHANIEL MEYER'S OLD OFFICE was nestled in a sea of high-walled cubicles in a hulking AT&T network reliability center outside Charlotte. In 2013, at 32, Meyer was working at the same facility where he had started when he followed in his father's footsteps and joined the company, then BellSouth, at age 19 as a technician. After more than a decade with the telecom giant, and several promotions, Meyer's work still ▷▷

CEO Randall Stephenson at the company's Dallas headquarters.

▲ PHOTOGRAPH BY **BRENT HUMPHREYS**



NATHANIEL MEYER
Data Scientist
After years toiling in an operations center in Charlotte, Meyer earned a master's degree in computer science through an online program developed by the Georgia Institute of Technology in partnership with AT&T that helped propel him to a new job—without leaving the company.

▷▷ revolved around the same basic technologies. He spent his days monitoring the massive switches that ran an old-fashioned telephone network scattered across more than 20 states, testing new equipment remotely, and updating databases with any changes.

Increasingly, though, Meyer was beginning to feel like he was in a dead-end job. He felt that way because, well, he was.

Meyer didn't know it at the time, but a thousand miles away, in the executive offices of AT&T's headquarters in downtown Dallas, the company's leaders were realizing that they had a lot of people like Meyer working with old phone lines and other technology that were quickly becoming outdated. Internal research found that 100,000 of AT&T's 240,000 workers in 2013 were in roles that the company probably wouldn't need in a decade.

AT&T was, and is, in the throes of a huge transformation. Customers have been disconnecting their landlines for decades, while traffic on the company's mobile network has exploded. Data usage at AT&T has increased 250,000% since the 2007 introduction of the iPhone. Its corporate business has also boomed, as companies zap increasingly huge amounts of data among offices and the cloud-server farms run by the likes of Amazon and Microsoft. Now, every day AT&T's network handles 130 peta-

bytes of data—equal to more than 40 times the digital holdings of the Library of Congress.

For a while, the company tried updating its existing technology piecemeal, pouring billions of dollars into buying more switches, adding new cell towers, and laying more fiber-optic cables. But that didn't stem the tide for long.

By 2012 the 132-year-old company had landed on a much more dramatic solution: replacing 75% of its hardware with computer-operated software systems by 2020. The task was immense. AT&T still has one set of 40-year-old switches, for example, that handle the 128 million 800-number calls a day, all with less computing power than a pair of iPhone 7s.

ELLIE ORDWAY-WEST
Data Scientist
Among the first students to graduate from Georgia Tech's online master's program, Ordway-West (top) now works in cybersecurity for AT&T.

KARA REEVES
Specialist
Reeves (above) started with the company as a retail sales consultant, but after plowing through AT&T's online resources, she's now a "scrum master" on several projects.

With almost 1 million boxes in service around the world—dedicated computers that perform functions like routing data packets or blocking hackers—AT&T has so far managed to convert 34% of the network to the software-defined model, with a goal of 55% by the end of 2017. "This year we will have hit the tipping point," says John Donovan, AT&T's chief strategy officer. "There's no turning back."

But even more difficult than replacing the hardware is finding the people to run and maintain it. In 2013, Donovan, who was then responsible for overseeing the company's technology and services unit that employs Meyer and 135,000 other workers, got together with human resources chief Bill Blase. Together they crunched the data and found that, although only about 50% of his staff had training in the fields of science, technology, engineering, and math, the projected need for employees with that training by 2020 would hit 95%.

"It became clear that our people did not possess the skill set required to run a massively scaled software infrastructure," says CEO Randall Stephenson. "We were facing a massive people issue."

To address the problem, AT&T has embarked on what may be the most ambitious retraining program in corporate American history. That investment in its people is part of why its workers love it: This year, for the first time, AT&T made *Fortune*'s list of the 100 Best Companies to Work For. Still, the challenge facing the company is formidable: With nearly 270,000 employees after its acquisition of DirecTV in 2015, AT&T has one of the largest workforces in the world. By 2020 it aims to retrain 100,000 of those people for radically new jobs. The project, referred to at the company as the Workforce 2020 initiative, is a more than billion-dollar investment that comes with a suite of new programs, new facilities, and a concerted push toward worker reeducation.

If AT&T can pull it off, it will avoid sweeping layoffs and perhaps give its entire software network strategy a critical competitive edge. ▷▷

▲ PHOTOGRAPHS BY **NANCY NEWBERRY**

One of the things employees say they like about AT&T is its renewed focus on innovation. Here (above left), engineering equipment for its Internet of things research sits on a shelf in a Plano, Texas, lab.

Legos (above right) at the Plano center, one of the company's six "foundries" focusing on different tech challenges.

▷▷ If it can't, as Stephenson himself admits, AT&T will be a company in long-term decline.

• **THE SKILLS GAP** AT&T is now addressing is far from unique. In many ways, the company's conundrum is the same one facing the larger American economy. According to the nonprofit National Skills Coalition, "middle skill" jobs like those that require computer proficiency account for 54% of positions in the U.S., but only 44% of workers have those skills. One survey of 42,000 companies by HR consultancy ManpowerGroup found that 40% of employers in 2016 were struggling to find talent to fill available jobs—the highest number since 2007.

Part of the problem is that companies have historically been resistant to look inside their own workforce to meet the demand for technical workers. The number of corporate apprenticeship programs, frequently cited as one of the best ways to get workers on-the-job training, fell by more than one-third to 21,339 from 2001 to 2016, according to Department of Labor statistics. And businesses—perhaps looking at the shrinking average tenure of their employees—provide less training than they used to, according to research by Wharton School professor Peter Cappelli. In 1979 the average young worker received 2½ weeks per year of training, he found. A few decades later the average had fallen to just 11 hours.

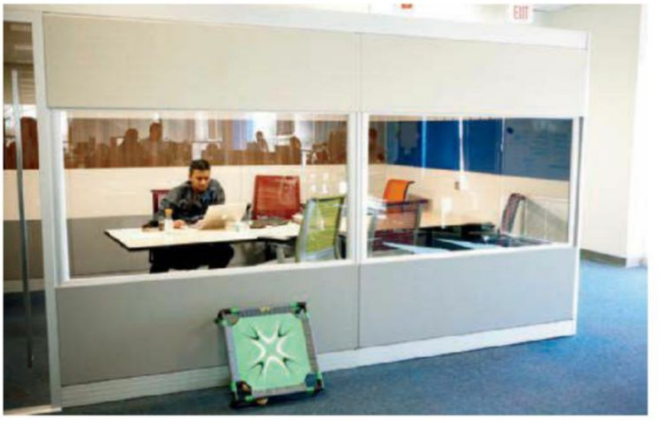
The result is a high-stakes economic challenge. "We cannot afford to let people's skills fall behind the cutting edge, or they will be displaced," says Katherine Newman, provost of the University of Massachusetts at Amherst and coauthor of *Reskilling America*. "It becomes a cycle of wasted cultural capital."

One bright spot: ManpowerGroup estimates that only 20% of firms were focusing on training their own employees in 2015; however, as of 2017, more than half reported that they will focus on training.

For an indication of how—and if—those companies will manage to develop their workforces to meet the growing demand for skilled laborers, a good place to look may be AT&T's retraining push. The sheer scale of the company's programs not only has the potential to avoid thousands of layoffs, but also could serve as a model for other businesses facing their own talent shortages. Like many companies, says Newman, AT&T "has realized that this upskilling is critical to their future."

AT&T didn't come to this solution immediately. About five years ago, the initial problem was how to deal with the skyrocketing traffic while revenue growth wasn't keeping pace. The landline business was dying, and the mobile market was nearing a saturation point amid growing price wars.

So CEO Randall Stephenson brought the



An AT&T employee (above left) hoverboards through one of the company's recently renovated offices.

At AT&T's experiment-oriented Plano Foundry (above right) no project can last more than 12 weeks or cost more than $100,000.

problem to John Donovan. One of Stephenson's only direct reports who had not spent his career in the Bell System, Donovan, then AT&T's chief technology officer, had come from Silicon Valley and was steeped in its culture, with a background in Internet infrastructure. A rock-steady presence with a laser stare, Donovan had initially imagined three scenarios for the way mobile data growth might play out, ranging from quick to astronomical. In 2012 he told Stephenson that scenario three—his most extreme case—was the one that was coming true.

With Stephenson immediately ruling out big price hikes for customers, Donovan needed to find a way to reduce the cost of AT&T's legacy network while adding huge amounts of capacity to its newer mobile and business platforms, all without any increase in its capital budget.

First, the company responded with its software push. The wholesale update of AT&T's technology was a risky move away from depending on the big telecom equipment makers like Nokia, Ericsson, and Alcatel-Lucent. AT&T couldn't wait for the gearmakers to innovate and make faster products, a dynamic that had slowed as semiconductor innovation ebbed and the industry had suffered from repeated financial difficulties. The carrier would have to move on its own to radically simplify the hardware in its data and switching centers. Generic, lower-cost computing boxes could replace the proprietary devices that had each been dedicated to a specific function. Instead of having one set of boxes that could route data, and another bank that established a security firewall, and then yet another that created encrypted private networks, all of the functions would be provided by software applications running more efficiently on the generic computers.

Some of the hardware that was being updated was prehistoric by tech standards. In the old system, when AT&T wanted to upgrade—to install faster routers, for example—it had to physically replace all the old gear. "We would have to use a forklift—we literally called it that, a 'forklift upgrade'—to pull out the old piece of equipment and put in the new piece of equipment," explains Steve McGaw, an AT&T veteran who currently runs marketing for its corporate business. Some gear stayed in service for decades.

Under the new system, capacity can be increased quickly just by adding more banks of simple computers. At the extreme end, adding a major function to the network might have taken 18 months before and now can be done in a week, says Melissa Arnoldi, president of technology development, who oversees the company's more than 80 global data-center sites. Says Arnoldi, "This isn't technology that any of us grew up with."

Next, AT&T must tackle its workforce issues. As the new systems rolled out, Donovan ▷▷

▲ PHOTOGRAPHS BY **NANCY NEWBERRY**

John Donovan, now AT&T's chief strategy officer, is a Silicon Valley veteran and one of the key architects of the company's retraining push.

NANCY NEWBERRY

realized that filling the tens of thousands of software and engineering jobs he needed to build and manage for the new AT&T network might be an impossible task. But if the company couldn't hire skilled workers at that scale, the only real alternative was to teach their existing workers how to do the new jobs.

After Donovan and HR chief Blase explained the severity of the shortage to the CEO, Stephenson gave his blessing to taking dramatic action. They would need a new training system capable not just of imparting new skills to workers, but also of helping those workers make decisions about which ones they might need and which would be in demand as AT&T shifted toward software.

To help create that program, Blase called on Cynthia Marshall, then the president of AT&T North Carolina. Another Bell lifer, Marshall went to the University of California at Berkeley, the first in her family to graduate from college, and started at Pacific Bell in 1981. Over the next 30 years, she had done everything from climb telephone poles to run central offices and lobby governors to approve mergers. She is now the company's SVP of human resources and chief diversity officer. Marshall recalls that the mission was clear: "We're not just going to tell those engineers that they can leave and somebody else is going to come do their jobs," she says. Her mandate was "We are taking the people."

The initiative, Workforce 2020, started with a sweeping restructuring of the company's organizational chart. Marshall helped streamline the phone company's 2,000 job titles into far fewer, broader categories with similar skills. Seventeen different programming-related jobs, for example, became "software engineer." Every new title was associated with specific skills or abilities, such as knowledge of a particular software-development language or techniques for being a project leader.

Then came the task of explaining the changes and helping employees navigate the new landscape. AT&T created an online system called Career Intelligence, which allows an employee to surf through possible alternative jobs, see what skills are required, how many positions are available, investigate whether the segment is projected to grow or shrink, and view the potential salary range.

The drawback for employees, however, is that they must take the initiative for their own retraining. Some of the work can be done on the job, but the company's new, more extensive online courses also require a large chunk of time outside work. Economic sociologist Newman calls the program "impressive in a not altogether happy way," given that employees who can't find time at home to participate may find that their jobs are being eliminated. (AT&T's roughly 75 hours of annual training for employees per year averages on the high end compared with other companies on the 100 Best Companies to Work For list.)

Back in North Carolina, technologist Nathaniel Meyer was getting used to seeing many of his experienced coworkers in his network reliability center slowly disappear—retiring and not being replaced. Sitting among shelves of training materials and schematics for gear like the 1970s-era 1AESS switches that were once the foundation of the network, he gradually found that he was spending more time talking on the phone with AT&T staffers in places like Sacramento, Kansas City, and Milwaukee than with anyone in the shrinking Charlotte office.

Then, in May 2013, Meyer got wind of AT&T's big retraining push. In partnership with the Georgia Institute of Technology and its top computer science program, AT&T was rolling out a fully online master's degree program in computer science aimed at technologists like him.

Almost immediately, Meyer applied to be in the first class. Realizing he needed a graduate degree to get the kind of computer science job he wanted to break out of the Charlotte office, he had been considering quitting work and enrolling full time at the University of North Carolina or North Carolina State. Instead, he got into the online version of Georgia Tech's program, and AT&T footed the bill for the tuition. "It was the best of all worlds," he says. "I got a master's degree, and I got zero debt."

But it wasn't easy. Meyer had to complete the course work for the degree during off-hours, while holding down his day job and helping his wife raise two small kids. The program included all the same material and intensive requirements as an on-campus degree program. Meyer was required to watch video classes, do hours of homework, and complete extensive projects. But the online flexibility allowed him to squeeze the time into nights and weekends. Also, he'll readily admit, "I had a lot of help from my wife."

AT&T says putting the onus on employees to better themselves is a feature, not a bug. "You have the choice of what your future is, and how you go about getting there, and how aggressively you pursue that," Donovan says. "If you don't opt in, all the tools and the vision [at AT&T] aren't going to do any good."

To give further encouragement and make clear just how serious AT&T is about the program, the system also assesses employees' current skills and assigns them to a specific future job that they could attain in a few years with additional training. Employees can choose a different future target if they'd like. And they can also set the program to alert them when roles of interest matching their desired skills are available.

That's how Kara Reeves, 34, got her promotion. After working on the retail store side of the company for eight years, she decided she wanted to shift to more technical work. She input her existing skills and interests in the system, and it suggested she vie for the role of "scrum master"—one of AT&T's new job titles, which entails leading a small team working on almost any kind of project, acting as a facilitator, and helping the group make decisions and work smoothly with other parts of the company.

Reeves had no previous formal training in that kind of project leadership, so she turned to AT&T's vast catalog of short online courses created as part of the retraining program. Developed both internally and in conjunction with Udacity, the program has helped employees like Reeves complete over 2.5 million of the minicourses, which typically take a few hours or less. Completing a set of courses in a specific area like cybersecurity or project management grants the employee a virtual "badge" on his profile page. AT&T has given out 173,000 so far. And Reeves' transition to her new job last March has been successful.

CYNTHIA MARSHALL
SVP and Chief Diversity Officer
A Bell System lifer who has done everything from climb telephone poles to lobby governors to approve mergers, Marshall has been instrumental in designing AT&T's workforce retraining program.

COURTESY OF AT&T

Another key part of the retraining effort is AT&T's internship program, which lets workers who have added skills try out a new position for a limited test run. Susan Bick, a 20-year veteran of the company, used the program to make a jump from billing systems to scrum master for teams in the software interface development unit. To make the move, she simply relocated from the seventh floor of one of AT&T's large offices in St. Louis to the 22nd floor.

Meyer had to travel a lot farther for his new job as a big-data scientist. He now feels and looks at home amid the lava lamps, Nerf guns, and other nerdy gadgetry in an AT&T Plano, Texas, office that looks more like a hip Menlo Park startup. Toting an "I heart me" coffee mug and making the occasional reference to the movie *The Matrix,* he gets excited while explaining how he sifts through the reams of information previously lying unused in various databases to identify where there might be potential customers for AT&T's Internet and cable-TV service who have been skipped over or missed in the past. "I feel like this is an awesome place," he says, grinning.

CEO Stephenson hopes that after the training is complete, the result will be a workforce that's more nimble and better equipped to take on future competitors. However, AT&T is only midway through its transformation. It still has tens of thousands of employees to retrain if the company hopes to meet its goal of having a technically proficient workforce in the next three years. And more than half the network still needs to be shifted to the software platform.

But there are some signs of progress. Last year AT&T filled more than 40% of the 40,000 jobs with internal candidates. And the company estimates that 140,000 people are undergoing at least some sort of development that will prepare them for a new job in the future—and then another new job only four years after that one, if the industry speeds along at its current pace of disruption and development, according to company predictions.

"Technology shifts have become somewhat routine," says Stephenson. "But who can transition their talent at scale as the technology changes?" That's the more important question for both AT&T and the American workforce writ large. The answer, says the CEO, will be the difference between growth and obsolescence.

COMPANY SPOTLIGHT

ACUITY INSURANCE

When Your Company Loves You, It's Easy To Love It Back

Giving employees exactly what they want makes them feel empowered, not entitled. And with a turnover rate of just 2%, **Acuity** knows this well.

96%

of employees say Acuity is "a great place to work."

97

– PERCENT –

of employees say "I'm proud to tell others I work here."

SOURCE: 2016 GREAT PLACE TO WORK® REVIEW™

WHEN ASKED TO DESCRIBE his corporate culture in three words, Acuity president and CEO Ben Salzmann doesn't miss a beat: "Acuity loves you," he says. This is a man who loves his job and wants his employees to feel the same way.

Inside the sprawling Sheboygan, Wis., corporate headquarters of Acuity, there's a 27,000-square-foot gym open 24/7, a rock climbing wall, ping pong tables, and all-you-can-eat freshly popped popcorn. It might come as no surprise that the median age of the company's new hires over the past five years is 27—the sweet spot of the millennial generation. When Acuity's employees talk, management listens.

Its 2,000-person theater-in-the-round facilitates this give-and-take culture. In addition to open mikes "where employees can ask anything they want," this state-of-the-art theater also features guest speakers such as bestselling business writers and recently a performance by an *American Idol* contestant that was streamed live for field employees.

The company has a 65-foot Ferris wheel under its roof that is the exact make and model as the one in Mall of America. Dubbed the Charity Wheel, Acuity uses it in part to hold charitable events and fundraisers, which have enabled the company to donate millions of dollars to various organizations over the years. And at the biweekly Family Fun Night, employees and their kin can go for a spin and enjoy a full supper.

Acuity's perks aren't just fun; they're also thoughtful. In addition to flexible work schedules and unlimited sick days, the company puts 10.5% of employees' salaries into their 401(k) without requiring any employee contribution. Other practical-minded benefits include on-site banking and dry cleaning services as well as an all-day, everyday jeans dress code.

The company's recruiting methods start as early as kindergarten. It had its first event, a spelling bee, in 2000. Afterward, the company fed the kids pizza and sent them home with a gift. In 2015 a college senior came in for an interview and was asked why she wanted to work for Acuity. Reaching into her purse, she pulled out a tiny T-shirt from 15 years earlier and said, "I was in your very first spelling bee. I've only ever wanted to work at Acuity."

COMPANY SPOTLIGHT

VMWARE

VMware: Culture of Possibility

VMware pioneered virtualization technology, but it's leaving quite a mark in the real world, too, especially when it comes to taking care of its diverse set of employees.

95% of employees are proud to tell others, "I work here."

93% of employees feel good about the ways VMware contributes to the community; each employee receives 40 paid hours annually to contribute his or her time and talents to their communities.

SINCE ITS FOUNDING IN 1998, software giant VMware has always challenged the status quo. "Why, why, why?" soon became "Why not, why not, why not?" It was that kind of disruptive thinking that created a global leader in cloud infrastructure and digital workspace technology that has grown to 20,000 employees and $6.5 billion in revenue.

The company, whose headquarters are in Palo Alto, Calif., applies the same logic to the people dimension of its business, too. "At the core of what we do is to engineer software that gives our customers the freedom to create their futures," says VMware's chief people officer Betsy Sutter, who has been with the company since 2001. "It's also at the core of everything we do on the people front, because building great software is a human process. If you can't support or mirror what you're trying to do with your products with what you're doing culturally, then you won't achieve the kind of success that we've achieved."

One visit to VMware's 105-acre, highly sustainable Campus in the Forest and it's clear what a fun, inclusive, and diverse culture it is: Dogs are welcome; there's a full gym with mindfulness, meditation, and yoga classes; and four cafeterias nourish workers. Says Sutter: "It's really about creating an environment where people can do their best work."

But perhaps what's not so obvious is most impressive. With its "Culture of Possibility," the company offers a robust series of development, rejuvenation, and philanthropic programs. Employees who have been with VMware for five or more years, for instance, can take three months to work on a specific project unrelated to their day-to-day job, while more than 85% of VMware's employees have given back to a community of their choice, amounting to 17,000 employees completing 66,000 hours of volunteering.

Employees also take a very powerful unconscious-bias training class. And just last month, VMware hosted the second annual Women Transforming Technology conference, which brought a consortium of tech companies together to talk about the challenges of being a woman in the industry.

The goal is clear: to attract and retain the most diverse and talented group of employees possible in order to provide the most innovative solutions possible for customers. "We know we're going to get better results on every dimension with a diverse set of perspectives," says Sutter. "We've known that from the early days. We're a company that loved a lot of conversation and didn't care about who got the answer right, just that we got to the best answer. That's still true today. The diversity factor has proved itself to make VMware the company it is today."

SOURCE: 2016 GREAT PLACE TO WORK® REVIEW™


vmware
Do something remarkable.

94
NORDSTROM

HQ.................... Seattle
EMPLOYEES........ 69,542
JOB OPENINGS...... 5,333

THERE'S ONLY one rule employees need to follow while working at this fashion specialty retailer: "Use good judgment." People at the retail mainstay say they are "empowered" to "run their own business" and feel "trusted and respected." Nordstrom is "the most supportive company that I have ever worked for," says one employee.

TOP AREAS WHERE NORDSTROM IS HIRING: E-COMMERCE AND TECH.

FROM THE RECRUITER

"Don't put your picture on your résumé. Do make eye contact during the conversation. Red flag: talking more about what you want than what you can contribute to the firm."

JUDY WIENS
OFFICE ADMINISTRATOR, BAKER DONELSON

99
FEDEX

HQ................. Memphis
EMPLOYEES...... 335,435
JOB OPENINGS...... 6,000

EMPLOYEES "get the impossible done" at the massive shipping company, where "hard work is consistently reflected in raises, bonuses, and promotions." Workers here also praise the "great" benefits, which are extended to all employees, including each of the 115,844 part-timers in the U.S.

95
BAKER DONELSON

HQ................. Memphis
EMPLOYEES.......... 1,562
JOB OPENINGS........... 13

EMPLOYEES at the "friendly" Southern law firm love its strong "team mentality," built on "loyalty." It's a place where there's a "spirit of cooperation" and "mutual accountability." Perks include bonuses when the firm has a good year (and not just for attorneys), plus free parking (or full reimbursements for public transportation).

96
ORRICK HERRINGTON & SUTCLIFFE

HQ...........San Francisco
EMPLOYEES.......... 2,300
JOB OPENINGS........... 68

WORK/LIFE balance is of "paramount importance" at this law firm, where "managers bend over backward to ensure work gets done without getting in the way of home life." With 35 days of personal time off and up to 22 weeks of maternity leave, employees can "decompress" and remain "high performers."

97
BAPTIST HEALTH SOUTH FLORIDA

HQ...... Coral Gables, Fla.
EMPLOYEES........ 15,073
JOB OPENINGS......... 755

THIS LARGE hospital system has a "true sense of unity" among coworkers. "You can feel the love," says one staffer. "Working with my colleagues is like a puzzle—the pieces just fit together." Zero co-pays for in-network doctor visits, a fund for staff in times of need, plus employee celebrations lend it a "family" feel.

98
PCL CONSTRUCTION

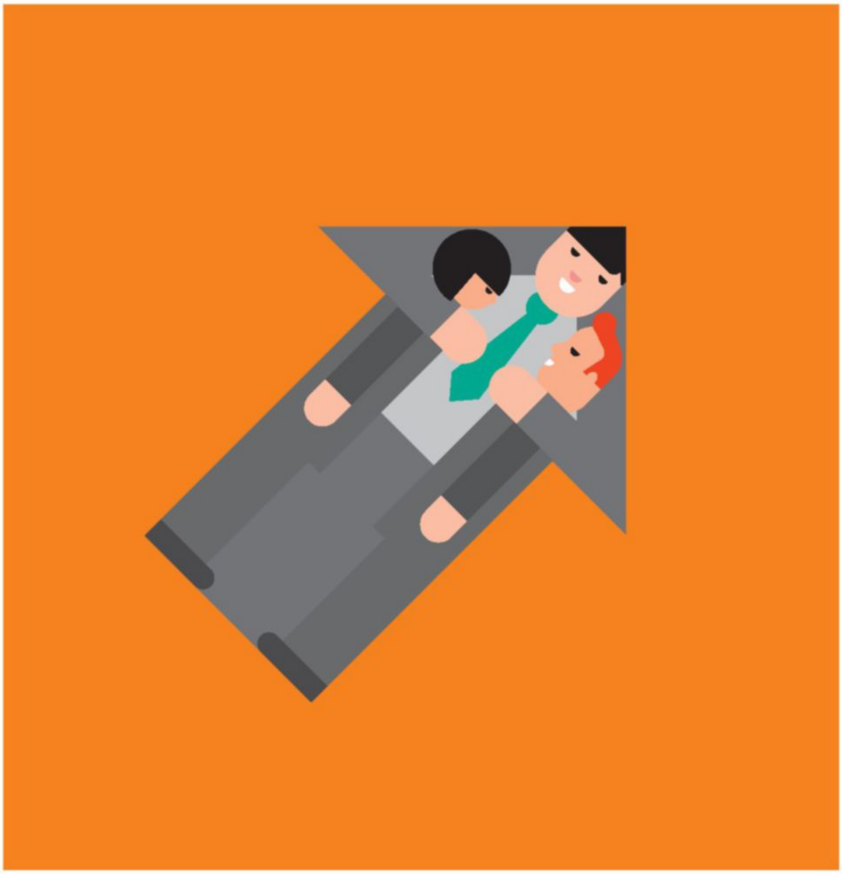
HQ......................Denver
EMPLOYEES.......... 4,451
JOB OPENINGS........... 82

THIS CONSTRUCTION company offers stock options to all employees, 90% of whom own shares. The employee-ownership model gives staff a "great sense of belonging" and "a true understanding of how people at all levels contribute to success." Dividends for long-term employees often exceed their annual salaries.

100
ALLIANZ LIFE INSURANCE COMPANY OF NORTH AMERICA

HQ...Golden Valley, Minn.
EMPLOYEES.......... 1,859
JOB OPENINGS........... 67

SOME COMPANIES have employee appreciation day; this insurance company has employee appreciation month. With awards ceremonies and chair massages, people say this celebration is "truly special," with "energy like no other." For the other 11 months? Perks include pet insurance, on-site childcare, and discounts on furniture.



WHEN THE BEST WORKPLACES ARE THE BEST INVESTMENTS

ONE OF THE TOP-PERFORMING MUTUAL FUNDS OF THE PAST 10 YEARS HAS A REMARKABLE DISTINCTION: ITS MANAGER BASES HIS STOCK PICKS ON THE 100 BEST COMPANIES TO WORK FOR LIST. HERE'S HOW **PARNASSUS ENDEAVOR** WORKS—AND WHY IT SUCCEEDS.

BY JEN WIECZNER

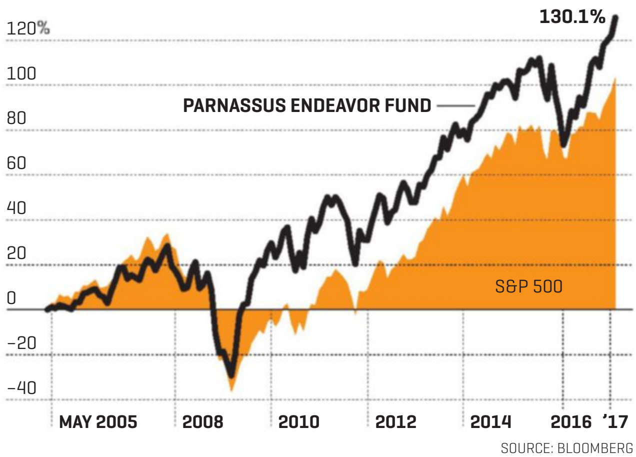
FOR MOST OF HIS first two decades as a mutual fund manager, Jerry Dodson was something of a nobody in finance. The Warren Buffett–quoting stock picker had set up shop in San Francisco in 1984 to practice "socially responsible" investing, partly inspired by the anti-apartheid movement that called for divestment from South Africa. Even as his firm, Parnassus Investments, racked up some impressive returns, he maintained a reputation as a hippie do-gooder and, at worst, a kook.

Among his more outlandish hunches was that treating workers well could pay off for companies in the form of better stock returns. "I had no evidence," he remembers. "Intuitively I thought it would work, but I had no idea." But shortly after the new millennium, Dodson received a phone call that gave him the proof he needed. Milton Moskowitz, the former business journalist who had created *Fortune*'s 100 Best Companies to Work For list, had commissioned some research and found that the stocks of the ranking firms had repeatedly outperformed the broader market. Dodson, Moskowitz suggested, might be able to use the list to make money.

Today, Dodson, now 73, is one of the most successful fund managers of his era, overseeing $22.5 billion. And the portfolio inspired by that phone call is the foundation of his best-performing fund. Since its inception in 2005, Parnassus Endeavor (previously known as the Parnassus Workplace Fund) has delivered annualized returns of 12.2%, compared with just 8.5% for the S&P 500. (It has also beaten the performance of the publicly traded companies on the Best Companies list in all but two of those years.) Overall, Parnassus Endeavor is not only the top performer among so-called sustainable and responsible funds, but it's No. 1 among *all* large-cap growth stock funds over every long-term period measured by research firm Morningstar, from one year to 10 years.

"*Fortune* has been a ▷▷

▲ ILLUSTRATION BY **ROBERT SAMUEL HANSON**



EMPLOYEE HAPPINESS EQUALS SHAREHOLDER JOY
Parnassus Endeavor has been the top-performing "responsible" mutual fund—and one of the top funds, period—of the past 10 years.

▷▷ very important part of our success," says Dodson, whose top criterion for the fund is whether a company is a good place to work. Adds Moskowitz, who consults for Parnassus today and also invests in the fund: "It's great confirmation of the idea that we originally had, that these companies are quite durable if they treat their people well."

The idea of earning strong returns while investing only in businesses that demonstrate care for the proletariat and the planet has become a holy grail in recent years. Money managers who incorporate environmental, social, and corporate governance (ESG) factors in their methodology oversaw $8.1 trillion in the U.S. in 2016, up nearly 70% from 2014, representing a fifth of American assets under management, according to US SIF Foundation, a nonprofit that tracks the industry.

But over the past decade, no one has consistently applied ESG principles and also beaten the market—no one, that is, except Dodson. Recent studies by TIAA and the Morgan Stanley Institute for Sustainable Investing have shown that ESG funds perform no worse than the average fund or benchmark indexes, but no better either. Indeed, of 206 ESG mutual funds tracked by US SIF, only 11 outperformed the S&P 500 over the past 10 years—and the top four are Parnassus funds. The firm "has shown that an ESG manager can do really, really, exceedingly well," says Jon Hale, who heads Morningstar's sustainability research.

• **PARNASSUS IS NOW** the biggest pure ESG firm by assets. But even Dodson has trouble putting his finger on how good corporate behavior translates into higher returns. Each of its six funds shuns tobacco, alcohol, weapons, and gambling—so-called sin stocks—as well as nuclear energy companies. And the $3.2 billion Endeavor Fund, with its additional, stricter employee happiness criteria, has the best record of all. Dodson posits that elements that define a good workplace—from benefits like health insurance and childcare to cultural collegiality, advancement opportunities, and faith in management—are linked to meaningful qualities that drive up stock prices, such as talent retention (leading to lower turnover costs) and increased productivity. "If you take good care of your employees, if you treat them well, if you pay them fairly, they're going to work harder," Dodson says. "If you don't, there are many ways that they can sabotage your business."

Today half of the 26 companies owned by Endeavor once ranked on the 100 Best Companies list. Relatively few firms on the list are publicly traded—only 38 this year—and Dodson ventures beyond the list, with help from Moskowitz, to unearth others that meet the same standards but may not have applied for *Fortune*'s ranking. Through interviews with employees and executives, Dodson and his staff tease out such hard-to-quantify metrics as the level of respect workers receive and how well they recycle.

Lanky and animated, with a Clint Eastwood rasp, Dodson admits that his eclectic way of vetting companies can seem subjective and squishy. A onetime Foreign Service officer who served in Southeast Asia during the Vietnam War, the investor occasionally moonlights as a walking-tour guide for the San Francisco Museum and Historical Society. "He's not a Wall Street guy," says Moskowitz.

Banks, in part because of their small carbon footprints, tend to show up disproportionately in ESG funds. But Dodson was so disturbed by some institutions' ugly cultural norms revealed in the wake of the 2008 financial crisis that he swore off those with major trading floors. "The London Whale, I think, cured me from J.P. Morgan," Dodson says. Still, he got burned recently by the one big bank that weathered the crash unscathed. Wells Fargo was one

DOING WELL WHILE DOING GOOD
CUMULATIVE TOTAL RETURNS, 1998–2016

SOURCES: FTSE RUSSELL, RUSSELL INVESTMENTS

713% PUBLICLY TRADED COMPANIES ON THE **100 BEST COMPANIES** LIST

229% **S&P 500**

ELIZABETH D. HERMAN—THE NEW YORK TIMES/REDUX

EVERYONE WINS Parnassus's Jerry Dodson: "If you take good care of your employees, if you treat them well, if you pay them fairly, they're going to work harder."

of Parnassus Endeavor's top holdings when it was caught last year creating phony accounts for customers. But Dodson, who met with Wells Fargo management as the scandal raged, is hanging on; he says he's encouraged by its high ratio of women in leadership and its charitable contributions.

Dodson identifies as a value investor, someone who buys only when shares look cheap. But the Best Companies list often points him to pricier stocks that he wouldn't have considered otherwise. Dodson never gave a second look to Google—a technology stock that has historically traded at high valuations—until it debuted on the list at No. 1 in 2007. Within three months, he had bought the stock. After several visits to the Googleplex, Dodson was wowed by its lavish benefits, from free meals, massages, and dry cleaning to 18 months of paid maternity leave. As Silicon Valley companies compete more on office luxuries in their fierce war for talent, they have become prime candidates for Parnassus Endeavor, whose heavy helping of tech, including Best Companies veteran Autodesk as well as Alphabet, has been a boon to performance in recent years. Dodson currently sees greater upside in the shares of semiconductor firms such as Qualcomm and Intel. Intel particularly impressed him with its commitment to equal opportunities for women and minorities, having already eliminated the gender wage gap internally.

One of Dodson's favorite stocks might as well be in the Best Companies Hall of Fame: Whole Foods, which has made the list each of the 20 years it has been published. The health-conscious grocery store embodies fair-workplace ideals, sharing profits with employees and reining in executive pay so that it can't go up too much without also increasing what the average worker makes. Whole Foods has struggled lately against new rivals, sending its stock price on a roller-coaster ride. That created an attractive opportunity for Dodson to buy cheap. With a P/E valuation in line with the S&P 500 and below its historical average, Dodson thinks Whole Foods stock has hit a "floor." The company's expanding loyalty program and increasingly competitive pricing, he says, will spur an acceleration in revenue growth that could push its stock price higher.

In the meantime, Dodson rests easy believing he'll be taken care of as well as Whole Foods takes care of its employees. Describing Parnassus's ethos, he says, "It's a good way to have a successful business and to make money in the stock market.

COMPANY SPOTLIGHT

WEGMANS FOOD MARKETS INC.

A Family-Owned Company That Treats Employees Like Family Members

98% of employees at Wegmans feel when you join the company, you are made to feel welcome.

95% of employees at Wegmans feel good about the ways they contribute to their communities.

A company that does right by its employees does right by its customers. That's the philosophy at **Wegmans Food Markets Inc.**

FOUNDED IN 1916 AND based outside Rochester, N.Y., Wegmans operates 92 stores in six states and employs 47,000 people. Despite its size and range, however, the company is run like the family-owned business it has always been.

"The fact that we are family-owned allows us to do many things that make us who we are," says Jack DePeters, senior vice president of Store Operations.

"Caring" is one such genetic marker and one of five values all employees know by heart. "When we survey our employees and ask why they like working for us, you'd think it would be pay, but it's not," DePeters notes. "It's always values—making a difference, respect, empowerment, high standards, how the company cares for me and our customers."

Wegmans also hires by its values, making sure prospective employees are a "value-fit" with the company. That, in turn, enables workers to spread those values to new markets and customers, while helping to ensure loyalty and retention.

For many employees, an introduction to the Wegmans philosophy begins as teenagers. The company currently employs nearly 10,000 young men and women 19 years of age and younger.

"We truly are a company run by 16-year-old cashiers," says DePeters. "In many communities, we're the first place teenagers work. Our job is to help them learn customer service and all of the things that, later in life, whether they stay with us or not, will aid them in being successful. That's a responsibility we take very seriously."

To help young workers pursue their educational goals, Wegmans has awarded $105 million in scholarships to more than 33,000 employees since 1984.

Caring also extends to the communities that Wegmans serves. To date, the company has raised more than $30 million for hunger relief at its checkouts, and annually it donates more than 14.5 million pounds of food to local food banks, food pantries, and soup kitchens. In most of the communities, employee drives have made the company the biggest contributor to United Way—chainwide, that amounts to more than $5 million annually.

"We lead from our heart and we live by our values," as DePeters observes of the company's presence, while acknowledging the business wisdom in the aphorism: "If the community thrives, we thrive."

SOURCE: 2016 GREAT PLACE TO WORK® REVIEW™


FORTUNE
100 BEST
COMPANIES TO WORK FOR
2017
To our people, we say
Thank You!
By truly caring about each other and our customers, our employees have created a culture that feels like family, making Wegmans a great place to work and shop. Their ideas and actions help us improve our century-old company because all 47,000 of us come to work every day, eager to help others. That commitment reminds us that we continue to make a positive difference together, on our mission of helping people live healthier, better lives through food.
Colleen Danny Nicole
Wegmans
"FORTUNE and FORTUNE 100 Best Companies to Work For are registered trademarks of Time Inc. and are used under license. FORTUNE and Time Inc. are not affiliated with, and do not endorse products or services of, Wegmans."

Keith Richards dreamed up "Satisfaction" as he drifted off to sleep.

TERRY O'NEILL—HULTON ARCHIVE/GETTY IMAGES

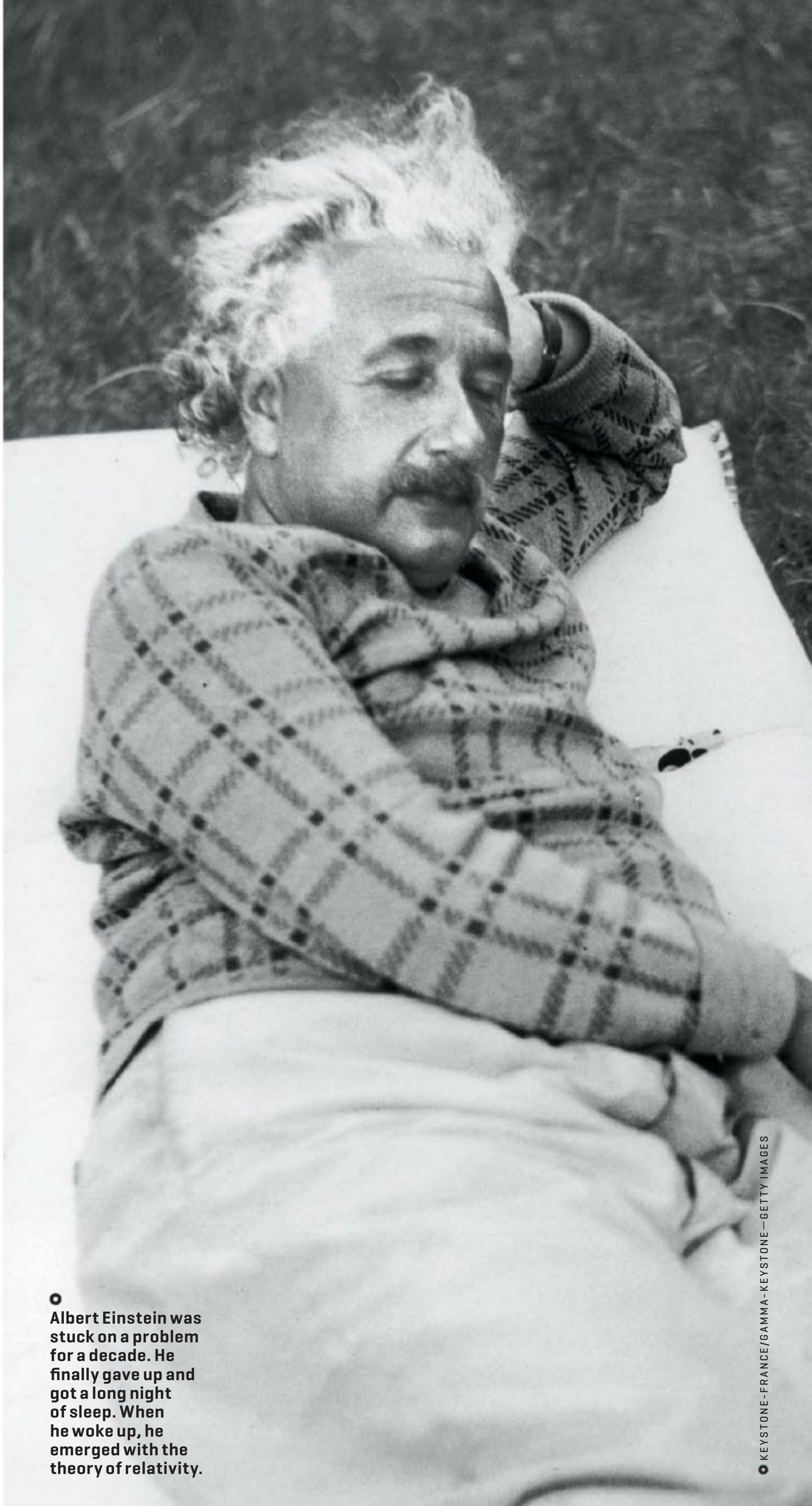
UNLOCKING YOUR BIG IDEAS

In this book excerpt, authors **Olivia Fox Cabane** and **Judah Pollack** explore how sleeping, walking, and drawing connections can spawn breakthroughs. It worked for Albert Einstein, Steve Jobs—and Keith Richards. Could it work for you?

BOOK EXCERPT

YOU CAN LEARN TO CULTIVATE GREAT IDEAS.

That's the bold promise of *The Net and the Butterfly: The Art and Practice of Breakthrough Thinking*, by Olivia Fox Cabane and Judah Pollack. Cabane is the author of *The Charisma Myth*, and both she and Pollack used to work at Stanford University's startup accelerator; the two now consult variously for prominent companies and organizations ranging from Google, Airbnb, and IDEO to Deloitte and even the U.S. Army Special Forces. *The Net and the Butterfly* is filled not only with anecdotes describing the births of famous ideas, but also with a series of practical exercises aimed at improving your ability to generate them. The edited excerpts that follow examine the states of mind that are most conducive to creativity, along with a few examples of how to achieve those states. The final passage explores how idea "creation" often consists as much of idea modification and combination as of the original spark.



Albert Einstein was stuck on a problem for a decade. He finally gave up and got a long night of sleep. When he woke up, he emerged with the theory of relativity.

KEYSTONE-FRANCE/GAMMA-KEYSTONE—GETTY IMAGES

THE YEAR WAS 1965. The place was Clearwater, Fla. In his motel room—the Rolling Stones weren't yet famous enough to afford hotels—Keith Richards woke up on a hot, humid morning to find his guitar and a tape recorder on the bed beside him. Groggy and hungover, Richards rewound the tape and pressed play.

The hour-long tape contained 59 minutes of his own snoring. But the first 30 seconds held the opening bars and first lyric of what became the Rolling Stones' most iconic hit, the song "Satisfaction." He didn't remember even touching the tape recorder.

Believe it or not, Richards's breakthrough moment follows the very same pattern as Albert Einstein's discovery of the special theory of relativity. It's the pattern we heard again and again when we interviewed some of the world's greatest innovators for this book. And it's the same pattern you've experienced if you've ever had a sudden epiphany in the shower.

Whenever you have a "shower moment," chances are something was on your mind, like a problem at work or an issue in a relationship. You'd probably been mulling over the problem, trying to work it out in different ways. Then you stepped into the shower. Your mind wandered off as the water poured over you. You were no longer focused. Suddenly, seemingly out of the blue, the answer came to you.

What do your shower moments have in common with both Keith Richards's and Albert Einstein's discoveries? When you got into the shower, you unknowingly switched brain modes. Previously, you had been consciously focusing on the problem. But in the shower, your mind was probably drifting, idly daydreaming or seemingly "thinking about nothing." Neuroscientists have recently discovered that the secret to breakthroughs lies in our ability to switch between these two modes, the focused and the meandering.

The focused mode is one you are already familiar with, because it's the one you have been consciously using all your life. You can think of this mode as the "executive mode": It's the one you use to execute, to get things done. Goal-oriented and deadline-focused, it's a champion at making lists, following timelines, and coming in under budget. The part of your brain responsible for this mode is called the executive network, or EN.

The EN is a group of brain regions near the front of your skull that help you focus on a task and accomplish a specific goal. You're very well versed in the use of your EN. You did, after all,

FOUR TYPES OF BREAKTHROUGH IDEAS

1. EUREKA

● A sudden, unexpected realization (though to achieve one, you need to be both deeply immersed in a problem and able to let your mind wander).

2. METAPHORICAL

● The application of analogies. For example, the Wright brothers used analogies both of birds flying but also of a twisting inner-tube box to come up with the "wing-warping" breakthrough that set the age of aviation in motion.

3. INTUITIVE

● Instinct without the eureka moment. Thomas Edison invented the phonograph with an intuition that touching a pinpoint on a diaphragm (which he did on an early telephone) would cause indentations in tinfoil beneath the diaphragm, which could then be used to reproduce the sound.

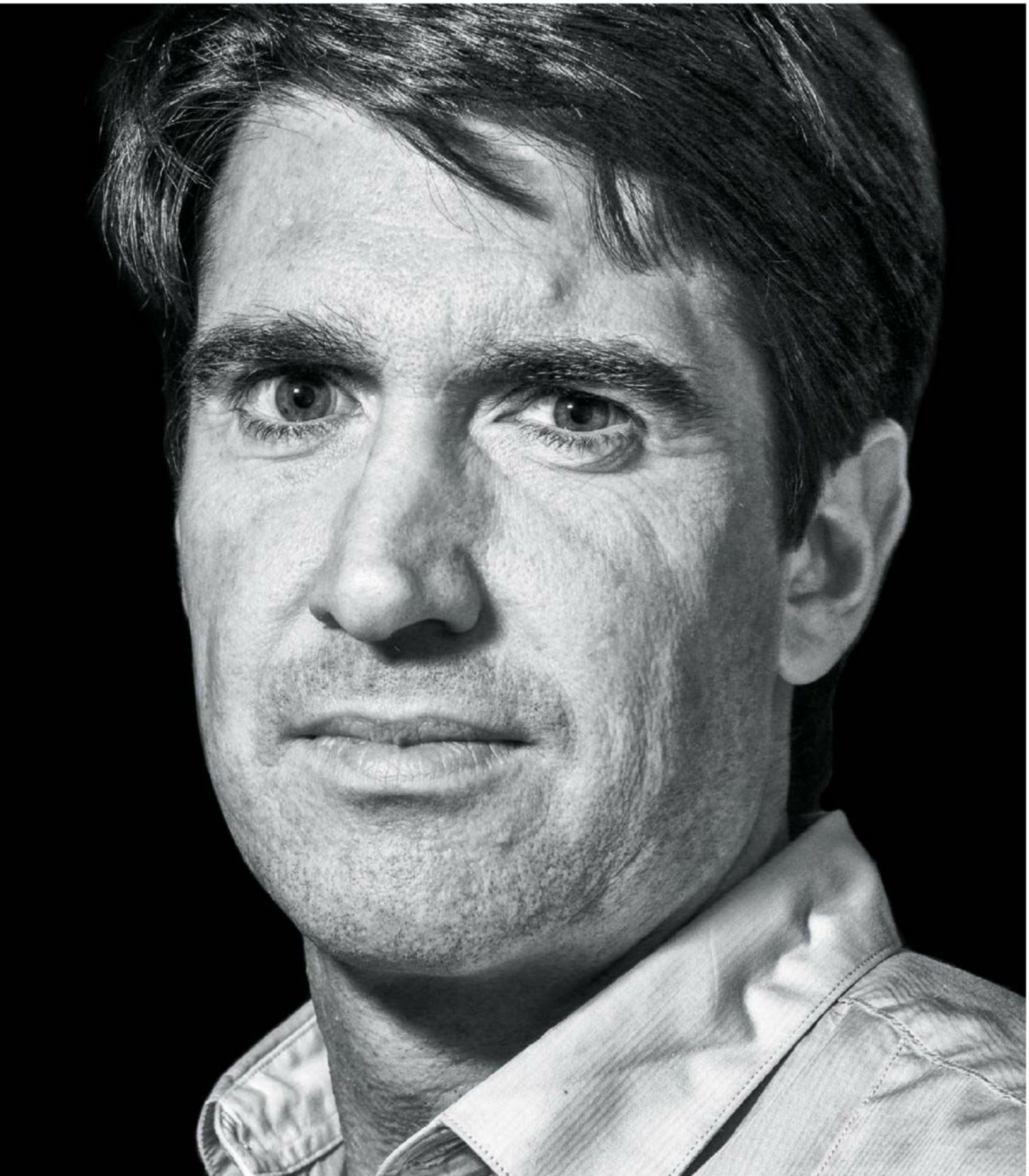
4. PARADIGM

● A deep insight about a system of thought that changes the rules we assign to it. When Isaac Newton watched an apple fall and realized that the same force that pulled the apple down was also governing the heavenly bodies, he transformed our understanding of the universe.

spend at least a decade in school specifically training those brain regions. As a matter of fact, you're using your EN right now to read this sentence. With your EN you are (we hope) a functional, responsible, and productive member of society.

But your EN alone can't create breakthroughs. It needs help from the more meandering network, the one that creates shower moments. This is our creative network, the default network, or DN. You can think of the DN as a council of breakthrough geniuses inside your brain. The geniuses talk and exchange ideas, half-baked theories, and wild speculations.

The DN is the source of all our creativity, all



Adam Cheyer, the cocreator of Siri, likes to "noodle" on a problem before falling asleep—then harvests ideas the next morning.

DAN TAYLOR PHOTOGRAPHY/HEISENBERG MEDIA

PUTTING IT INTO PRACTICE: HOW TO ENTER THE HYPNAGOGIC STATE

- Clear the room of clutter and distractions.
- Have a pen and paper or a voice recorder ready so you can make notes.
- Set your phone to airplane mode.
- Dim the lights (or wear an eye mask).
- Ensure you're in a quiet place, or that only white noise is audible.
- Don't get too comfortable—no wearing pajamas or getting in bed.
- Try to find time at midday or right after you've eaten, when you're just the right amount of tired.
- Set your alarm for 10 to 15 minutes.
- Take a moment to focus your brain on the problem, and then let it go.
- Relax and drift off.

our invention, all our genius—and it hasn't gotten nearly enough recognition. What has the DN accomplished throughout history? A better question would be, What great discoveries hasn't it played a role in? If the EN gives us the ability to focus and accomplish a task, the DN gives us the ability to look through the complexity of the world to see the patterns underneath.

The DN is a vital component of your brain: Research has made clear that this part of your brain is as essential to your survival as your heart or your kidneys. It's so important, in fact, that we could have written this entire book all about the DN. We would have said, "Here it is! Here's how it works, here's how you can access it, here's how you can turbocharge it." But in fact, that's not enough. The DN, alone, can't create breakthroughs.

It's the ability to use both modes, to switch from one mode to another, that enabled Keith Richards to come up with "Satisfaction" and Albert Einstein to discover the special theory of relativity. In fact, it's what enabled most discoveries in human history.

> "SO WHAT'S THE SINGLE BEST MINDLESS ACTIVITY I CAN DO?" OUR CLIENTS OFTEN ASK US. IF WE HAD TO CHOOSE ONE, IT WOULD BE WALKING.

SO HOW CAN YOU access your genius mode? One way is to sleep on it. (Yes, really.)

Adam Cheyer is a cocreator of Siri, Apple's artificial intelligence iPhone voice assistant. Building Siri was a Herculean task of design and programming. First, there was the sheer number of variables—the ability to understand varying speech patterns, the ability to search based on the random ways people would request information, the ability to return answers in a useful way—and each was a massive challenge. Thankfully, Cheyer had a secret weapon: ready access to his genius mode.

Although designing and building Siri was a highly structured task, Cheyer knew better than to try to logically grind out every answer. Instead, he told us, "I sleep on the issues I'm wrestling with." Cheyer has discovered the incredible breakthrough power of the hypnagogic and hypnopompic states, the half-asleep periods just before falling asleep and just before waking. These are times when our genius council runs on hyperdrive.

"I go to bed around 11, noodling on a problem as I fall asleep," he explained. By "noodling" on the problem, Cheyer uses his EN to deliberately and consciously focus his genius council on a question. He relies on this resource to make new associations and deliver breakthroughs while asleep. Then in the morning he goes to his desk and uses his EN to process the night's harvest of ideas.

Morning after morning, while first designing Siri, he would wake up with new insights from his DN and use his EN to integrate them into the prototype he was building. Eventually he felt that he had something concrete enough to show the rest of the world.

The hypnagogic and hypnopompic states are so fruitful for creativity because our inhibiting frontal lobes—where our EN's front office is located—are quiet, and our DN is running strong.

As anyone who zones out all the time can testify, simply taking a break will not lead to inspiration: To stoke creativity, you need to perform tasks that allow your mind to wander.

Consider one study conducted by a team of psychologists at the University of California at Santa Barbara. The team gave a group of undergraduates a creativity test that involved coming up with unusual uses for items. ("How many things can you do with a hanger?") The students were then given a 12-minute break. One group simply rested; one did an easy, mindless task; one did a demanding memory game; and one group took no break.

When the participants reconvened, the "mindless task" group performed an average of 41% better on challenges such as the "unusual use" tests. By contrast, participants in the other three groups showed no improvement.

Interestingly, this was only the case for problems that were already being mentally chewed on; doing a mindless task didn't seem to lead to a general increase in creative problem-solving. This makes sense: Our executive has to have set a clear goal for our geniuses in order for them to be productive.

"So what's the single best mindless activity I can do?" our clients often ask us. If we had to choose one, it would be walking.

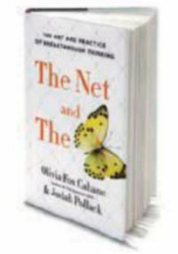
That point is backed by research. In a 2014 study from Stanford's Graduate School of Education, participants walking indoors on a treadmill facing a blank wall or walking outdoors in the fresh air produced twice as many creative responses compared with those who were sitting down.

"I thought walking outside would blow everything out of the water," said the lead Stanford researcher, "but walking on a treadmill in a small, boring room still had strong results." The study also found that creative juices continued to flow even when a person sat back down shortly after a walk. "We know walking meetings promote creativity, but walking before a meeting may be nearly as useful."

FROM A COGNITIVE ANGLE, walking demands just the right amount of focus from our executive, without asking too much. Walking is a very complex task: We are taking in constant input from our feet, legs, hips, arms, and, of course, our inner ears, the core of our balance gyroscope. But our brains are experts at this task. Through long familiarity, a person can do all this with very little energy.

From a physical angle, walking stimulates your brain. Increased blood flow causes a cascade of wonderful changes in the brain, including the release of brain-derived neurotrophic factor (BDNF) and other growth factors. BDNF promotes the birth of new neurons and the formation of new synapses, and it also strengthens existing synapses.

Open offices have strong detractors as well as proponents, but with their few inner walls and rolling tables, they're at least walker friendly. In fact, according to research out of Stanford, the most



Excerpted from The Net and the Butterfly: The Art and Practice of Breakthrough Thinking, by Olivia Fox Cabane and Judah Pollack, published on Feb. 7, 2017, by Portfolio, an imprint of Penguin Publishing Group, a division of Penguin Random House LLC. Copyright © 2017 by Olivia Fox Cabane and Judah Pollack.

important thing these open spaces offer to creativity is the ability to walk. Doing so increased a person's creative output by 60%, the study found.

Charles Darwin famously had a quarter-mile-long walking path called the Sandwalk that was his place to go and think when working on a problem. So important was walking to his thought processes that Darwin sometimes described a problem he was working on in terms of the number of turns around his path he would need to solve it.

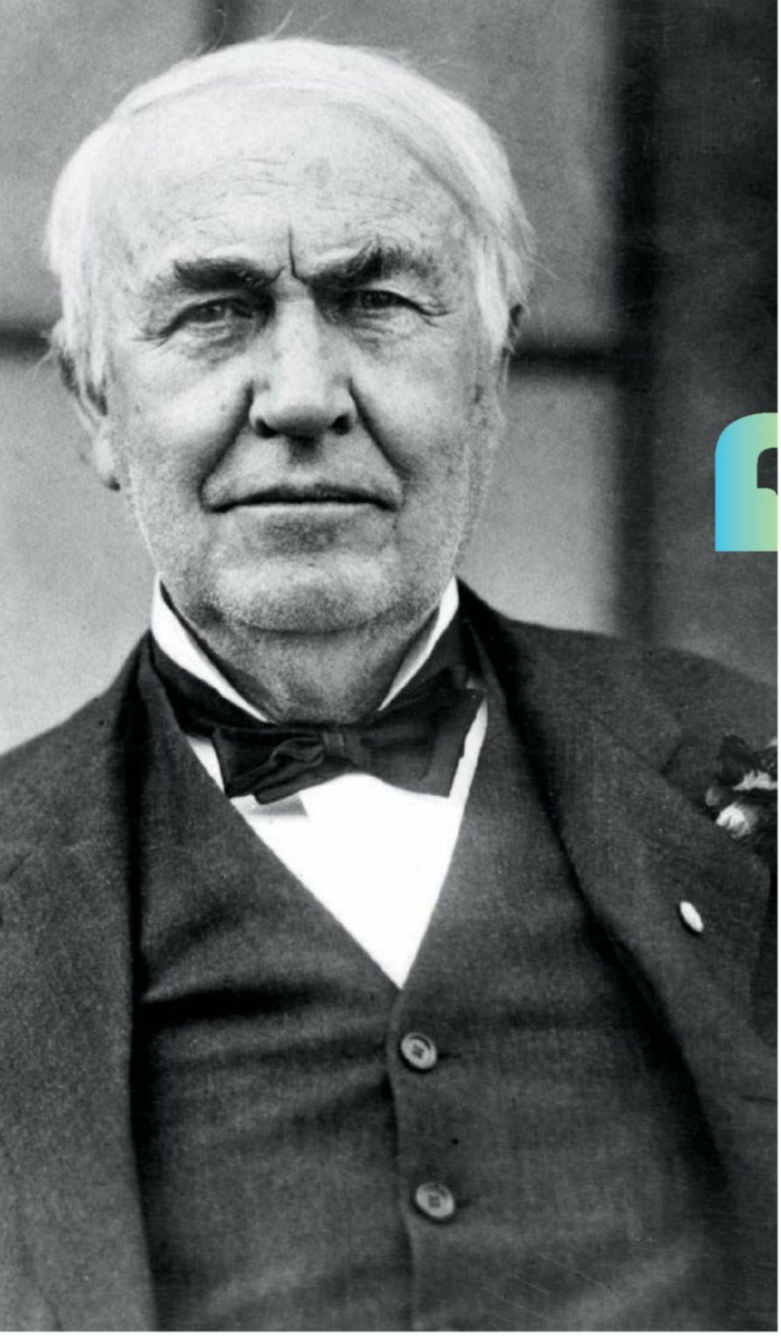
Mason Currey, after studying the habits of nearly 200 of the world's most prolific inventors and innovators over the ages, found that the single common habit of these great inventors and innovators was walking. As Currey reports, Charles Dickens famously took three-hour walks every afternoon—and what he observed on them fed directly into his writing.

Tchaikovsky made do with a two-hour walk, but wouldn't return a minute early, convinced that cheating himself of the full 120 minutes would make him ill. Beethoven took lengthy strolls after lunch, carrying a pencil and paper with him in case inspiration struck.

Søren Kierkegaard is quoted as saying, "I have walked myself into my best thoughts." He is also reported to have often rushed back to his desk and resumed writing, still wearing his hat and carrying his walking stick or umbrella.

Walking, when used for mind-wandering, works well in quiet, peaceful places; less well when you have to be aware of cars, traffic lights, joggers, and so forth, because your executive mode has to stay active. Whether to meander or to walk with purpose is up to you: Judah is comfortable walking aimlessly, but Olivia needs a route and a destination.

Here's the thing: You don't just take a walk



KEYSTONE/GETTY IMAGES

Not every idea was a light bulb for Thomas Edison. But one unsuccessful one, the electric pen, ended up spawning the tattooing machine.

and magically have a breakthrough. Walking is a wonderful way to set the conditions, but there is more to creation than simply meandering along. Cultivating breakthrough thinking involves multiple steps, including defining your problem—the act of verbalizing what you're looking for can get you started on finding the answer—and setting a goal. You'll also need to carry a notebook so you always have a way to record your thoughts. And then there are the more unexpected techniques: Keep something in your hand. A coin, a stone, a paper clip, a *Star Wars* figurine—we won't judge. Our hands send massive amounts of information to our brains, and keeping those channels open keeps our brains in a more associative state. Adam Cheyer, the Siri coinventor, always keeps a Rubik's Cube on his desk to play with while thinking.

"CREATIVITY IS JUST CONNECTING THINGS," Steve Jobs once said. "When you ask creative people how they did something, they feel a little guilty because they didn't really do it, they just saw something… That's because they were able to connect experiences they've had and synthesize new things."

What Jobs was describing is called "associative thinking," and is essential for breakthrough thinking. Too often, we make the mistake of assuming breakthroughs are freestanding ideas, something never thought of before by anyone in any context. The truth is that almost every breakthrough is a combination of ideas that already existed.

Henry Ford's breakthrough of the assembly line came when he made an association between the Chicago meatpacking industry's use of mechanized hooks and bakeries' use of industrial conveyor belts. He put the two together, applied them to the building of the automobile, and the assembly line was born.

A breakthrough in gun accuracy came when gunmakers looked to the bow and arrow. The feathers on the back of arrows cause the arrow to spin, and the spin makes the arrow fly straight. In the same way, a football flies straight when thrown in a spiral. To make their bullets spin, gunmakers carved spirals inside their gun barrels. Accuracy increased fivefold. Because putting feathers on arrows was called rifling, these guns became known as rifles.

One of Thomas Edison's least successful inventions was the electric pen, patented in 1876, to help make copies. People just weren't that into it. In 1891 a tattoo artist named Samuel O'Reilly saw the pen and had a breakthrough. He invented the modern tattooing machine. Instead of using ink to write on paper, he applied it to skin.

And when the Southern Pacific Railroad built a series of microwave towers to facilitate an intercontinental network of telecommunications, the intention was simply to improve its trains' efficiency. But the company eventually began selling access to outside customers, and those towers became the foundation for the telecom company Sprint (Southern Pacific Railroad Internal Network Telecommunications). The new use in this case became the breakthrough.

COMPANY SPOTLIGHT

SAP

An International Software Giant Where Every Employee Is an Innovator

With offices throughout the world, **SAP** has the breadth, experience, and scale to provide global opportunities for employees. But it operates like a startup.

LIKE MANY U.S. TECHNOLOGY COMPANIES, the software giant SAP offers perks and benefits that are nothing short of spectacular. Its Silicon Valley campus features free lunches, an organic garden, and onsite beer bashes (yes, beer bashes). Its New York City offices—in the trendy new Hudson Yards complex—boast floor-to-ceiling windows showing the entire city skyline and a common area with a fireplace. Its North American head-quarters just outside Philadelphia hosts an annual summer picnic complete with carnival rides and games.

But the pièce de résistance for prospective employees may be the international opportunities the company presents for employment, travel, and career experiences. SAP North America's roots and global headquarters are in Germany, and it is one of the largest technology companies in the world with customers in 190 countries. The company boasts the largest cloud portfolio of any software company on the planet, and the world's 100 most valuable brands run their companies on SAP systems. The company has 84,000 employees, over 20,000 of whom work in the United States.

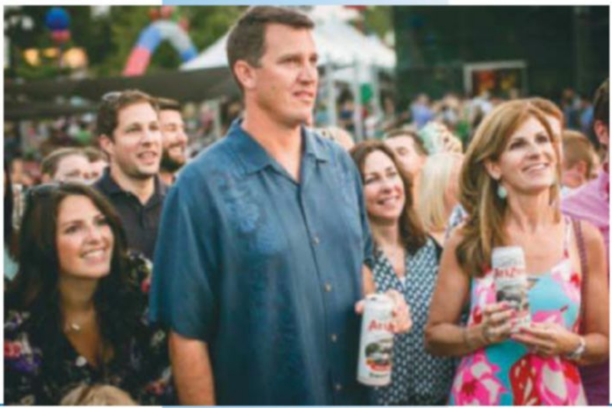
"We've really built a special culture in North America. It's innovative, it's dynamic, and it feels like a startup even though it's fueled by the power of a multinational organization," says Jennifer Morgan, president of SAP North America. "So our employees get the benefit of a fantastic culture and experience, along with opportunities to live and lead around the world. Having the breadth and scale to provide global opportunities for our employees is a huge differentiator, not only for their careers but for us."

> **"We have a philosophy that 'every customer is a disruptor, every employee is an innovator.' Employees truly have the power, opportunity, and resources to bring new ideas to life."**
>
> **JENNIFER MORGAN**
> *President*
> SAP North America

It's all in keeping with the company's focus on global innovation. "We have a philosophy that 'every customer is a disruptor, every employee is an innovator,'" says Morgan. "Employees truly have the power, opportunity, and resources to bring new ideas to life."

Central to the company's ability to innovate is its commitment to diversity and inclusion. Thirty percent of the company's managers in the United States are women. Moreover, SAP has gone to great lengths to ensure that all employees are paid equally. In 2016, the company conducted a pay equity analysis of every employee in the United States and proactively adjusted the salaries of those who lagged their counterparts.

That initiative is just another example of the way SAP values and engages its employees. Says Morgan: "We've created a work environment and culture that pays dividends every day. People want to be part of something special—and we never want them to lose that feeling at SAP."



Jennifer Morgan (far right), president of SAP North America, joins employees at the company's annual summer family picnic in Newtown Square, Pa.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★ **THE BATTLEFIELD**

The bar at Beijing's Pei Ping Machine Brewery. Two-thirds of the beers on tap are Chinese, but AB InBev's Goose Island is on the menu too.

CHINA'S NEW CRAFT-BEER BULLY

AB INBEV, THE GLOBAL BEER GIANT THAT OWNS BUDWEISER, GOT LEFT BEHIND BY THE CRAFT BOOM IN AMERICA. NOW IT'S USING ITS MUSCLE TO MAKE SURE THE SAME THING DOESN'T HAPPEN IN CHINA.

By **SCOTT CENDROWSKI**

Photographs by **MARK LEONG**

IN LATE 2015, CHANDLER JURINKA REALIZED SOMEONE WAS SPYING ON HIS BEER TAPS.

Jurinka and a partner own Slow Boat Brewery, a Beijing craft-beer maker that distributes its beers across a dozen cities in China and runs a new three-level brewpub in Beijing's nightlife district. (Jurinka named the brewery after the 1940s Frank Loesser love song "On a Slow Boat to China.") The business is driven in part by sales of kegs to restaurants and bars in China's capital, where good beer isn't as easy to find as it is in, say, Seattle or Kansas City.

One of those restaurants, a popular spot called Home Plate BBQ, once sold five Slow Boat drafts on its nine taps. Slow Boat sent a technician weekly to take care of the tap lines: "We bought them, installed them, and maintained them," says Jurinka. But one day the tech was startled to find a device called a flow meter monitoring every line. Flow meters measure the beer passing through the taps, as a way for restaurants to track sales.

Home Plate itself hadn't installed the meter: The global beer giant AB InBev had. The restaurant owners told Jurinka it was a free perk from the brewer of Budweiser, Corona, and Stella Artois. With one move, AB InBev had earned goodwill with the restaurant and got a source of intel on its competition—since the meter could monitor Slow Boat's sales in real time. Jurinka, a broad-shouldered former U.S. Army sergeant, was incensed, he says, "but other than take our beer off tap, there was little I could do about it."

Then last summer Home Plate hosted a four-day event for AB InBev—a Beijing unveiling for the craft brand Goose Island that included free beer and selfie opportunities with the goose mascot. China's news sites covered the event like a fashion show. By autumn the restaurant had replaced all but one of Slow Boat's taps. Now sitting atop Home Plate's draft menu: three Goose Island beers.

The flow meter was one of the first salvos in a new marketing war. AB InBev is bulldozing its way into China's nascent craft-beer market: Since early 2016, the Belgian-Brazilian beer conglomerate has inundated Beijing and Shanghai with Goose Island, the Chicago-based craft brand it acquired in 2011. Goose Island brews exotic beers that it ages in French wine casks and bourbon barrels and has the kind of cute animal logo that can turn heads, and tastes, in China. The campaign is central to AB InBev's strategy of promoting pricier beer to China's growing ranks of wealthier young consumers. While competitors—including Heineken and Duvel—are importing their own craft beers, none have moved with the same gusto.

AB InBev is seizing an additional advantage: Thanks to China's weak regulatory climate, it can muscle into the market in ways that wouldn't pass muster in the U.S. AB InBev has leaned on distributors to keep them from carrying other craft beers. It has given bars incentives to promote Goose Island while shoving other beers off the taps—deals that would be illegal in the States. It's offering lavish salaries to poach local brewing talent. "AB InBev wants to be a craft-beer brewer," says Gao Yan, who owns a Nanjing craft brand called Master Gao. "But they want to act like a big brewer."

The leviathan is turning to China, the world's biggest beer market, to compensate for a catastrophic mistake it made in the U.S.—missing out on the craft revolution. Over the past decade craft brews grabbed 20% of the U.S. market in dollar terms, largely at the expense of mass-produced lagers like AB InBev's Budweiser and Bud Light. In 2016 the company's U.S. sales fell 2%; Budweiser sales have taken the biggest hit, falling 35% since 2008. "Craft beer would never have become as big under independent ownership if [AB InBev's] Anheuser-Busch had not more or less ignored the sector," Sanford Bernstein analyst Trevor Stirling told the website Just-Drinks in December.

AB InBev has purchased nine craft breweries in the U.S. over the past six years—Goose Island was among the biggest acquisitions, at $39 million—but they haven't turned around slowing sales. China's tiny but booming craft market offers a second chance to capitalize on a global trend.

Brewers endlessly haggle over the definition of craft beer. Generally speaking, it's beer produced by small breweries that is more flavorful and (usually) higher in alcohol content than what you typically find in the grocery store. (Whether brewers remain small enough to hold the label "craft" after being acquired by giants like ABI is a contentious topic.)

★ AB INBEV TAKES ON CHINA

CRAFT BATTLE

From top: A server at Slow Boat, a pioneering Chinese craft brewery; at Beijing's Home Plate BBQ, AB InBev's Goose Island now tops the draft-beer list.

However it's defined, the craft market in the Middle Kingdom is booming. A dozen successful breweries have popped up across Beijing and Shanghai, with more appearing in Chengdu, Nanjing, Shenzhen, Wuhan, and other cities. Beer is the most consumed beverage after tea in China, which now gulps a quarter of global beer output. Retail sales have doubled since 2008, according to Euromonitor, and Chinese consumers spend 550 billion yuan (roughly $80 billion) annually on beer.

Craft's share of that total is undoubtedly small, though analysts can only offer guesses. "Right now it might be 0.1%," says Jonny Forsyth, global drinks analyst at Mintel. But he adds that craft beer tends to take off as a market matures, as China's is. Gary Brown, owner of beer distributor Top Shelf Asia, says AB InBev's appearance in China is a sign of heady times to come. "It's like Starbucks: If you see a bunch of their coffee shops going up in an area, you know it's a pretty good one to be in."

There's another reason China is a good market for AB InBev: Regulations disproportionately favor the biggest players. In the U.S., brewers can't legally own bars or monopolize the beer a bar offers. In China, brewers can and do buy bars, in addition to controlling distributors. Rules around product safety give another edge to the giants. AB InBev imports Goose Island into China from the U.S., where it's brewed under American regulations. China's own brewers, however, have to obey more restrictive rules. Regulations require a stamp of quality approval on bottles produced inside China. Those stamps are available only to production lines that generate at least 12,000 bottles an hour—huge multiples of what craft brewers produce. Beer bottled in China also must be pasteurized and filtered, eliminating yeast and sediments that give craft beers character.

In practice, those rules mean microbreweries have to sell their beer in kegs on-site in brewpubs, while "craft" imports can be easily distributed anywhere. The upshot: Beer is the rare market in which China plays favorites with big foreign companies at the expense of local producers. And AB InBev is racing to tap that advantage.

AB INBEV BEGAN WHEN THREE BRAZILian investors—the founders of the private equity firm now known as 3G Capital—bought a declining brewer called Brahma in the late 1980s. That

AB INBEV TAKES ON CHINA

operation merged with Belgian giant Interbrew in 2004 to create InBev, which then obtained America's largest brewer, St. Louis's Anheuser-Busch, in 2008 in a stunning $52 billion deal. The new AB InBev outdid itself last year by paying $103 billion for rival SABMiller. It now controls 200 brands and nearly a third of the global beer market. Last quarter, AB InBev sold $14.2 billion worth of beer.

But diminutive Davids continue to wound this sudsy Goliath. AB InBev has missed analysts' estimates for seven quarters in a row. Sales have sunk for not just Budweiser but Bud Light, Busch, and other mainstay brands. So, like other multinationals, AB InBev is looking for growth in China, and it's pulling no punches. The heart of its strategy: Squash—or someday soon acquire—small breweries before they have a chance to capture market share.

AB InBev coordinates its moves through a division called Disruptive Growth; competitors call it the Craft Beer Disruption Unit. The first step: controlling the bars. "This is something that you just don't see in the U.S.," says Michael Jordan, the American expat brewmaster at Boxing Cat, a Shanghai brewery that last year won China's first medal at the World Beer Festival. He argues that the incentives brewers like AB InBev offer in China would run afoul of Western laws. "There's just no regulation on this side."

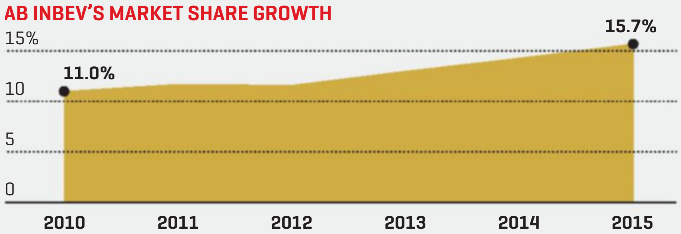
It's unclear how many deals AB InBev has with bars like Home Plate, but rival brewers say these "tap takeovers" are widespread. One bar owner in Beijing's Sanlitun nightlife district described a recent deal he says AB InBev proposed to him and his partner. (The owner insisted on anonymity for fear of harming his business prospects.) AB InBev reps approached him last spring and offered to pay 60,000 yuan a month—enough to nearly cover about two-thirds of his bar's rent—if his bar agreed to host its assortment of beers including Goose Island. He said AB InBev told him it was planning to purchase all the outdoor advertising space in the area, which would put his bar on better negotiating terms with local officials. "Often the government official says, 'If we let you have a big sign, your neighbor restaurant won't have one, and that will be bad,'" he said. "AB InBev will just buy the neighbor a sign!"

Still, he and his partner were uneasy. Would they still be able to show rugby matches sponsored by Heineken? And the craft beers he already offered, from California's Firestone Walker and Kansas City's Boulevard? Under the agreement, he couldn't price those for less than AB InBev's beers. "So how would that look, those being sold at 25 kuai [yuan] when Goose Island is 20 kuai?" he says. Ultimately, he and his partner didn't sign: They didn't want to lose control.

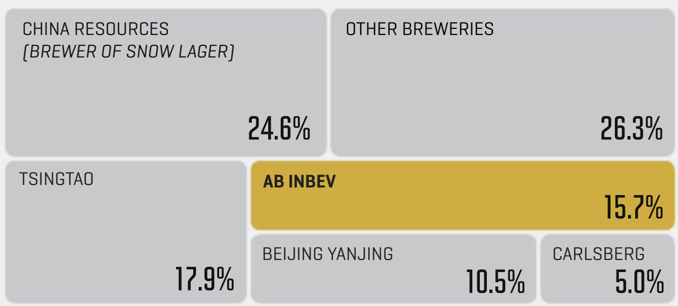
AB InBev's offer may have been heavy-handed, but in China it's legally unproblematic. If it tried a similar takeover in the U.S., it would face antitrust action under laws that have been in place for 80 years. Before Prohibition, the brewers owned the bars. They sold their product cheaply, squeezing the profits out of saloons and tempting bar managers to juice margins by introducing gambling and prostitution. After Prohibition was overturned, a three-tier distribution system—including a middleman distributor to negotiate with bars—became a staple of alcohol regulation, keeping big brewers' influence at a remove from bars.

On the other side of the world, this system doesn't exist, and Chinese bars have a tough time turning down the kind of money AB InBev offers. John Guy, a quick-talking Australian whose McCawley's chain of bars in southern China had sales last year topping $10 million, says he has heard of bar owners being offered 1 million yuan (about $150,000) to switch all their draft beer to AB InBev brands. Guy prides himself on his range of overseas craft

AB INBEV'S MARKET SHARE GROWTH



BREWERIES' CHINESE MARKET SHARE, 2015



SOURCE: EUROMONITOR

gather statistics and written confirmation regarding the super premium beer products' brand and sales volume before both sides sign the agreement," says the contract, issued last year. In essence, AB InBev gets veto power over whether the distributor sells another company's craft beer.

Previously in China, distributors would sign similar contracts but could carry other beers through side deals. But through contracts like this one, AB InBev has hamstrung distributors. A distributor owner who requested anonymity because he didn't want to antagonize a powerful player told *Fortune* he was offered a deal to carry Goose Island, but it would have restricted him from storing competing brands in the same warehouse—effectively keeping his small company from carrying the rivals.

Behavior like this would likely get quashed in the U.S. During AB InBev's acquisitions of breweries in North America in recent years, craft brewers complained that the beer behemoth was trying to curb competition by striking similar deals with distributors. The Justice Department scrutinized the practice, and in July it announced a settlement with AB InBev curbing such deals and requiring the opportunity for formal DOJ review of future acquisitions. As far as anyone knows, there's no similar action afoot in China.

beers and says he would never accept such a deal. But other bar owners don't have the same choice. "Some bars run at break-even and make money on tap bonuses—$15,000 a year on some," he says. For them, AB InBev looks like a lifeline.

AB InBev is also targeting China's distributors. *Fortune* has seen a contract between AB InBev and one of the country's nationwide distributors under which the distributor must report to AB InBev before it signs a craft-beer deal with another brewer. "Dealers and AB InBev should

BREW CREW
Diners at Slow Boat's Beijing taproom. AB InBev and its rivals hope that their more profitable craft brands will catch on with younger, affluent Chinese consumers.

Rebecca Kuo, an AB InBev spokesperson, declined to comment on AB InBev's relationships with China's bars, calling them "commercially sensitive matters." She added that InBev had given away flow meters to improve availability and sales promotions of the company's beers and that "it is ultimately up to the wholesalers as to which beers they choose to carry." Goose Island president Ken Stout said in a statement that drinkers in China and other non-U.S. markets "have responded really well to our beer."

IN A COUNTRY WHERE IMPORTED beers—even mass-market ones like Budweiser—have a patina of luxury, AB InBev has steadily expanded. The company controlled 15.7% of China's market by volume in 2015, up from 11.7% in 2011, according to Euromonitor, trailing only domestic giants China Resources Holdings (which brews the world's top-selling beer, Snow) and Tsingtao.

AB InBev doesn't break out craft numbers, but its China sales grew 4%, to $3.4 billion, in the first nine months of 2016, and earnings before taxes and adjustments jumped 19%, to $973 million. That's a 30% profit margin—impressive in a country that ranks dead last among the world's top beer markets for profitability.

That gives the company piles of cash to throw around. China's beer veterans say AB InBev has launched a frenzied hiring blitz for its craft unit, offering salaries three to four times what the pros could earn elsewhere. Two salespeople from Slow Boat left last year, Jurinka says, and Gary Brown's distribution business had two defections. Daniel Dumbrill, owner of Shenzhen microbrewery Taps, was stunned when the AB InBev district manager for all of Asia called one of his staff and demanded, "Why are you not working for us?" The company is even poaching the beer proselytizers who helped build China's craft scene. Two hip women from Shanghai and their Chihuahua—a team known collectively as BrewGirl—sold home-brewed beer out of their Mini Cooper for two years before joining AB InBev last year.

AB InBev will even hire customers. In September, Goose Island advertised on Chinese social media looking for young people to fill bars: "Do you LOVE drinking Goose Island? Do you think it's even better when it's FREE? Or, better yet, getting PAID to attend these events? Join the Goose Family and these dreams really can come true." The company promised drinkers in Beijing and Shanghai, ages 20 to 40, that they would earn money in addition to "beer and swag." If AB InBev is going to go to the trouble of controlling China's bars, they had better be crowded.

The brewer also offers discounted and sometimes free kegs to bars to build Goose Island's popularity—and that's the tactic some competitors fear most. Craft brewmasters believe that AB InBev is distorting the market, dragging down prices for craft beer while incurring losses that smaller brewers can't sustain. Joe Finkenbinder of Bionic Brew in Shenzhen says he has heard of Goose kegs selling for a third of the cost of his kegs. "They're using that as just the tip of the spear and then driving the prices into the ground," he says.

CHINA'S BEER INCUMBENTS

SNOW
The world's best-selling beer is a pale lager that doesn't taste like much. But in China it's cheap and ubiquitous.

TSINGTAO
Pronounced "Ching-dow," it's the only Chinese beer to make waves overseas. The brewery was founded by Germans in the early 1900s; the Chinese government now owns it.

CARLSBERG
The Danish lager entered China when the Communists opened the country to the world in the 1970s. It's popular in China's poorer western regions, where market share tops 60%.

YANJING
In Beijing the local brewer's green bottles often litter restaurant tables and sidewalks. The pale lager has been losing market share but remains the country's fourth most popular beer.

AB INBEV TAKES ON CHINA

Not everyone selling craft beer in China is critical of AB InBev. "I'm actually excited about what they're doing," says Dumbrill, the Taps owner. Dumbrill opened a location in Chongqing, in Sichuan province, a less affluent city where his staff is constantly explaining to customers why craft beer is more expensive than what's being sold down the street. He expects that the multinational's splashy marketing campaigns will help teach Chinese drinkers about the differences between, say, an IPA and a lager.

Heavy promotions of Goose Island also help bars attract customers who, in theory, will try other beers. Li Wei, a 35-year-old host on CCTV, co-owns a Beijing brewpub called Pei Ping Machine Brewery. He added two Goose Island taps last year. In return, AB InBev last October delivered two free kegs of Goose Island's Bourbon County Brand Stout, a special-edition beer whose annual short-term release in the States is celebrated among the craft cognoscenti. Li's tap house sold it in eight-ounce glasses for $14. He calls AB InBev a partner.

Some of AB InBev's freebie promotions mirror the way craft beer is sold worldwide. Mass-market brands like Budweiser lend themselves well to conventional advertising, says Anna Ward, drinks analyst at Euromonitor, but "when you advertise craft, you take away from its credentials." Hollywood doesn't market an indie film the same way it does the latest *Transformers* blockbuster; the same logic applies to beer. That's a key distinction, because the distaste for "big beer" that fueled the craft boom in the U.S. is bound to migrate to China, if it hasn't already. Total beer volumes sold in China have declined since 2014. AB InBev has told analysts it plans to boost profits in the country by focusing on premium beers, and it may be working—its China revenue is growing even as sales by volume decline.

For all its recent spending on Goose Island, AB InBev is still waiting for a payoff. After the company blanketed Chinese cities with events and discounts last summer, there were reports of tepid sales. Insiders say at one point Goose Island flooded bars and restaurants with kegs priced at cost, eager to move the beer before it went stale.

The consequences of such hiccups may be tiny in a craft-beer market that's still tiny itself. Once upon a time, the U.S. craft market was equally microscopic, and AB InBev missed the trend. That's a misstep it doesn't want to repeat. And in early March it showed it was serious, acquiring the Boxing Cat brewery for an undisclosed sum. Jordan, the brewmaster, no longer has to worry about competing against the new giant in town. He's now on the team. ■

COMPANY SPOTLIGHT

DELTA

'Rules of the Road' Continue to Pilot Delta's Values and Culture

96%

of employees say, "I'm proud to tell others I work here."

95

– PERCENT –

of employees say "When I look at what we accomplish, I feel a sense of pride."

SOURCE: 2016 GREAT PLACE TO WORK® REVIEW™

An employee handbook written decades ago by the airline's founder remains relevant today, keeping the company's staff engaged and customers on board.

DELTA AIR LINES' PRINCIPAL founder C.E. Woolman once said, "No one individual can create an airline. An airline is a team. It must be a friendly, courteous, cooperative, and efficient team, bound as closely as a devoted family."

It's those words—written in an employee handbook decades ago—that continue to guide how Delta, one of the world's largest airlines, works with its nearly 85,000 employees worldwide.

The handbook was reintroduced to employees in 2007 when leadership discovered it in storage, updated it, and distributed it as Delta's "Rules of the Road."

It outlines the company's core values of honesty, integrity, respect, perseverance, and servant leadership—considered the guiding principles for how Delta treats its customers and employees.

"It's the best business book you'll ever read," says Joanne Smith, Delta executive vice president and chief human resources officer. "We've always believed that our employees and our people, the culture of Delta, have been its backbone."

Employees are often lured to the airline by its travel program, which provides unlimited free or reduced-rate standby privileges on its flights worldwide, as well as discounts on partner airlines. Other perks include competitive wages and benefits, including the recent addition of a paid maternity leave, as well as a generous profit-sharing program that paid out $1.5 billion in profits in 2016.

The airline also has several initiatives to help drive employee inclusion and engagement. Delta operates 11 employee-run business groups, for instance, which include more than 8,000 team members working to make the company a better place for work and travel. Over the years, these groups have created solutions for improving the airline's service and its work-life balance for employees.

"This interaction with leadership and working together collaboratively bring forward issues and considerations to inform the way we do business," Smith says.

Delta also has a reputation for being there for employees, in good times and bad. It has not only standard policies on sick and bereavement leave but also a Care and Sponsorship Fund that provides $2.5 million a year to employees in need. The fund recently paid out money to a team member who lost his home in a natural disaster.

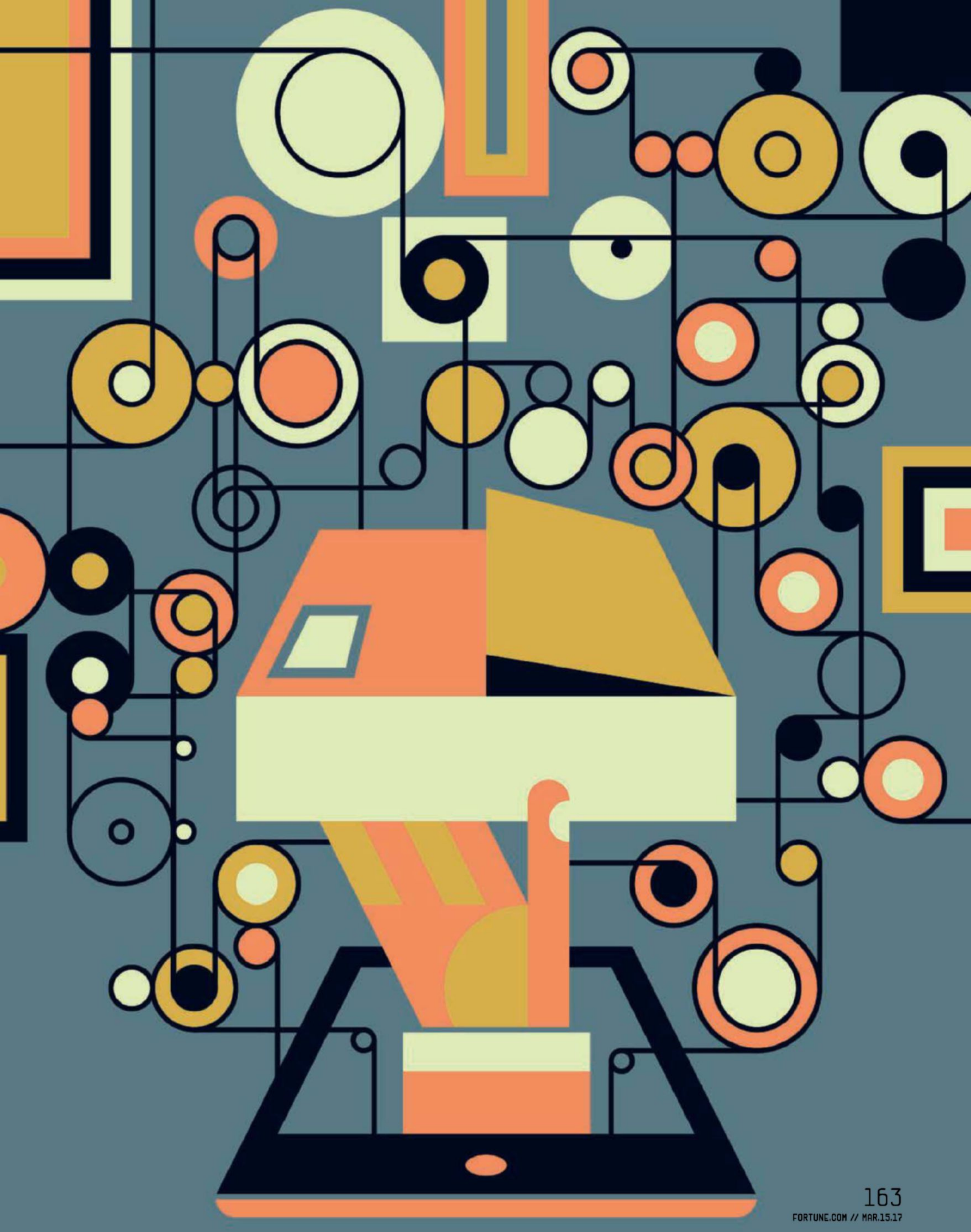
"It's an unwritten rule," says Smith, "that we assist our employees."

THE INVISIBLE SELLING MACHINE

By
Stephen M. Baldwin

ILLUSTRATION BY
GREG MABLY

Its stock has doubled since its IPO. It's conquered an important market in online retail ceded by the almighty Amazon. From the unlikely setting of Ottawa, Shopify has quietly been powering an e-commerce revolution.



Shopify cofounder and CEO Tobi Lütke.

PAUL CHIASSON—THE CANADIAN PRESS

SHOPIFY HAS DONE A PRETTY GOOD JOB OF HIDING ITSELF FROM THE WORLD.

The company's e-commerce platform was involved in purchases by more than 100 million individual shoppers in 2016, yet it is invisible by design, enabling the end-to-end operation of its customers, some 400,000 individual retail shops and brands. It proudly operates not from San Francisco or SoHo but from six floors of an inconspicuous office tower in Ottawa, a city whose much bigger success story is Justin Trudeau, the heartthrob Prime Minister whose office is a 10-minute walk away. Shopify's cofounder and CEO, Tobias "Tobi" Lütke, a 36-year-old German-born computer programmer with ice-blue eyes and a penchant for newsboy hats and free thinking, is an introvert with a shy demeanor.

And yet the company has quietly but aggressively encroached on territory occupied by retail giants like Amazon and eBay to carve out a lucrative niche in e-commerce. Founded in 2004, Shopify has close to 2,000 employees—700 of them added in the past two years—and offices in five cities. Revenue in 2016 was $390 million, up almost 100% from 2015; it's projected to grow 50% this year (it had a $37.2 million operating loss in 2016 but expects to be profitable this year). Since it went public in 2015, its stock has more than doubled. It has advisers and partners including Tim Ferriss and Tony Robbins.

Lütke's goal is a lofty one: to make commerce easier for everybody. Just as WordPress made it easy for anyone to set up a blog or content website, Shopify lets anyone set up and run a digital store immediately, without needing any technical prowess. With subscriptions starting at $29 per month, Shopify helps merchants decide on a store and domain name, what to sell, and which design template to choose. Once the store is set up, Shopify acts as a hub for tracking inventory, shipping, sales, and marketing analytics.

Most of its customers are small and midsize businesses like Tattly, a Brooklyn-based temporary-tattoo company founded by Tina Roth Eisenberg, who noticed her daughters coming home from birthday parties with shoddy fake tattoos, and Mindzai, a Toronto-based designer toy store run by Chris Tsang, who ran his business out of his condo before leaving the corporate world to sell full-time.

Increasingly, it's serving big names too. Celebrities like Drake, Kanye West, and Kylie Jenner use Shopify to sell their product lines, and Radiohead used it to sell its most recent album. Google, GE, and Tesla use the company's enterprise version, Shopify Plus, which starts at $2,000 per month, because it's cheaper and better than building and maintaining their own e-commerce platform.

That many of these bigger, more marketable names are opting for Shopify speaks to the changing face of distribution. Businesses no longer have to pay middlemen to sell their products and can provide a more personal experience by connecting with customers directly. Why would Bose, the thinking goes, pay to sell its products only at retail when it can connect with customers directly through its own digital store? Shopify makes it possible.

Merchants large and small can use a single interface to sell through their online store, and can also avail themselves of all kinds of help with any point in the selling process—social media, shipping and manufacturing, marketing, inventory tracking—in Shopify's app store, a selection of free and paid tools it calls Merchant Solutions. Kit, a company recently acquired by Shopify, offers an AI-driven virtual assistant that, for $10 a month, makes marketing suggestions, engages with customers who abandon their online carts, and pushes out Facebook ads. Companies like Intuit, Houzz, and MailChimp have built custom apps for Shopify's merchants. (Shopify takes a cut of the revenue.)

Shopify allows merchants to sell online and through other channels: in a brick-and-mortar setting (it offers a line of physical point-of-sale devices that sync with its software), through consumer hubs like Facebook and Pinterest, and, more recently, on Amazon. The latter was a big win: For years the online retail giant had its own software product for small and midsize retailers, Amazon Webstore. But it was more expensive, and over time startups like Shopify and BigCommerce, which focused exclusively on these services and prioritized the merchant rather than the consumer, gained ground. Amazon shut down Webstore last year, recommending its customers migrate to its competitors. In January, Shopify announced an integration with Amazon that would allow Shopify merchants to sell on its massive marketplace from their Shopify stores. Shopify's stock jumped nearly 10% on the news. It became the rare example of a company not just taking business away from the conquer-everything-at-all-costs Amazon, but likely playing a role in its decision to pack up and go home.

THAT BIG NAMES LIKE TESLA ALSO USE SHOPIFY SPEAKS TO THE CHANGING FACE OF RETAIL DISTRIBUTION.

TOBI LÜTKE SITS on a couch that faces a row of snowboards in his office. He speaks thoughtfully in his native German accent—he grew up in Koblenz, a historic town about an hour west of Frankfurt.

He owes much in his life to snowboards. In 2002, while on a snowboarding trip to Whistler, British Columbia, he met his wife, Fiona McKean. They soon moved to McKean's native Ottawa, where Lütke connected with McKean's family friend, Scott Lake. The two bonded over a shared love of technology—Lütke had fallen in love with computers as a child and left high school at age 17 to work as a programming apprentice at Siemens, and Lake was a vice president at a midsize tech company—and eventually decided to start a company together. Both avid snowboarders, they chose to sell high-end boards online, with Lütke handling the tech side and Lake handling the business side.

While building the site, Lütke grew frustrated with popular software options like Microsoft Commerce and Yahoo Stores, which were clunky and expensive, so he decided to build his own e-commerce engine from scratch. It would be simpler, faster, and more visually pleasing than the competitors, and he would build it using Ruby on Rails, an innovative new programming framework invented by David Heinemeier Hansson, the Danish programmer who had founded the web-based project-management tool Basecamp. Hansson, now a close friend of Lütke's, says Lütke was "instrumental" in the development of Ruby on Rails, which would ultimately be used to build Twitter, Airbnb, Groupon, Soundcloud, GitHub, and more.

Lake and Lütke launched their company, Snowdevil, in 2004. But while they made a few sales, they soon came to believe that the better opportunity might be in selling the software Lütke had built. He had released some of his e-commerce-related applications to the Ruby on Rails community as open-source projects, and they were gaining notice.

They changed the name to Jaded Pixel (new to English, Lütke confused "jaded" with the color "jade"). Lütke made a call to Germany to bring aboard Daniel Weinand, his best friend since age 15 and a computer programmer with a gift for design and user experience, as its third cofounder. Lake renamed it Shopify.

It was slow going at first. While they got a few dozen customers through the Rails community and word of mouth from the design world, the company pulled in just $8,000 in October 2006. Lütke and McKean were living in her parents' house, and his father-in-law, who was one of the company's first investors, occasionally had to write checks to help the cofounders make their small payroll.

Help came the following year, when Toronto-based angel investor John Phillips heard about the nascent company through a friend who was helping someone set up an e-commerce site. He was impressed by the product and even more by Lütke. He wrote the company a check for $250,000 at a $3 million valuation.

Soon after, Lütke and Lake began engaging in debates over where to take the company: Lake felt they should become a venture-backed growth company; Lütke, who had a distaste for large corporations, aspired to instead make Shopify the "best 25-person company in the world." But it continued to grow, and in 2008, Lütke flew to Silicon Valley to meet with major venture capital firms Benchmark, Sequoia, and Accel. Benchmark and Sequoia were interested, but they discussed moving the company to Silicon Valley with Lütke, at which point, he says, he lost interest.

Frustrated with Lütke's reluctance to grow and tired of the post-startup phase, Lake left that year to launch Source Metrics, a social marketing analytics tool for retailers, but remained on the board. Lütke went on a hunt for a new leader, but Phillips pushed him to run the company himself. "I said, 'Tobi, you gotta run the company.' And he'd never thought of it, really," Phillips says. But Lütke agreed. Phillips also pressed him to find different kinds of leaders, and Lütke soon tapped as COO Harley Finkelstein, an ambitious extrovert and an early Shopify user who had sold T-shirts to pay for law school and whom Lütke met at an entrepreneurs meet-up.

Another critical assist came from Tim Ferriss, the self-improvement guru and tech investor. Lütke, a fan of Ferriss's book *The 4-Hour Workweek,* suggested he be the keynote speaker at the annual Ruby on Rails RailsConf in 2009, and the two bonded over a shared passion for inspiring entrepreneurs. Ferriss helped conceive the Build a Business competition, Shopify's flagship marketing event that challenges people to start a store over an eight-month period. Lütke initially wanted the prize to be a MacBook Pro; Ferriss, whom Lütke calls Shopify's "idea supersizer,"

Shopify's offices in Ottawa evoke a Silicon Valley tech company (not pictured: a slide and a go-kart track).

BLAIR GABLE

convinced him to make it $100,000. ("I wanted him to think as big as possible," Ferriss says, "to the point that it would make him uncomfortable.") The contest is now a major event; along with Ferriss, winners receive mentorship from Tony Robbins, celebrity entrepreneur Daymond John, life coach Marie Forleo, and Russell Simmons.

In 2010 the company was contacted by Bessemer Ventures, which was looking to invest in interesting e-commerce businesses. After a months-long courtship, Lütke decided he and the company were ready to grow. In December of that year, Bessemer led a $7 million Series A funding round. Ten months later, Shopify raised a $15 million Series B. In 2013 the company raised a mega-round, $100 million at a valuation of $900 million.

That set the stage for the company's April 2015 IPO, a move Lütke says he's confident was necessary for Shopify to achieve its long-term goals. "I want Shopify to be a company that sees the next century," he wrote in a letter included in the IPO filing. After setting an offering price of $17, the stock began trading at $28. Nearly two years later, it sits at around $60.

LÜTKE'S PREDICTIONS FOR THE FUTURE OF COMMERCE

"PACKAGE BOXES"

Lütke thinks children will someday wonder why everyone had mailboxes instead of "package boxes," which he envisions as new, bigger vessels for receiving mail that will be better able to accommodate e-commerce deliveries and be less focused on paper mail, which is nearly obsolete.

BUY ANYTHING, ANYWHERE

Lütke predicts consumers will be able to buy wherever and whenever they want, whether it's through text message, Snapchat, Netflix, or VR. If someone is telling a friend about a product via a messaging service, Lütke reasons, they should be able to loop the merchant into the conversation.

STORES AS EXPERIENCES

Consumers will need more incentive to travel somewhere to buy a product when they can buy so easily through their devices. They'll expect to be entertained.

SAME-HOUR DELIVERY

Lütke believes instant shipping, in which purchases are sent to a customer's home immediately, will end the days of shoppers dragging their purchases around.

VR CONSUMPTION

When it comes to virtual reality, Lütke tends to veer into the mind-bending and the philosophical: "If people spend a significant amount of their time in virtual reality, do we still need to buy physical products?" he asked at Shopify Unite in March 2016.

LÜTKE DESCRIBES HIMSELF as being disobedient and antiauthoritarian from a young age. "When people said, 'Hey, you need to do this,' I would usually think about doing the opposite," he says. This was a problem in his first job, at Siemens, when he felt restricted by the corporate environment. But one colleague, a grizzled, potbellied senior programmer in his fifties named Jürgen who rode to work on his motorcycle, showed Lütke that people outside the norm could survive in the corporate culture. Lütke gleaned an important lesson. "The secret," he says, "was be exceptionally good at what you do, and everything else will fall into place." From the start, he wanted to make Shopify a place that would embrace such iconoclasts.

The company's hiring strategy, for example, is to focus not on what candidates have done already, but on what they might do in the future.

> WHEN PEOPLE SAID, 'HEY, YOU NEED TO DO THIS,' I WOULD USUALLY THINK ABOUT DOING THE OPPOSITE," SAYS LÜTKE.

That philosophy, which means betting on uncredentialed but motivated applicants, was adopted largely out of necessity—they couldn't afford the candidates who checked all the boxes—but it's one the company still follows, and it has led to a workforce of varying backgrounds and dispositions.

There is a companywide aversion to workplace "personas" and an emphasis on authenticity, free thinking, and the ability to be comfortable with discomfort. Another key tenet is the "trust battery," an internal gauge of one's successes and failures that determines how much freedom they have to pursue new ideas for the company. Employees take this almost literally.

But such principles have their limits. An early expression of Lütke's authenticity was brutal honesty. "The mistake I made is, I thought everyone had signed up for the same thing," he says. "Different people need different kinds of communication for it to have the same effect. That was something I had to learn."

Free thinking could also be blamed for Shopify getting pulled into a Donald Trump–related controversy. Unbeknown to many, the Breitbart News Network, the alt-right online publication formerly headed by Trump chief strategist Stephen Bannon, hawks fan merchandise. And to sell Breitbart coffee mugs, T-shirts, beer cozies, badges, and hats that say things like: "Hate America? We'll help you relocate," Breitbart uses—you guessed it—Shopify.

Several of those freethinking Shopify employees uncovered the connection late last year and demanded Lütke cut off Breitbart. That led to public condemnations from bloggers and a #DeleteShopify campaign—an echo of the #DeleteUber campaign—that spread across social media.

Lütke responded with a Medium post titled "In Support of Free Speech." In it he said that, despite receiving more than 10,000 emails, tweets, and messages on the matter, in the absence of illegal activity, Shopify had to remain neutral. "To kick off a merchant is to censor ideas and interfere with the free exchange of products at the core of commerce," he wrote. Breitbart remains a customer.

A handful of merchants canceled their subscriptions; two employees quit. Lütke expressed admiration for them. "I sent them emails saying, 'Hey, I really, really respect that,'" he says. "The thing that's important is people have principles. It's not a principle unless it costs you something."

DESPITE HIS GROWING WORKLOAD, Lütke has remained disciplined in his pursuit of freethinking. Every quarter, he takes a weeklong deep-learning retreat in which he secludes himself in office spaces around Ottawa to write code or takes a stack of books into the woods. The practice, which he calls "studio weeks," was inspired by a practice established by musician friends.

He spends much of this time thinking about Shopify's future, something the company's investors and advisers say is one of Lütke's biggest strengths. "He has an unrivaled ability to prioritize in the long term," says Ferriss, comparing Lütke to Jeff Bezos in that regard. "I think a lot of people claim to be able to do that; in reality, very few people are able to do that."

For Shopify, that future includes a big commitment to data and machine learning. Through tracking hundreds of thousands of merchants, Shopify will soon be able to learn what makes a company succeed and grow, and use that insight to make recommendations from its menu of add-on products and services.

Another big bet is Shopify Capital, a funding mechanism for small and midsize businesses. If Shopify sees an opportunity for one of its customers to expand, it will offer the merchant a cash advance. There's no interest rate, but Shopify keeps a percentage of future sales at a discounted rate. In 2016, it seeded merchants with more than $30 million.

Tim Ferriss (above left) has been a key adviser to Lütke; right: Shopify COO Harley Finkelstein.

And, of course, Shopify needs to get more people to set up shop. There are some 10 million small and midsize businesses across its core markets (Canada, the U.S., the U.K., and Australia). Less than 4% use its platform. Lütke and his team believe they can expand that potential market by pushing more people toward entrepreneurship.

"The next challenge is, How do we encourage not just the people that self-identify as entrepreneurs to do it, but everybody?" says Finkelstein. "How do I get people that are making jewelry for their granddaughter to be like, 'You know what? Maybe other people want this jewelry and I'm gonna create an online store and start selling jewelry to the whole world.'"

Bessemer's Jeremy Levine has lofty ambitions for what Shopify could become. "It is certainly plausible that half of all e-commerce transactions could flow through Shopify at some point," he says. "My rationale is that every merchant will eventually want its own storefront, and Shopify offers, by far, the best platform for storefronts."

Lütke speaks more from the perspective of battle-scarred founder. "Shopify has been a perpetually underestimated company at every point of its history," he says.

"I feel that changing."

FROM LEFT: MAARTEN DE BOER—CONTOUR BY GETTY IMAGES; REGINA GARCIA

COMPANY SPOTLIGHT

ATLANTIC HEALTH SYSTEM

A Caring Culture Drives the Business of Health Care

Atlantic Health System is a health care company that emphasizes care, not just for its patients but for its team members as well.

ATLANTIC HEALTH SYSTEM'S reputation as a great place to work precedes it, as Nikki Sumpter discovered before joining the N.J. company five months ago as senior vice president and chief human resources officer. She heard the many accolades and wanted to see for herself. When entering the corporate headquarters for her first interview, she observed the culture in action as one of the security officers was greeting everyone—employees, visitors, vendors, even children en route to the on-site day care—with the words "Good morning, friend."

"What a great first impression," says Sumpter, "and it was also a lasting one." She quickly saw that can-do spirit and feeling of pride existed at all levels of the organization. It made her want to join the team, too.

The company's raison d'être is to improve the health of the communities it serves, but that caring extends to its workforce, too, which is obvious in the vast benefits Atlantic Health System provides. "We can do what is commonplace within the industry," explains Sumpter, "but it really is about connecting to what our team members and their families need." In addition to paying 100% of health care costs for maternity services, it also offers adoption and in-vitro assistance, backup child care and elder care, and a new telehealth service that enables employees to see a provider right away.

Trish O'Keefe, Ph.D., RN, is a great example of the success of its tuition reimbursement program. "It's not just about the financial support," says O'Keefe, who has been with the company 35 years, "but also the flexibility that's allowed me to go to school, complete my coursework, and grow professionally through advanced degrees.

"To start as a graduate nurse, work my way up through management ranks, and become president of the largest hospital at Atlantic Health System was a very proud moment," adds O'Keefe, who was appointed to the post at Morristown Medical Center last May. "If I did not have the infrastructure, trust, support, and mentorship, I would not be where I am today."

The company also takes care of another important population: the military. Atlantic Health System actively recruits and promotes veterans. When asked why, Sumpter replies: "It's more than the right thing to do—veterans bring a unique perspective to our health care environment."

Atlantic Health System

Brian Gragnolati, President and CEO, Atlantic Health System (far right), joins in a celebration for employees Julius Garvin, Helen Quiros and Judy Santiago (L-R) when AHS received the *Fortune* '100 Best Companies to Work For' designation in 2016 for the 8th consecutive year.

On the *FORTUNE* 100 Best Companies to Work For List

9 YEARS in a row.

AHS senior leaders meet with staff at Morristown Medical Center in Morristown, NJ, to provide an opportunity for open conversation. (L-R) Food services team members Jalil Valentino, Gerald Duroseau; Trish O'Keefe, Ph.D., RN, President, Morristown Medical Center; Nicole Nardiello, RN, Clinical Coordinator; Nikki Sumpter, SVP, Chief Human Resources Officer.

SOURCE: 2016 GREAT PLACE TO WORK® REVIEW™

COMPANY SPOTLIGHT

AT&T

When Every Voice Matters, Anything's Possible

AT&T's 12 employee resource groups and 11 employee networks have **137,000** total memberships.

AT&T has invested **$140 billion** in capital over the past five years (2011–15), more than any other publicly held U.S. company.

AT&T employees have invested more than 1.5 million hours mentoring **260,000** young students since 2012.

Spend a few hours in any **AT&T** location, and you're sure to hear a familiar refrain: "I love this company."

OUR EMPLOYEES LOVE how we connect people with their worlds and with one another. They love being part of a company deeply committed to our communities. They love knowing we're at our best when natural disasters strike—never stopping until the work is done. And they absolutely love how we've helped lead a technology revolution even as we've transformed ourselves from a phone company to a wireless broadband entertainment leader.

But most of all, AT&T employees love the people with whom they work.

That emotional bond is rooted in employees' experience at a company that believes every voice matters. Three simple words that define who we are and how we operate. Three simple words that together form the key that unlocks everything.

Cynt Marshall, Senior Vice President—Human Resources & Chief Diversity Officer, AT&T

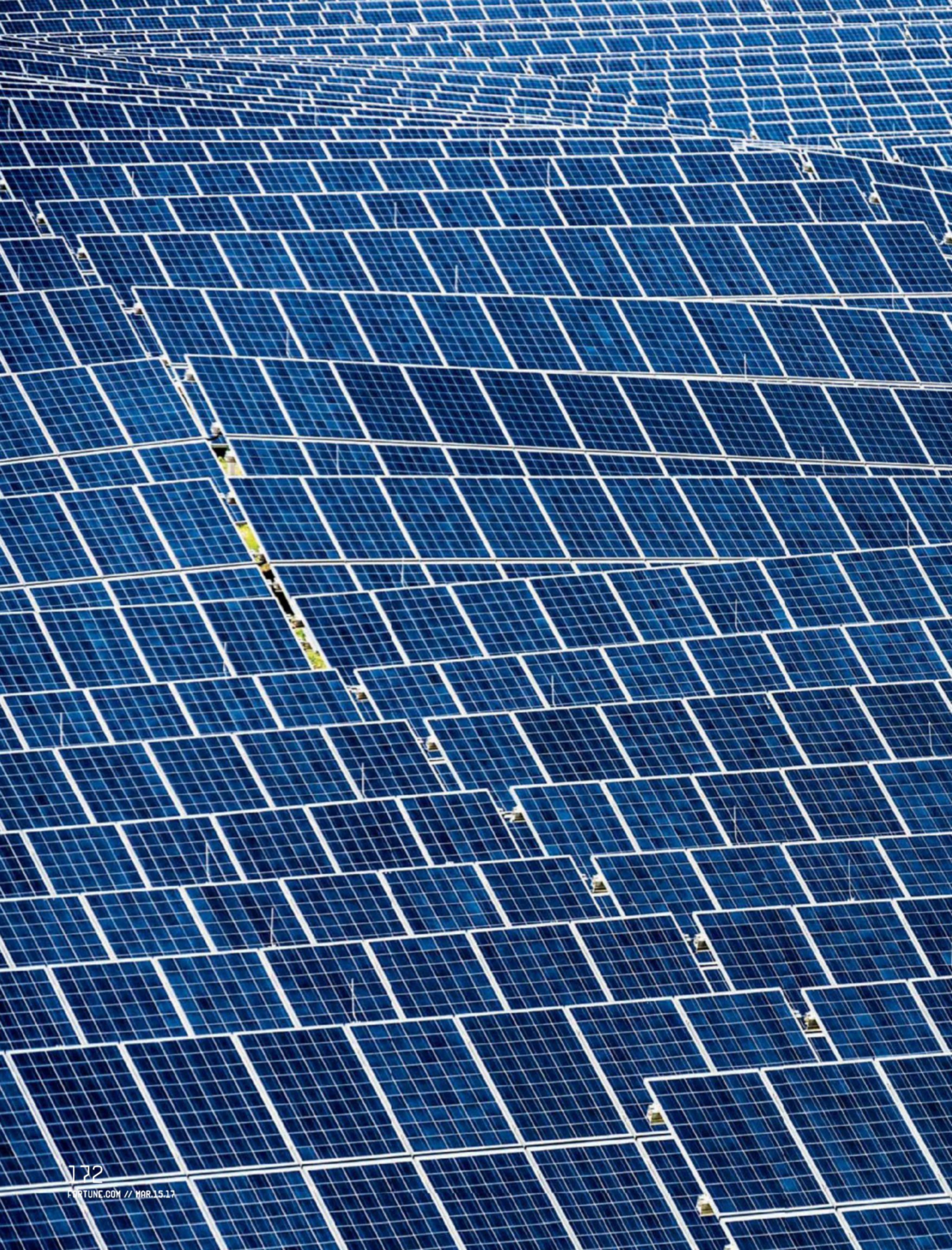
Because we've seen, again and again, that when every voice matters, every employee is free to achieve his or her full potential. When every voice matters, game-changing ideas emerge from our best. And when every voice matters, everyone wins: customers, shareowners, partners, employees, friends and family members.

In just the past few months, AT&T has been named by *Fortune* magazine a top company for diversity and a top company for African Americans. For the fourth year in a row, we were named *Fortune*'s Most Admired Telecommunication Company. And now, for the first time ever, we're being recognized as a *Fortune* Top 100 Company to Work For.

To say that every one of our 268,540 employees is proud would be an understatement. We are swelling with pride—in our brand, in our legacy, and in one another. For the men and women privileged to lead this iconic company, this recognition is powerful validation of something we've believed and experienced throughout our careers: AT&T truly is a great place to work, and the company's future is brighter than ever.

So, as we pause for a moment to be thankful, we also take this occasion to recommit ourselves to reaching higher, to exceeding our customers' expectations, and to always, always remember that when every voice matters, anything's possible.

—*Cynt Marshall*



A photovoltaic solar power array in Pasewalk, Germany.

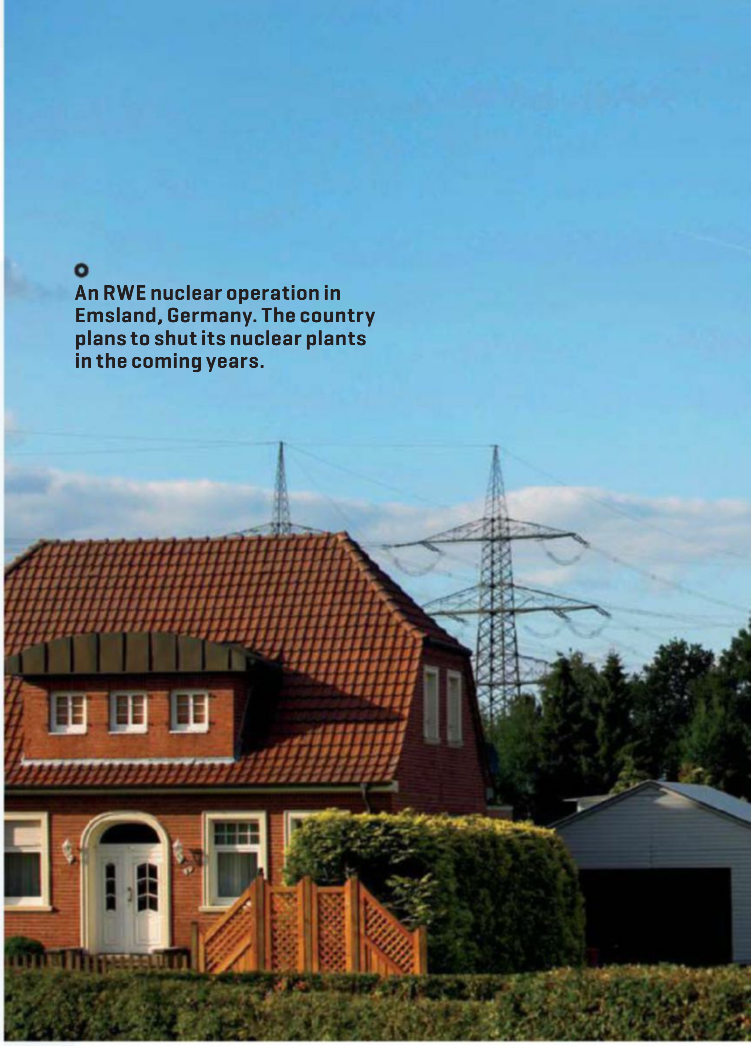
CLEAN ENERGY SPECIAL REPORT

GERMANY'S EXPERIMENT

THE BEST ENERGY REVOLUTION MONEY CAN BUY

GERMANY HAS TAKEN HUGE STRIDES TOWARD RENEWABLE POWER. BUT IF EVEN THAT RICH NATION CAN'T AFFORD THE STEEP COSTS, WILL OTHER COUNTRIES BE ABLE TO FOLLOW?

BY JEFFREY BALL



An RWE nuclear operation in Emsland, Germany. The country plans to shut its nuclear plants in the coming years.

A

AS MANY GENERATIONS of Dieter Dürrmeier's family as he can track have grown vegetables and tended livestock here in Opfingen, a hilly corner of southern Germany near the French and Swiss borders. Over the decades the Dürrmeiers have adapted, ever on the lookout for new ways to make money. In 1963, Dürrmeier's father exploited cheap government loans to move his 136-acre farm from the crowded village to the outskirts of town. In 1986 the Dürrmeiers stopped raising cows and shifted to the less cyclical business of boarding wealthy city dwellers' horses. But the family's current shift has been its most lucrative yet. Though they still grow asparagus and grapes and tend to the equines, the Dürrmeiers today harvest their fattest earnings from sunshine. Thanks to generous checks from the German people, that crop from the sky spins off cash more reliably—and at higher margins—than anything the Dürrmeiers have ever grown in the ground.

On a recent frigid winter night, wearing a red-and-green flannel shirt and mud-caked boots, Dürrmeier takes a break from feeding the horses and chats under the eave of a barn, one of four work buildings on whose roofs he has installed subsidized solar panels. The glass-and-metal sheets, whose production he monitors in real time on a computer in his office, fetch him a steady profit of about 40,000 euros (about $42,000) annually. That equates to about 40% of the earnings from his entire farming operation. As he describes his solar windfall, the balding, barrel-chested 62-year-old is both proud and embarrassed.

"For us it's a very good business, but for the German people it's very bad," Dürrmeier says of the government policy that has turned intermittent sunshine into an all but sure thing for his wallet. Germany's solar-subsidy scheme pays him a set price for every kilowatt-hour of electricity he produces with his solar panels and sells into the grid. It guarantees him that price, which when he started was several times the prevailing electricity rate, for 20 years.

When he learned of the subsidy more than a decade ago, he says, "I was at first skeptical because it was a bit too good, and I personally objected because I thought that subsidies were generally bad

PREVIOUS PAGE: PAUL LANGROCK—ZENIT/LAIF/REDUX; ABOVE: KRISZTIAN BOCSI—BLOOMBERG/GETTY IMAGES

for the economy as a whole. But if it was offered, I had to take it. It was against my beliefs, but as an entrepreneur it was the right thing to do."

Germany has launched a renewable-energy revolution, and it's paying a fortune to achieve it. In the past decade its green-minded politicians, backed by green-minded voters, have undertaken an extraordinary energy transition known in German as the *Energiewende*. At the center of the transformation has been a slate of renewable-energy subsidies that have dramatically scaled up once-niche solar and wind technologies and in the process have slashed their cost, making them competitive in some cases with fossil fuels.

Thanks to Germany's lavish first-mover spending, a raft of second-mover countries, from the U.S. to China to India, are now installing solar and wind power on a huge scale. If renewable energy ends up significantly helping curb climate change, then history may judge the *Energiewende* as a remarkable example of global leadership.

The raw ambition of the *Energiewende* is both mind-boggling and quintessentially German. It reflects the engineering prowess of a country that built the Autobahn, pioneered modernist architecture, and cranks out sleek BMWs and Mercedes. It evokes the environmental ideals of a society that idolizes the Black Forest, led the way in organic farming, and still celebrates Goethe's nature-loving poems. It bespeaks the moral confidence, both wrong and right, of a culture that created Romanticism in the late 18th century, Nazism in the 1930s, and one of the world's most generous campaigns to welcome refugees today.

But all that ambition is bleeding Germany. The mounting costs are testing its resolve. Leading politicians, even those with strong environmental credibility, are racing to rein in spending. If they can't achieve that, then Germany's near miracle may be remembered as the environmental equivalent of, say, heart-transplant surgery: a worthy endeavor, undoubtedly, but one that remains unattainable for all but the very wealthiest.

RENEWABLE ENERGY HAS GENERATED BILLIONS IN PAYMENTS TO GERMAN CONSUMERS—AND POUNDED TRADITIONAL POWER COMPANIES.

FROM A PURELY technological perspective, the energy transition has already been a stunning success. It has shown that German engineering can manhandle Mother Nature and power a major chunk of an industrial economy with clean energy from the sky rather than dirty energy from the ground. Enough renewable energy was produced in Germany in 2016 to cover 32% of the country's electricity consumption, a staggeringly large proportion by global standards.

In doing that, Germany has demolished one of the most fundamental reservations about alternative energy: that wind and solar power are too flaky to be relied on. A breezeless day or sudden clouds can interrupt them, making them, critics said, too unreliable to supply more than a token portion of a nation's energy supply. But even with all that erratic wind and solar energy stuffed into the system, Germany continues to operate one of the most reliable electricity grids in the world. Blackouts remain as rare in the world's fourth-largest economy as late trains or bad beer.

To be sure, fossil fuels remain crucial; the economy would grind to a halt without them. But Germany has solidified the start of an epic shift toward renewable energy. And the country has made these huge strides in less than a decade, the blink of an eye in the energy sector, which typically measures its investments in half-century increments.

The transformation is placing a heavy burden on its citizens. Germany spent 25 billion euros ($26 billion) on renewable energy in 2016, most of which—23 billion euros—consumers paid through a surcharge on their electricity bills. The rise in that surcharge is the single biggest reason that the amount the average German household spent on electricity rose to 1,060 euros in 2016, up 50% from 2007.

The renewable-energy shift is also pummeling the companies and communities that for decades have cranked out the conventional electricity—fueled by coal, nuclear, and natural gas—that has kept Europe's largest economy on top. Germany's big electricity generators have watched in horror over the past few years as solar power has blown up their stability and hefty profits.

Millions of these firms' wealthiest customers have installed subsidized solar panels on their roofs. This new army of power-producing consumers—"prosumers," in the lingo—are a force that the country's established electricity giants simply didn't believe would materialize.

The prosumers have flooded Germany's power market with their homegrown solar juice. That has sent prices tumbling on Germany's "wholesale" energy market, where traders buy and sell power. In turn, that cratering of wholesale electricity prices has rendered many of the country's gas-fired and nuclear plants uneconomic, unable to sell their electricity at prices high enough to generate the profit margins on which the plant's construction was based. The upshot: The share prices of Germany's big energy companies have plummeted too.

Making matters worse for Germany's traditional energy industry and for the villages and towns that rely on it is that, costs be damned, Germany is upping the ante in its renewable-energy wager yet again. It is shutting down its fleet of nuclear-power plants, which last year provided 13% of the country's electricity, because of worries about safety. And it is starting to phase out coal, which last year generated 40% of the nation's power, because of global-warming concerns.

RENEWABLES RISE, EVEN IN A COAL COUNTRY

Germany now gets a third of its power from renewable sources, way more than any other major economy. But lignite coal, which is plentiful in the country, remains widely in use—a key reason Germany is struggling to reduce its carbon emissions.

SOURCE: EUROPEAN ASSOCIATION FOR COAL AND LIGNITE

Each of those moves would amount to a historic transition on its own. Together, they put drastically more pressure on Germany's traditional power producers to reinvent themselves and on the German state to make renewable energy even cheaper.

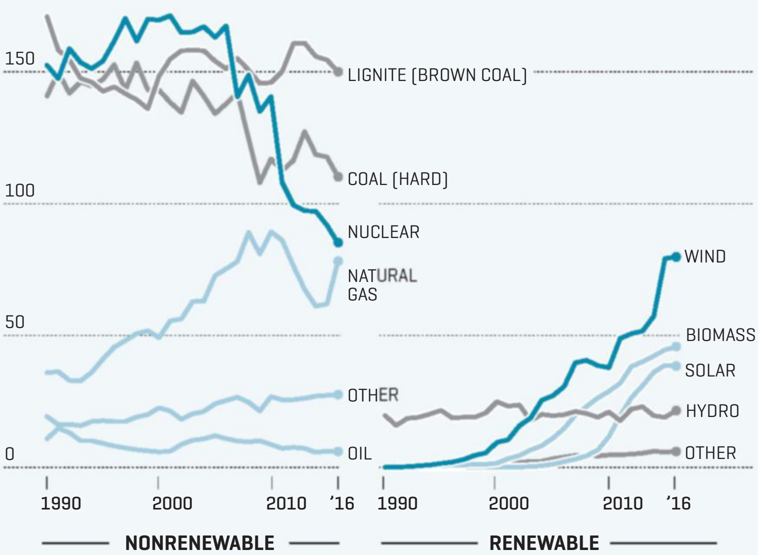
And yet, for all its progress toward renewable energy, Germany isn't on track to meet its underlying environmental goal. The objective motivating Germany's current green push—to slash the country's emissions of planet-warming greenhouse gases—appears in doubt. Germany, long a cheerleader for more-aggressive international climate targets, has pledged to cut its carbon emissions 40% below 1990 levels by 2020, one of the boldest targets in the world.

Yet Germany's greenhouse gas emissions, according to estimates, rose in 2015 and probably in 2016 too. With the 2020 goal looming, Germany finds itself in the sticky situation of having cut its carbon emissions only 27% from 1990 levels. That's because, at the same time that Germany's domestic subsidies have produced more wind and solar power, the vagaries of the global energy market—high prices for Russian gas and low prices for coal, given a glut of exports from the U.S.—have induced the country's power producers to burn more lignite, a particularly cheap and dirty type of German coal.

SOURCES OF ELECTRIC POWER GENERATION IN GERMANY

200 billion kwh

SOURCE: AGEB-ENERGIEEINHEITENUMRECHNER



THE PUSH FOR RENEWABLE energy in Germany dates from the 1980s. It began as a backlash against the country's campaign to build dozens of nuclear-power plants in the wake of the 1973 Arab oil embargo. At the time, antinuclear fervor assumed existential overtones in a country split in two by the Cold War. East Germany and West Germany were the frontline, laden with nuclear weapons placed there by the Soviet Union and the U.S. Most Germans assumed that, "whenever there was World War III, we would be the first ones to be killed," recalls Patrick Graichen, then a boy and now the 45-year-old head of Agora Energiewende, a Berlin-based nonprofit funded by foundations with the mandate to help inform Germany's renewable-energy shift.

In 1983 the fledgling Green Party scored some seats in Parliament on an antinuclear platform. Antinuclear fears in Germany deepened following the 1986 Chernobyl nuclear disaster in Ukraine, to the east. Chernobyl was a news story in the U.S. It was a generationally defining event in Germany, where radiation from the accident was detected over cities and farms.

It wasn't until 2000 that Germany's modern renewable-energy push really gained steam. That year, after years of fighting about the issue, the German government, run by a coalition of Social Democrats and Greens, passed a law declaring the country would phase out nuclear power. In a bid to ensure that what picked up the slack from nuclear would be renewable energy and not coal, the government that year also passed a renewable-energy support policy known as a "feed-in tariff."

Germany is hardly a natural solar hotspot. Berlin sits at roughly the same latitude as Calgary; Germany's sunniest areas get about as much sunshine each year as Seattle. Yet by 2010, encouraged by subsidy payments, millions of citizens had mounted solar panels on their property, and Germany had become the world's largest solar market by far.

The subsidy rules contained a mechanism under which they got a bit less juicy every year. But technological progress is hard to predict, and solar-panel prices ended up falling far faster than the writers of the tariff had expected. As a result, profit margins for those who installed solar installations in Germany ballooned. That spurred more projects, which drove up the subsidy bill facing German consumers still more.

Worried German politicians ordered a cut in the subsidy at the end of 2010. But the announcement induced solar developers to push through even more projects before the regulatory window closed. That year, fully 44% of the solar panels installed globally were installed in Germany, a country with a land mass roughly equivalent to Montana's. Solar installations in Germany kept rising in 2011 and in 2012. Politicians enacted reforms in 2012 that dialed back the fervor. But because of their 20-year guarantees, the subsidies agreed to in the go-go years will dissipate only in the 2030s. Until then, they will linger in the German economy, like a gobbled mouse moves slowly through a snake.

WHEN AN ECLIPSE SUDDENLY CURTAILED SOLAR OUTPUT, THE JUICE STILL FLOWED ON. WHY? PLANNING BY THE POWER COMPANY.

FEW PLACES BETTER illustrate Germany's technical success in handling the particular challenges of wind and solar power—namely, their perpetually fluctuating natures—than the region served by 50Hertz, a regulated monopoly that operates one of the country's largest electric grids. Its territory spans the northeast quadrant of Germany, from the Baltic coast down to the Czech border. As is typical for Germany, even the company's name is optimized for engineers: It refers to the electrical frequency at which the European grid hums.

Enough renewable energy was produced in 50Hertz's territory in 2015 to cover 49% of consumption; the biggest portion, 38%, came from wind and solar. "There is no other region in the world that has this concentration of intermittent renewables," Boris Schucht, 50Hertz's silver-haired CEO, boasts to me one evening over coffee. "We are the proof that a high share of renewable supply can exist with a high degree of system security."

Dressed in a tailored gray suit, he is sitting in a conference room on a high floor of the company's new glass-sheathed headquarters tower, across the street from Berlin's main railway station. Schucht was trained as a nuclear engineer; these days he often receives foreign delegations hungry to know how a power system can accommodate so much renewable energy. His answer: a combination of hot technology and cool engineering tricks. "When I started in the energy business, the grid was the least sexy business," he says, flashing a smile. "I'm sexy now. The company is totally sexy."

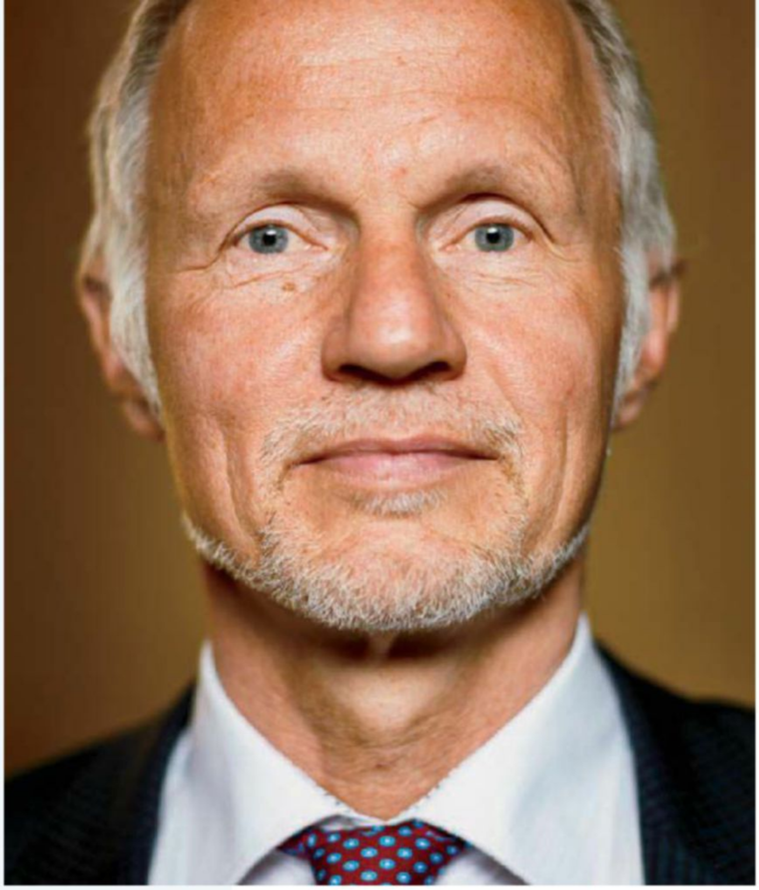
The centerfold of the 50Hertz operation is its grid-control room, which sits in a squat gray building on a dirt field down the street from a discount grocery store in Neuenhagen, a nondescript suburb east of Berlin. Gaining entry requires pressing a palm against a blue, wall-mounted sensor that detects the pattern of blood flow in the entrant's hands. (That's a surer security measure than a fingerprint sensor. A terrorist could cut a finger off an authorized company official, touch it to a fingerprint reader, gain admittance, and then wreak havoc with the grid.) Inside the control room, an electronic screen that can display the 50Hertz electric grid at various magnifications and orientations covers a wall. On the left side of the screen is a column of digital counters that report the amount of wind and solar electricity being produced on the grid at any given moment.

Gunter Scheibner runs the grid-control center and has worked at 50Hertz and its predecessor companies for 40 years. He spent his early career overseeing a reassuringly boring process: Electricity was produced by flicking a switch on a centralized power plant, and then it was transported to customers in steady, easy-to-manage flows.

Not any more. Today 50Hertz needs to forecast precisely how and when the wind will blow and the sun will shine. It buys forecasts of wind production from seven companies and forecasts of solar production from five. Today the wind data is between 96% and 98% accurate. The solar data is less accurate: between 93% and 95%. Solar is harder to forecast for several reasons: Solar power scaled up after wind power, so the forecasting science is younger; there are more, and smaller, solar installations than there are wind farms; and solar production is affected by many variables that don't affect wind production, such as fog and snow.

The importance of accurate predictions was underscored on the morning of March 20, 2015. Just after 8:30 a.m. local time, a solar eclipse occurred. The eclipse covered Europe, blocking some 85% of the sun. For 90 minutes or so solar production cratered by about 6 gigawatts, then surged back by 13 gigawatts. That's roughly equivalent to six large nuclear-power plants going dark—then twice as many switching back on.

Yet the lights didn't go out. Why not? Planning. Six months earlier, forecasts had predicted the eclipse, and since then Scheibner and his colleagues had been working feverishly on a strategy to counteract the expected fall and rise of solar



Rainer Baake, a state secretary in the German Ministry of Economic Affairs and Energy, is the political godfather of the *Energiewende*.

GOETZ SCHLESER—LAIF/REDUX

production. Along with other major German grid operators, 50Hertz held several workshops with the various players in Germany's electricity market—notably generators and traders—to ensure that enough other sources of power would be bought and sold around the time of the eclipse to compensate for the sudden solar variation.

When the eclipse came, they executed the plan. "We were able to balance the system without any incident," Scheibner tells me. But things wouldn't have been so easy for 50Hertz had the solar eclipse been accompanied by, say, a sudden change in the wind too. "We were lucky," he acknowledges.

It's the sort of challenge that Scheibner expects Germany will face more frequently as renewable energy expands. And none of this balletic engineering to manage Mother Nature's vicissitudes is easy or cheap. When the wind is blowing particularly hard or the sun is shining especially brightly, Scheibner and his colleagues have to compensate to ensure the frequency in the system never wavers much from the namesake 50 hertz.

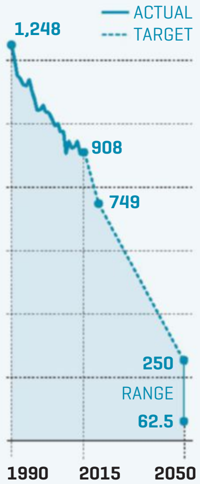
Because Germany's rules compel grid operators to pay prosumers for all the wind and solar power they produce, 50Hertz has only a few options to mitigate a surge from all those installations. It can order conventional-power producers to reduce their production—something that hurts the profitability of those coal, gas, or nuclear plants. But sometimes that's not enough. In those cases, 50Hertz tells wind and solar operators to stop feeding their electricity into the grid—even though the law forces 50Hertz to pay those renewable producers anyway for the juice they produced.

In engineering-speak, this is called congestion management. In plain terms, it's a waste of money. In 2015, 50Hertz spent 351 million euros on such measures. And because the German government assures grid operators a minimum return on their outlays, it is German consumers who ultimately bankroll the millions that 50Hertz and other grid operators spend adapting to renewable energy's rise and fall.

Now Germany is racing to upgrade its transmission system to catch up with the massive increase in wind- and solar-energy production. For its part, 50Hertz is adding new lines and beefing up existing ones. It's installing, on Germany's borders with Poland and the Czech Republic, devices called phase shifters, fancy valves that can be opened or closed to send excess power more easily across the borders. And it's encouraging the installation of big batteries to store renewable power.

GREENHOUSE GAS EMISSIONS IN GERMANY

(Million metric tons of carbon dioxide equivalent)



SOURCE: GERMAN ENVIRONMENT MINISTRY

"It's difficult," says Schucht, the 50Hertz CEO. As the city lights twinkle below his offices, he isn't talking just about his company's slog to bulk up power lines. "We need to be clear. It will be the same all over the world," he says. "There will be winners and losers. It's a huge transformation."

THE BIGGEST LOSERS in Germany's energy makeover are the companies and communities rooted in the conventional-energy past. In January 2012, Jürgen Grossmann, then the CEO of RWE AG, a giant German power producer, told a conference that solar power in Germany "makes as much sense as growing pineapples in Alaska." By that time his replacement as CEO had already been announced; Grossmann left his post that summer. Since then, Germany's metaphorical pineapples have been thriving. RWE? Not so much.

Last year the company underwent a radical restructuring. It spun off its renewable-energy operations—in which it had begun to invest even under Grossmann—into a separately traded company called Innogy SE. The goal was to give the markets a pure-play renewable-energy stock to invest in. RWE still owns a 77% stake in Innogy and has retained its longtime portfolio of coal, gas, and nuclear plants. The market has made its preference clear: As of early March, new-energy Innogy's market capitalization was 18.9 billion euros ($20 billion), more than twice that of its old-energy parent.

The shift to renewables in Germany is "an irreversible process now," Thomas Birr, an RWE veteran who helped the company's board engineer the restructuring, tells me when I meet him on a gusty, rainy morning in the former RWE headquarters tower in Essen, the traditional capital of Germany's western coal region. Purely on profitability, he says, solar projects "are completely outcompeting fossil" ones. "You cannot build a coal plant any more for this price. And we don't talk about nuclear; nuclear is totally outpriced."

It was a stunning message from a senior executive of one of the world's largest conventional utilities. A fit runner and horseman, Birr came to RWE 18 years ago from the oil industry. Today, at

GERMANY'S SHIFT TO RENEWABLES IS "AN IRREVERSIBLE PROCESS NOW," SAYS AN EXECUTIVE OF ONE OF ITS INCUMBENT ENERGY COMPANIES.

51, he finds that decentralized renewable energy has utterly rocked his world. He now spends his time flying around the globe assembling what Innogy calls its "innovation hub," an operation that includes a clean-energy venture capital fund. He even looks the part of a Silicon Valley entrepreneur: His head is shaved, he sports fashionably thick black glasses, and his idiomatic English is peppered with phrases such as "machine economy" and "disruptive digital." The office tower in which we are sitting, the tallest building in Essen, was recently rebranded as the headquarters not of RWE, the parent, but of Innogy, the child. Beside the front entrance on the day I visit hangs a massive blue banner that promises, "We will be pioneers."

Like RWE, E.ON—the two traditionally have been Germany's biggest electricity producers—restructured over the past year by cleaving its renewable-energy and conventional-energy sides into two. Klaus Schäfer, formerly E.ON's CFO, now is the CEO of Uniper SE, which owns and runs the former E.ON coal and gas assets. Schäfer says he "happily subscribes" to Germany's long-term carbon-reduction targets but takes issue with the "very aggressive" way Germany has gone about trying to push renewable energy to meet them. "You do it first," he says, "and you spend even more."

But reality is reality. Given the government's intent to continue accentuating renewables, E.ON decided it had to break into two. "How do you push for a new coal plant and argue for solar? Can you credibly do that as one company?" Schäfer asks me rhetorically, reprising the question that preoccupied the former E.ON's management. "We felt no." As with Innogy and RWE, the market value of new-energy E.ON in mid-March was 15 billion euros ($16 billion), more than three times the value of old-energy Uniper.

ONE PERSON SHEDDING no tears for the utilities is Rainer Baake, a state secretary in the German Ministry of Economic Affairs and Energy. If there is a political godfather of the *Energiewende*, it is Baake, who for the past two decades has alternated between senior jobs in the German government and top posts at environmental organizations. He has the heart of an ecological activist and the spine of a tough negotiator. Tall and thin, with blue eyes, close-cropped hair, and a careful gray stubble, he looks vaguely like Sting, if slightly more rumpled.

"FOR US IT'S VERY GOOD BUSINESS," DÜRRMEIER SAYS OF SOLAR SUBSIDIES. "BUT FOR THE GERMAN PEOPLE IT'S VERY BAD."

"I wish them all the luck in the world that they will be successful," Baake tells me, referring to the utilities, when we meet one afternoon in his elegant office at the ministry. Gummy Bears, the ubiquitous German-made candy, fill a bowl on the table. Two massive photos shot in Africa by Baake's wife—one of a lion and one of a jaguar—hang on a wall.

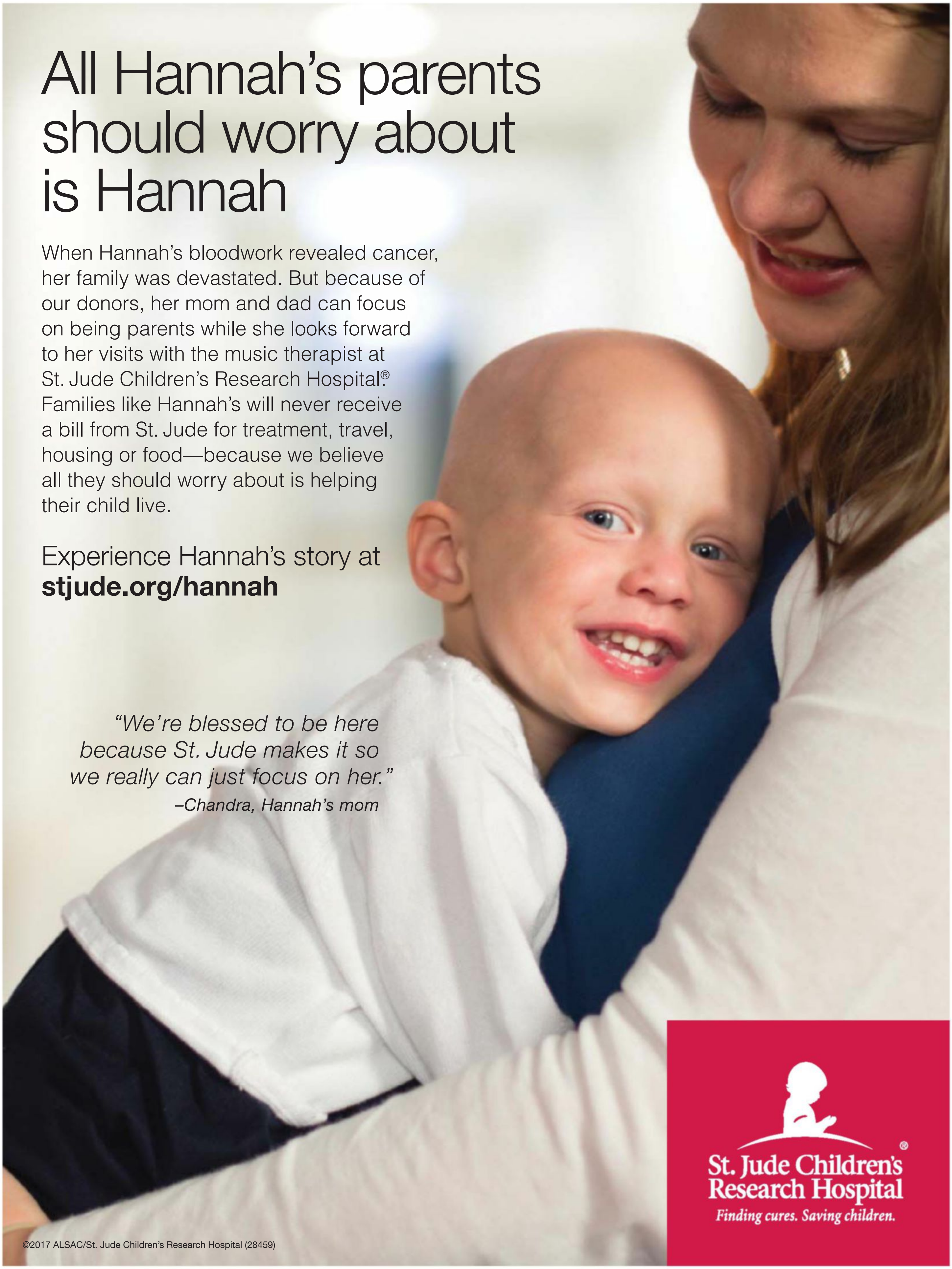
It was Baake who, in a similarly senior post in the German Ministry of the Environment in 2000, steered the political negotiations that led to the country's national feed-in tariff. Today, nearly two decades on, he is trying to make the *Energiewende* leaner and meaner.

Baake has angered many green activists by pushing through reforms to cut the cost of the renewable-energy subsidies. Rather than continue to pay a uniform tariff for big new wind and solar projects, Germany is beginning to set their subsidies at auction, a system that has been used in other countries and that Germany hopes will exploit competition to drive down costs.

Baake is also rankling the utility industry by leading the government push to finally shut down the country's nuclear-power plants and phase out coal. That move would require Germany to pay big sums to the utilities to close the plants early, yet another cost of the country's climate push.

He is acutely aware of the symbolic importance of what he's doing. If Germany succeeds, the leadership effect will far outweigh the actual impact on the planet. "We could bring down our emissions to zero and it would not have any effect on the global climate," Baake notes. Germany coughs out just 2% of global carbon emissions, slightly more than Iran. China emits 24%; the U.S., 13%. Germany's real objective, Baake says, is to set an example: "We have to do this economically efficiently. Then others will follow."

Down on his farm, Dieter Dürrmeier smiles. The earliest of the solar projects he installed on his barns won't lose their ratepayer support until 2024. If a business owner ran a company the way the German government has structured its solar subsidies, "he would be bankrupt," Dürrmeier says. Still, he would happily install more solar panels if he could. But the electric line from his farm to the grid is maxed out, and he has run out of space on his rooftop. ■


All Hannah's parents should worry about is Hannah
When Hannah's bloodwork revealed cancer, her family was devastated. But because of our donors, her mom and dad can focus on being parents while she looks forward to her visits with the music therapist at St. Jude Children's Research Hospital®. Families like Hannah's will never receive a bill from St. Jude for treatment, travel, housing or food—because we believe all they should worry about is helping their child live.
Experience Hannah's story at
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"We're blessed to be here because St. Jude makes it so we really can just focus on her."
–Chandra, Hannah's mom
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COMPANY SPOTLIGHT

VETERANS UNITED HOME LOANS

Helping Our Veterans Find a Place To Call Home

No.1

Nation's largest VA purchase lender.

690

Number of employees hired in 2016.

This specialized lender serves military families on homeownership journeys and beyond.

SHORTLY AFTER GETTING married in 2016, Keith and Christian Lewis became first-time homebuyers. The dual military couple found a cute fixer-upper on the rolling plains of Kansas and used their hard-earned VA home loan benefits to finance the purchase.

Working with Veterans United Home Loans, a VA loan leader based in Columbia, Mo., made the process stress-free and meaningful.

"We met so many wonderful people at Veterans United," Christian says. "It says a lot about a lender when you can truly experience their values, integrity, and passion during a process as important as buying your first home."

Veterans United is the nation's largest VA purchase lender. But the company's success is about more than mortgages. Growth has come as a byproduct of Veterans United's commitment to enhancing lives and educating veterans about their powerful homebuying benefits.

"It's one thing to be on a team, and it's another to be on a team that shares the same passion for what they do," says Temi Adeyeri, a web application developer for Veterans United. "I've never seen anything like it."

Veterans United employees are driven by a set of core values: be passionate and have fun; deliver results with integrity; and enhance lives every day. These statements have special meaning because they are a collective creation of employees that continues to guide talent acquisition and retention at the organization, which has 2,300 employees in 23 states.

"I love how Veterans United brings the best out of every person," says Emily Kamin, the company's health and fitness coordinator. "You can't duplicate our people."

Thanks to the compassion and generosity of employees, the mission of enhancing lives reaches far beyond the workday. More than 90 percent of Veterans United employees donate 1 percent of their income to an employee-run foundation serving veterans, local communities, and one another in times of need. Veterans United Foundation has raised more than $30 million in its first five years.

"It's humbling to see the company you work for make such a big impact," says Charles Neville, a systems support administrator. "Without a doubt, the best part is that we get to ensure that our nation's veterans and service members experience the freedoms they fought to defend. As a veteran, I know how much that means."

SOURCE: 2016 GREAT PLACE TO WORK® REVIEW™


FORTUNE
100
BEST
COMPANIES
TO WORK FOR
2017
Their story
is **our** story
John R. - U.S. Army Veteran
Closed Jan. 2017 in Maine

CLEAN ENERGY SPECIAL REPORT

DEEPWATER WIND

WI

THE FIRST OFFSHORE U.S. WIND-POWER PROJECT IS UP AND RUNNING, BACKED BY THE DEEP POCKETS OF HEDGE FUND GIANT D.E. SHAW. THE OBSTACLES TO A WAVE OF OFFSHORE POWER ARE HUGE—BUT SO IS THE POTENTIAL.

BY BRIAN DUMAINE

ON THE WATER

Deepwater Wind's project near Block Island, R.I.

COURTESY OF DEEPWATER WIND

I

IT WAS A BRISK SUNDAY MORNING in October 2015, and Deepwater Wind CEO Jeffrey Grybowski's cell phone buzzed. His construction manager, who was driving piles 200 feet beneath the floor of the Atlantic Ocean, three miles from Block Island, R.I., said he had to halt work on the company's wind farm because a humpback whale had meandered near the site. Under the Endangered Species Act, it's illegal for humans to "harass" certain marine mammals, and loudly pounding steel into the ocean floor would certainly qualify.

Worse, from Grybowski's perspective, the law permits driving in piles only during certain months, when the whales aren't migrating to the area. Bad weather was moving in, and if his team didn't finish the project that day, Grybowski would have to wait another six months before the feds would allow him to sink in the final post for the five giant wind turbines that would provide the island's power. That meant millions in losses and a disaster for his small company. Recalls Grybowski: "It was a nail-biting moment. We had no way of knowing when the whale would stop hanging out."

Over the next few hours Grybowski hounded his foreman for information. How far away was the whale? Was it moving at all? Was it drifting closer to the construction site? By midafternoon, he had only a few hours left to finish before time ran out. Grybowski's cell rang again, and he learned that with a magnificent flip of its flukes the humpback had swum away. The crew then sank the last piling, just making the deadline.

No one ever said it would be easy to build the first offshore wind farm in America. But in December, Deepwater Wind's Block Island turbines started spinning out electricity. What the company accomplished is much more than replacing the island's dirty, diesel-power plant with clean wind. The project marked the beginning of what many experts and investors are betting is a boom in offshore wind along the northeast coast of the U.S. After decades of false starts, bankrupt projects, and protests—Ted Kennedy once complained that a proposed wind farm would ruin the view from his Hyannis Port compound—offshore wind is looking practical.

Europe has been building offshore wind since the early 1990s, but American developers couldn't figure out how to make those farms compete with cheap coal and natural gas. In the past few years, however, the turbines have gotten larger and more efficient, and the installation costs have dropped. As a result, the wholesale cost of European offshore wind power has fallen from an average of 20¢ a kilowatt-hour (kwh) to less than 10¢. And the cost curve keeps sloping downward.

For the first time, U.S. investors see a path to profitability. The gold rush has begun. In the U.S., 23 offshore wind projects totaling 16 gigawatts (GW), the equivalent of about 16 nuclear power plants, are on the drawing board. Almost all are located along the northeast coast. Over the past year, Denmark's oil and gas giant Dong Energy bought federal leases off the coasts of Massachusetts and New Jersey. Norway's Statoil won a 33-round auction to secure a 79,000-acre site south of Jones Beach on Long Island for $42.5 million, far more than the $16 million generated by all earlier offshore wind auctions combined. Shell has been sniffing around. Wall Street players such as Citigroup, HSBC, and, as we'll see, D.E. Shaw are lining up to finance the most promising projects.

At the same time, state governments are generating favorable winds. Last summer, Massachusetts Gov. Charlie Baker, a Republican, signed a law that requires that state to procure 1.6 GW of offshore wind by 2027. Not to be outdone, New York's Democratic governor, Andrew Cuomo, committed to develop 2.4 GW of offshore wind as part of his pledge to get 50% of the state's power from renewables by 2030 (roughly twice the current percentage). As Cuomo tells *Fortune*: "New York will continue to advance the largest offshore wind development in the

JAMEL TOPPIN—THE FORBES COLLECTION/CONTOUR BY GETTY IMAGES

Deepwater CEO Jeffrey Grybowski in Providence in front of bases for wind turbines.

nation that will bring resilient and reliable power, create jobs, and combat climate change."

All told, the U.S. Department of Energy projects that offshore wind will produce 86 GW of power by 2050—about 7% of America's current electricity demand. That's up from virtually zero today. (Land-based wind now delivers 82 GW in the U.S., vs. just 4 GW 15 years ago.)

If offshore wind can follow such a trajectory, that would make it a multibillion-dollar industry and create as many as 600,000 jobs during the next few decades. Offshore wind has the long-term potential to produce twice as much electricity as America currently consumes, according to the National Renewable Labs, part of the DOE. It conservatively estimated offshore wind capacity in the U.S. by taking into account only areas likely to be developed because of water depth, distance from shipping lanes, and nearness to shore.

But making offshore wind viable in the U.S. won't be easy. New projects in the U.S. cost roughly twice the national average of 7.5¢ for all sources of electricity. One reason is that America doesn't have the infrastructure and supply chains in place to build offshore wind farms affordably.

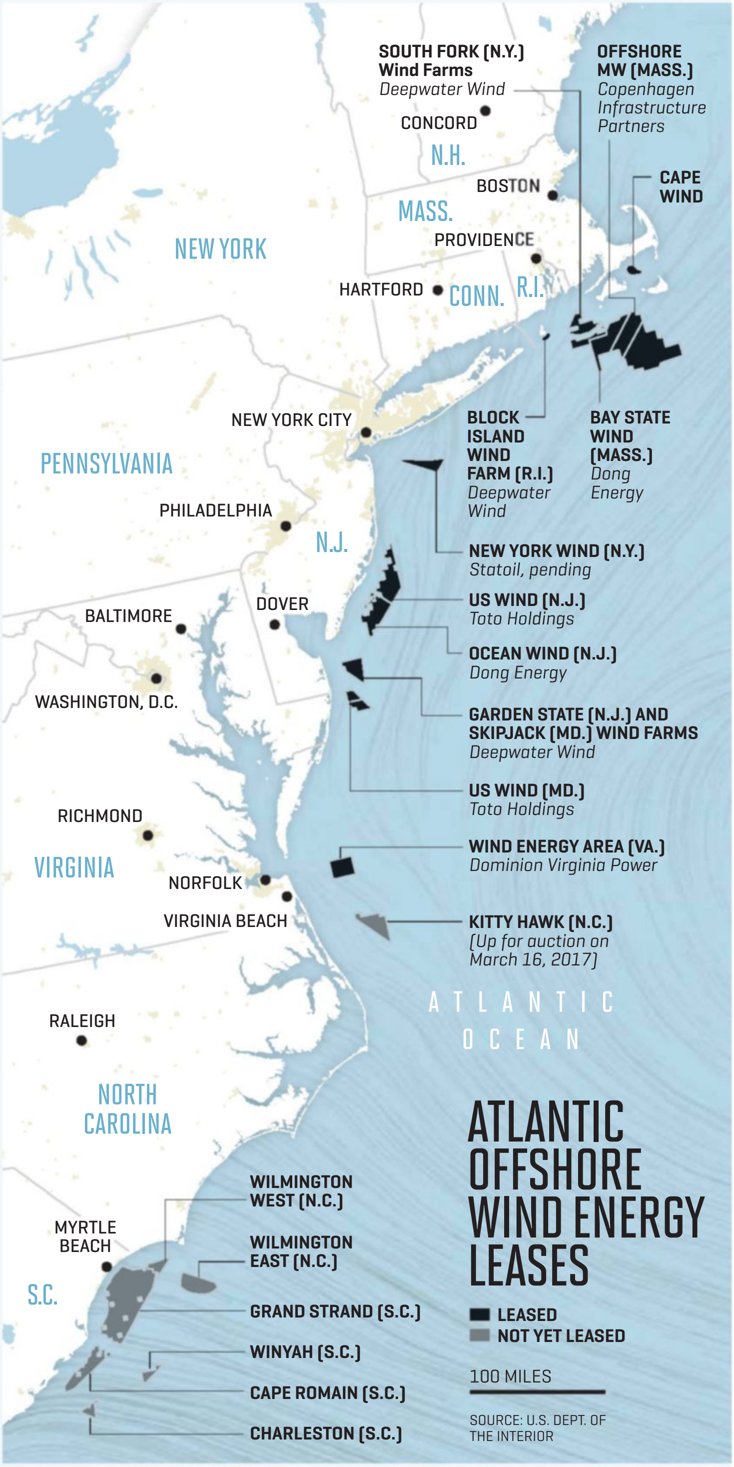
OFFSHORE WIND COULD SOMEDAY PRODUCE TWICE AS MUCH POWER AS AMERICA CONSUMES TODAY, SAYS THE ENERGY DEPARTMENT.

In addition, the permitting process is complicated and time consuming, and a new administration in Washington has made it clear that coal—and not renewable energy—will be its priority.

Industry backers argue that offshore wind will follow the same steep cost decline of other technologies. The price of land-based wind (without any subsidies) plummeted from 14¢ to 4.7¢ a kilowatt-hour from 2009 to 2016, according to financial advisory and asset management firm Lazard. That's cheaper than the energy from a new natural-gas or coal plant.

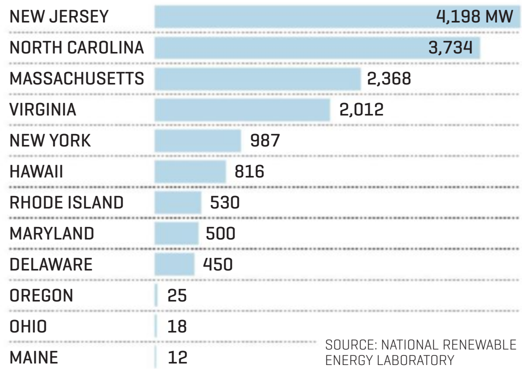
Now we're seeing the start of a similar downward trajectory for offshore wind. The DOE estimates that the price of offshore wind will drop by 43% by 2030, which would make it nearly competitive with other new sources of electricity. Irene Rummelhoff, who runs Statoil's offshore wind and other "new energy" businesses, is more optimistic: "Two years ago they said European wind wouldn't be competitive until 2030. We became competitive last November. In the U.S. it can happen extremely quickly too."

Deepwater's small operation off Block Island doesn't prove that wind power is competitive. The island had a small diesel plant that was expensive



U.S. OFFSHORE WIND PROJECTS

New Jersey leads the U.S. with the most offshore wind energy in the planning stage.



to run. The wind power replacing it is cheaper than diesel fuel but still more than double the national electricity rate. But wind power can be competitive in select markets—heavily populated parts of the country where building a new fossil-fuel plant is expensive, if even possible. In other words, along the Northeast Corridor.

That's what Grybowski hopes to prove with his next project: building and operating the South Fork Farm, a 90-megawatt (MW) plant—enough to power 50,000 homes—30 miles off the coast of Montauk, and serving the eastern tip of Long Island. The project, which is slated to come on line as early as 2022, will provide much-needed power when the hedge fund kings and celebrities descend on the Hamptons each summer and thousands of megamansions start drawing outsize loads of power. Grybowski thinks that if he can get it up and running, it might just provide the gust of momentum the industry needs to take off.

B**Y THE LOOK OF ITS BRIGHT** but cramped office suite in downtown Providence, Deepwater Wind might seem like a shoestring operation run by a band of Birkenstock-wearing environmentalists. It's anything but. The company is principally owned by D.E. Shaw, a New York hedge fund and private equity firm, which manages $40 billion in assets.

And Deepwater's chairman, Bryan Martin, is no tree-hugging idealist. A former partner at J.P. Morgan's private equity unit, he has decades of experience building huge oil and gas projects and, later, solar and onshore wind farms as CEO of D.E. Shaw Renewable Investments, his current position. Believing that offshore wind could be the next big economic win, Martin first invested in then-fledgling Deepwater in 2007 and hired Grybowski, a lawyer and a former chief of staff to a Rhode Island governor; Grybowski moved up to CEO in 2012. Martin saw that Grybowski, an animated, quick-talking executive with an infectious laugh, had the drive to run projects like the Block Island farm, plus the political experience to navigate the complexities of federal and state policies. (The company is private and will not release financial data.)

Martin and Grybowski saw a huge opportunity to replace aging fossil-fuel plants in New York and New England. Some of the coal, oil, and nuclear facilities, at 50 to 60 years old, have exceeded their expected lives. New York State is closing the Indian Point nuclear operation, which supplies the equivalent of 25% of New York City's power. Long Island is scheduled to shut three or four of its fossil-fuel plants over the next few years.

But replacing them with new fossil-fuel or nuclear plants, in blue states populated with citizens concerned about clean air and climate change, would be costly and controversial. When the local utility simply tried to install larger power poles on the leafy streets of East Hampton a few years ago, the public outcry was so great that the power company had to back off. Says Martin: "We have limited cost-effective options to replace aging power plants in New York and New England. Offshore wind will be one of the lowest-cost sources of new power."

Geography is also working in the favor of offshore power. Finding enough land to build giant solar and wind farms in the heavily populated east, where land values are high, poses a problem. (The town of East Hampton spent $7 million just to buy the rights to prevent 20 acres from being developed.) Why not build wind farms in upstate New York, where land is cheap and plentiful? As it turns out, the state doesn't have the grid capacity to move the power from upstate to the population centers in the south, and building miles of new high-voltage power lines would face serious local resistance.

The technology enjoys another advantage in the region: The Atlantic is very shallow—typically 90 feet or less—near the East Coast, making it cost-effective to drive in the pylons that support the turbines. Plus, the wind blows harder and more steadily there than in many other places. Offshore wind tends to peak in the afternoon and early evening; onshore wind blows stronger at night. The biggest demand in summer comes in the afternoon and evening, when the sun is hottest and people return home from work (and the beach) and turn up their air-conditioning. It's a perfect match.

"OFFSHORE WIND WILL BE ONE OF THE LOWEST-COST SOURCES OF NEW POWER," SAYS MARTIN, AN EXECUTIVE AT D.E. SHAW AND CHAIRMAN OF DEEPWATER WIND.

The result: a surge in interest from developers. When the Long Island Power Authority (LIPA), the agency responsible for supplying power to Long Island, asked for bids for the South Fork Wind Farm, some 20 companies, including ones that wanted to build natural-gas and biofuel plants, vied for the project. Deepwater Wind won the bidding. Under the 20-year contract, Deepwater will provide LIPA with electricity that will likely cost in the vicinity of 17¢ a kilowatt-hour. In addition, the project will help LIPA fulfill its pledge to add more renewable energy to the grid. Says Tom Falcone, the CEO of LIPA: "We hope the South Fork Farm will serve as a gateway project for us. By starting to develop that resource, the next wind farms will cost a lot less."

To deliver electricity at that price, Grybowski will have to do some scrambling. For one thing, building an offshore wind farm requires special ships and equipment. No such fleet exists in the U.S., and federal law (meant to protect American shipping) prohibits hiring European operations, which have been doing this type of work for years.

Grybowski turned to the fossil-fuel industry. Because of the slump in oil and gas drilling, many service vessels in the Gulf of Mexico are sitting idle. For the Block Island project, Grybowski hired Gulf Island Fabrication of Louisiana to build the foundation and another Louisiana company to help install the turbines. "The Gulf ship owners see offshore wind as a big opportunity," says Grybowski. For the South Fork project, the CEO anticipates, he'll be working out of multiple ports, creating hundreds of jobs. Little by little he hopes to achieve the scale of the operations in Europe.

Deepwater is already making progress in its quest to cut costs. The company says the $740 million South Fork farm will be 30% less expensive per unit of energy than the Block Island project. Prices of turbines are falling, and Deepwater thinks it can obtain permits more quickly this time.

O FFSHORE TURBINES boast advantages compared with their land-based brethren. They are much larger because there is simply more wind to harness over the ocean. Typically, a landlocked turbine generates 2 to 3 MWs. The ones Deepwater Wind uses for the Block Island wind farm were made by GE and crank out 6 MWs. One project in Europe has deployed 8 MW turbines, the largest in the world, made by Vestas. Each of the three blades is 265 feet long—bigger than the wingspan of a 787 Dreamliner. From waterline to the tip of the blade, the turbines stretch 722 feet, more than twice as high as the Statue of Liberty and its base combined.

These behemoths are getting smarter and more efficient. Because offshore wind turbines are bigger, taller, and in windier areas, they are 50% efficient, meaning that over time they convert half the theoretical wind power into electricity. That efficiency level is significantly higher than land-based ones. The giant turbines can rotate 360 degrees, and the blades can tilt to capture the best angle of the wind.

Some experts think that efficiency number could reach 55%, and manufacturers like GE are applying advanced software to do the job. Says Markus Rieck, managing director of commercial operation, sales, and marketing for GE's offshore wind business: "Every 1% improvement in efficiency generates a lot of cash for our customers." In one example, turbines could be designed to communicate with one another. Those nearest the wind might be blocking the airstream for those in the rear. GE's system, still in development, could use algorithms to adjust the angle of the turbines so that the maximum amount of power is produced. The software can also be used to predict when the turbines are likely to break or need maintenance to avoid sending a worker up—sometimes in horrendous weather—to check what's wrong. GE currently uses similar software for its jet engines. Next up: drones with cameras that could fly up to the turbines to detect material failure, rust, or a missing bolt.

Such technological progress will need to overcome the changed political climate in Washington. The new administration is unabashedly hostile to renewable energy, and soon after Trump's Inauguration the White House took down all mention of climate change on its website. Still, there are good political and economic reasons to support offshore wind. This fledgling industry is just the kind of heavy steel and construction project that the new President envisions for his infrastructure program. And offshore could bring a dollop of sorely needed revenue to the Treasury. The DOE estimates that annual lease payments for offshore wind projects could total $440 million annually through 2050.

Certainly, the Republican-controlled Congress could decline to renew the subsidies that wind power now enjoys. The production tax credit, which is slated to phase out by 2020, helped the onshore wind industry become competitive and create 100,000 jobs, most of them in red states. Onshore wind doesn't need the tax credit any longer, but why not extend it for offshore wind to help create more high-paying jobs more quickly? Even if Congress doesn't come through, New York State is looking to provide some financial incentives for offshore wind. Says John Rhodes, president of Nyserda, the agency that oversees the state's energy policy: "We want developers to come here with the certainty that they can build the wind farms and sell the power."

Some help from Washington would be nice, but Grybowski and his investors aren't counting on it. They believe they can build out this industry, if they have to, without much in the way of government subsidies. If they can deal with the endless technical challenges, and even the occasional pesky humpback whale, they just may have the gumption to go it on their own. ■

D.E. Shaw's Brian Martin (with fist raised), Grybowski (center), Rhode Island Gov. Gina Raimondo (with thumb up), and others celebrate an early construction milestone at Deepwater's wind farm in 2015.

BRIAN SNYDER—REUTERS

COMPANY SPOTLIGHT

INTUIT

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BRAD SMITH
CHAIRMAN & CEO, INTUIT

"Taxes shouldn't be taxing. Numbers should crunch themselves. And everyone should have the financial tools to take charge and power their own potential."

AS A COLLEGE SOPHOMORE, Kristina Thai peddled her résumé at booth after booth at a campus career fair, only to hear the same reply: Not enough experience. Until she got to the booth staffed by Intuit, the longtime leader in financial software.

"The engineers were open to the fact that I was young and wanted to learn," says Thai, who taught herself to code computer software in seventh grade. "I ended up interning at Intuit and returning for two more summers because I loved my internship so much."

Today, Thai is an iOS engineer at Intuit who has developed an app that enables people to transfer data from their Apple watch to their phone. In startup-rich Silicon Valley, she has found a rewarding career at Intuit, recognized for bringing innovation to financial management products for consumers and small businesses.

"We have the mindset of a startup," says Thai. "We're constantly evolving, moving from the desktop to the cloud. Our products are available on any device. That's possible because we work as teams. I have engineering responsibilities, but I can have a say in design and take on anything I'm passionate about."

Intuit's diverse workforce of young engineers has the opportunity to improve peoples' financial lives and create the products of tomorrow while working with the latest technologies—wearables, machine learning, and conversational user interfaces.

The company's flagship products—QuickBooks, TurboTax, and Mint—simplify managing personal finances, small businesses, and tax preparation and filing. Founded in 1983, Intuit has 7,900 employees, operations in 11 countries, and annual revenues of $4.7 billion.

But numbers tell only part of the story. The company's culture emphasizes giving back to the community, making $42 million in charitable donations last year. Its "We Care and Give Back" program provides matching cash gifts, in-kind donations, and physical labor that tap employees' special expertise and interests.

Thai is part of a domestic workforce that is 42% women. Worldwide, women hold 29% of the technology positions at Intuit and 32% of the leadership roles. Through 11 employee networks within the company, Intuit works to attract the world's top talent and give them the opportunity to do the best work of their lives, while embracing their different backgrounds and experiences.

"We serve our customers wherever they are—at home, in the office, or on the go—and on any device they choose," says CEO Brad Smith. "Yet we're still guided by our original mission: Improving our customers' financial lives so profoundly they can't imagine going back to the old way."

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SOURCE: 2016 GREAT PLACE TO WORK® REVIEW™

BUSINESS EDUCATION FOR THE FUTURE

JOINING TRADITIONAL MBAS ARE SPECIALIZED DEGREES AND ADVANCED EXECUTIVE PROGRAMS.

AN MBA HAS LONG BEEN the go-to degree for those serious about gaining the knowledge to be successful in business. Today, the master's in business administration is still a key degree in the field, but MBAs are no longer one-size-fits-all, and they're certainly not the only degree offering business expertise.

"Historically, an MBA was a generalized degree, but it's becoming increasingly specialized," says Todd Darnold, Ph.D., a professor at Creighton University's Heider College of Business, which offers several master's and dual graduate degrees. Among the programs offered by Heider and other business schools these days, for example, are a Master's of Business Intelligence and Analytics, and an MBA/Masters of Science in Financial Risk Management.

Another trend is toward practical and applied education. At Heider, undergraduate business students manage an on-campus Apple store and invest $5.6 million of Creighton University Endowment funds. "Creighton's a really unique environment for undergraduates to study business, because we have the best of a liberal arts education coming from a strong Jesuit university paired with hands-on, real-world experience based on internships and other opportunities to apply what they're learning," says Darnold.

A continuing trend in business education is online learning, completed either entirely online or as part of hybrid programs combining online work with the face-to-face interactions offered on campus. Online MBAs have become increasingly accepted in recent years, particularly now that many institutions offer programs equivalent in quality to those conducted fully on campus. But the institution does matter: Recruiters look for degrees from respected and accredited schools.

The most highly regarded accreditation is from AACSB International, the Association to Advance Collegiate Schools of Business. The University of Connecticut School of Business, like the other schools mentioned here, is AACSB-accredited. "We're committed to supporting the economic

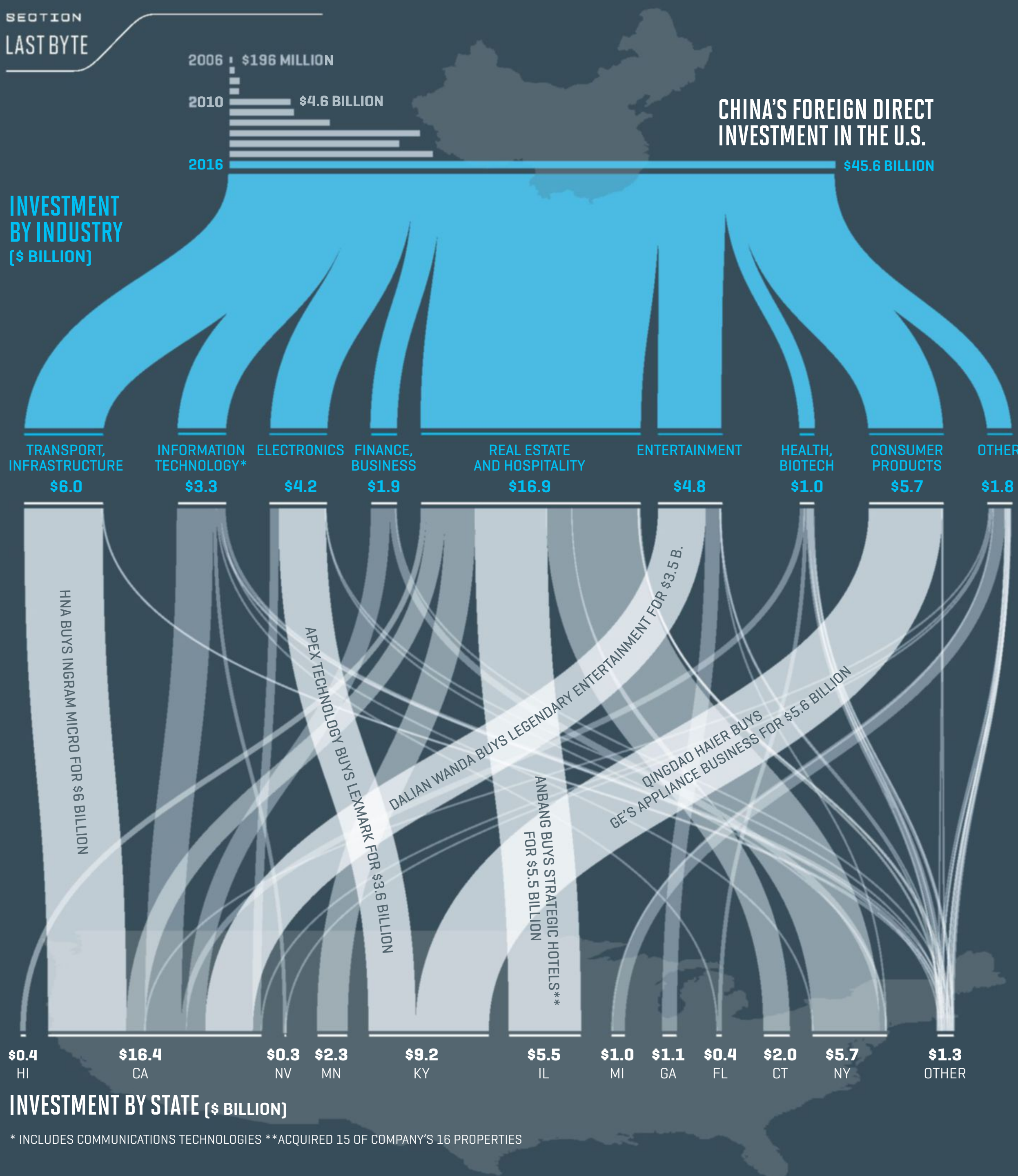
A CONTINUING TREND IN BUSINESS EDUCATION IS ONLINE LEARNING, COMPLETED EITHER ENTIRELY ONLINE OR AS PART OF HYBRID PROGRAMS.

community," says John Elliott, the business school's dean. "We believe in having a firm strategic intention of how we're trying to improve what we're offering students, and we hold ourselves accountable."

UConn offers a degree for mid-career executives called an Executive MBA. It's part of a growing niche in business education that includes programs for DBAs (Doctorates in Business Education) and Ph.D.s in business.

At Oklahoma State University's Spears School of Business, Executive Ph.D. candidates must have master's degrees, and they are typically at the C-suite level, often from *Fortune* 500 companies, with 20 to 25 years of experience. The degree, says Toby Joplin, director of Spears' Executive Doctorate Programs in Business Management, is designed to help them increase their company's success by using data-driven decisions.

"An MBA student is going to be focusing more on applying known best practices to either real-world situations or case studies," he says. "A Ph.D. is really a science degree. We do research at the theory level and create best practices for the future."



CHINA BUYS INTO THE U.S.

IT'S A DELICIOUS IRONY: Thanks to President Trump's tough talk on trade, U.S. relations with China are as tricky as they have been in years. Meanwhile, America has never looked so good to Chinese companies. In 2016, according to economic research firm Rhodium Group, China's foreign direct investment in the U.S. soared to $45.6 billion—triple the total from the year before. (The five biggest acquisitions are noted above.) And a strong pipeline of deals awaiting regulatory approval means the trend should continue. That is, unless politics gets in the way. —**BRIAN O'KEEFE**

SOURCE: RHODIUM GROUP

GRAPHIC BY **NICOLAS RAPP**

FORTUNE
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EY
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EY is proud to be named to the FORTUNE 100 Best Companies to Work For® list for the 19th consecutive year. Together our people go the distance.
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The better the question. The better the answer. The better the world works.
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