

# NATURE SAVES LIVES



We are working with community leaders in more than 75 countries to make sure coral reefs have a fighting chance to survive and thrive into the future.

Learn how you can help us heal nature by visiting nature.org.



Protecting nature. Preserving life."

# CONTENTS



JUNE 1, 2817

**FEATURES** 

# Riding Shotgun With Travis Kalanick

Y ADAM LASHINSKY

In this exclusive excerpt from Wild Ride: Inside Uber's Quest for World Domination, the author prowls the streets of San Francisco with the pugnacious CEO and learns how he feeds on adversity.

MEE NO

22

# Coach Thinks Outside the Bag

BY PHIL WAHBA

Three years ago, the luxury retailer watched its sales plummet as Americans lost interest in its iconic handbags. Today, it's in the midst of a ramarkable recovery. Here's how Coach is climb-

ing out of purse purgatory.

56

# 18 Stocks and Funds to Buy Now

BY JEN WIEGZNER

Politics is the elephant in the room in every conversation about the markets these days. But here you'll find the best investments for riding out any news cycle.

33

# General Mills Loses the Culture Wars

By JOHN KELI

The company's Yoplait yogurt brand has gone completely sour—just one of many problems facing the packaged food giant. Can a new CEO settle investors' stomachs?

42



# Where Does the Algorithm See You in 10 Years?

A DN THE COVER: TRAVIS KALANISK

BY JEFFERY SALTER

By JENNIFER ALSEVER

Artificial intelligence has come to hiring, and could change staffing and careers forever. Should we be cheering—or afraid?

RABE NE

50

# CONTENTS

DEPARTMENTS

## BRIEFING

5 ► Can China Save Hollywood?
The movie industry's obsession with
Chinese growth in the face of weak
U.S. attendance is changing American
cinema. By MICHAL LEV-RAM

8 > Investors Go Long on Slime A look at the business impact of 2017's hottest [and weirdest] plaything.

By JEN WIECZNER

## 9 - Macron Economics

Can France's new 39-year-old global-ist President banish the country's economic ennui? By GEOFFREY SMITH

# 10 > The Puzzle Page

Write your own corporate apology! Match the tycoon to the NBA team! Enter the Oval Office influence maze!

11 ► Rise of the Room-Service Robots hospitality tech comes into its own.

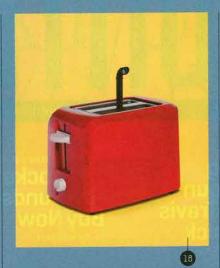
12 > Brainstorm Health 2017 Highlights from our second annual

By CLIFTON LEAF and DAVID B. AGUS, MD

# 14 . Executive Read

than paragraphs. Perfect for summer. BY ANNE VANDERMEY





# FOCUS

## TECH

# 15 > The iPhone Decade

One of the tech industry's biggest milestone. By AARON PRESSMAN

18 - When Your Stuff Spies on You problems. By JEFF JOHN ROBERTS

# FORUM

# 19 - We Changed the World! (Oops.)

Technology's most powerful companies are learning that making a big impact can come with adverse side effects.

By ERIN GRIFFITH



## 20 > The City on the Harbor

An expert concierge shows us why its own right. By ADAM ERACE

BACK PAGE

## LAST BYTE

64 ► Piling Up CO₂ Savings
The future of U.S. climate change policy may be uncertain, but Fortune 500 companies continue to embrace clean energy. Text by BRIAN O'KEEFE; graphic by NICOLAS RAPP





Fortune Asia [ISSN 0738-5587] is published monthly, with extra issues in March, June, September, and December, by Time Asia [Hong Kong] Limited. Fortune Asia may also publish occasional extra issues. Customer Service and Subscriptions: For 24/7 service, please use our website: fortune.com/customerserviceasia. You may also contact Customer Services Center at 852-3128-5688, or email to enquiries@timeasia.com or write to Time Asia [Hong Kong] Limited 37/15/04/ford House - Tables 1008-0689. Limited, 37/F Oxford House, Taikoo Piace, 979 King's Road, Quarry Bay, Hong Kong, Subscribers: If the postal authorities alert us that your magazine is undeliverable, we have no further obligation unless we receive a corrected address within two years. Mailing List: We make a portion of our mailing list available to reputable firms. If you would prefer that we not include your name, please contact Customer Services Center. Member, Audit Bureau of Circulations. © 2017 Time Asia (Hong Kong) Limited. All rights reserved. Fortune is protected through trademark registration in the U.S. and in the countries where Fortune magazine circulates. Fortune Asia is printed in Singapore. Singapore MCI [P] 061/11/2016. Malaysia KKON permit no. PPS1162/05/2013 [022950].



A STAR ALLIANCE MEMBER 💤

WIDEN YOUR TURKISH

# EXPLORE MORE

WITH THE AIRLINE THAT FLIES TO MORE COUNTRIES THAN ANY OTHER

# SOPA 2017 Awards for Editorial Excellence Celebrating Asia Pacific's Best Journalism for the 19th Year

# Chris Patten, former Governor of Hong Kong

The evening's eminent keynote speaker, Chris Patten will be speaking to the gathering by video from London. In an exclusive address just two weeks before the 20th anniversary of the Hong Kong handover, Mr. Patten will talk about his views on the future of Hong Kong and the current worldwide backlash against globalization.

Come join the media luminaries at our prestigious awards dinner, and find out who the winners are for the SOPA 2017 Awards for Editorial Excellence.

## Standard rate:

SOPA members - HK\$2,800 per ticket

Non-SOPA members - HK\$3,000 per ticket

Date: Thursday June 15, 2017

Time: Networking Cocktails at 6:00pm

Gala Dinner at 7:30pm

Venue: Ballroom N201

Hong Kong Convention and Exhibition Centre

Wanchai, Hong Kong

The SOPA Awards for Editorial Excellence were established in 1999 as a tribute to editorial excellence in both traditional and new media, and were designed to encourage editorial vitality throughout the region.



2017 SOPA Awards Administrator



Platinum Sponsor



Gold Sponsor



Newswire Partner

PR Partner

Printing Partner

MediaOutReach®

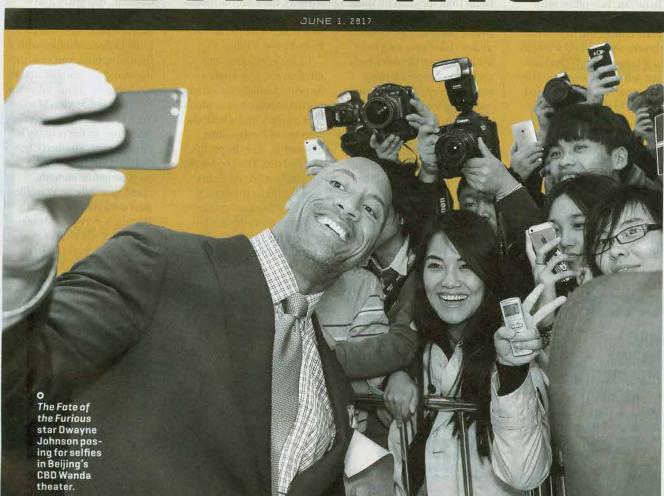




THE WORLD IN 18 PAGES

# BRIEFING





# Can China Save Hollywood?

The movie industry's obsession with Chinese growth is already changing American cinema. Studios hope the country will rescue it too.

BY MICHALLEV-RAM

ENTERTATNMENT

**SUMMER IS SUPPOSED** to be Hollywood's most glorious season,

a time for tentpole franchises to showcase A-list actors implausibly escaping from expensively produced explosions. But this year, even the slew of superhero flicks careering toward the big screen can't fight off Hollywood's most fearsome foe: stagnating theater attendance.

Over the past decade, the number of tickets sold annually in the U.S. and Canada has sunk by 80 million.

# BRIEFING

⊳ Meanwhile, per capita attendance fell 14% since 2007, to just under four tickets per person per year. To be fair, box-office sales ticked up 2% in 2016, to \$11.4 billion, but unless U.S. theater owners find a way to lure larger crowds (and not just sell more popcorn), they will soon face an existential crisis: Do you keep raising prices, even if it means the cinema becomes a niche experience? And if so, how long can that last? Those are the questions that keep studio execs up at night (presumably watching Netflix).

However, there is a silver lining to Hollywood's dilemma—China, Unlike their American counterparts, Chinese consumers are flocking to the theaters. And China is building them out faster than they can fill them with movies. The result is a rich opportunity for U.S.filmmakers who have long been aching to turn China's nearly 1.4 billion people on to its roster of recycled franchises.

Just how many theaters does China need to fill?

Last year alone, the country added more than 7,500 silver screens, and its national total surpassed the number in the U.S., which has stayed constant at about 40,000 since 2013. At some point in the near future—projections range from a few months

to two years—China will also overtake the U.S. as the largest generator of box-office revenue in the world. Already, the Chinese media and entertainment industry as a whole is worth an estimated \$180 billion.

China's audiences are attractive to U.S. studios; its protectionist caps on imported movies, not so much. The country limits both the number of foreign films allowed in, and the profits allowed out. The good news for Hollywood: As China looks to fill its theaters, it has upped its foreign movie cap from 34 to 38. And despite the heightened trade tensions following the elec-

tion of Donald Trump, that number is expected to rise even more this year.

U.S. studios have another obstacle, though: Chinese studios. Right now, mainland moviemakers spin out mostly absurdist comedies with limited appeal, and lack the big brand names that make a reliable hit (think Wonder Woman and Spider-Man). Yet the highest-grossing flick of all time in the country is homegrown. Stephen Chow's 2016 hit The Mermaid, a sci-fi romantic comedy, raked in nearly \$527 million. And conglomerate Dalian Wanda is currently developing one of the largest movieproduction facilities in the world in Qingdao.

That's left Hollywood scrambling to get a foothold before Chinese studios take off—and so far, it's working. The Fate of the Furious recently made \$388 million at China's box office, the most of any Hollywood film there to date. It earned just \$215 million stateside.

Therein lies the opportunity: "Smashing stuff up and being brave—those kinds of things tend to translate well," says Clayton Dube, an expert at the University of Southern California.

Given China's appetite for well-known action franchises, it's likely we'll see even more smash-'em-up sequels, prequels, remakes, and reboots coming out of Hollywood. That may not excite all U.S. audiences, but it will ease studios' fears about slowing growth—at least for now.

### CYPORTS

# WHAT MAKES A BLOCKBUSTER ...IN CHINA?

Chinese tastes are changing U.S. films as studios woo audiences abroad.

The Fate of the Furious became China's bestselling Hollywood movie ever in April. Here, a few keys to its success in the country. Expect more where this came from.

Action-packed Big stunts, simple plots, and beautiful actors helped F8 bridge the cultural divide.



Not subversive China has no rating system. Instead, censors cut out sex, violence, and overly political content.
Risqué movies get

a parental advisory, which F8 avoided.

Available in 3D In Asia, 78% of movie screens are 3D. It's only 39% in the U.S. CHINA'S MOVIE MAGIC: BY THE NUMBERS

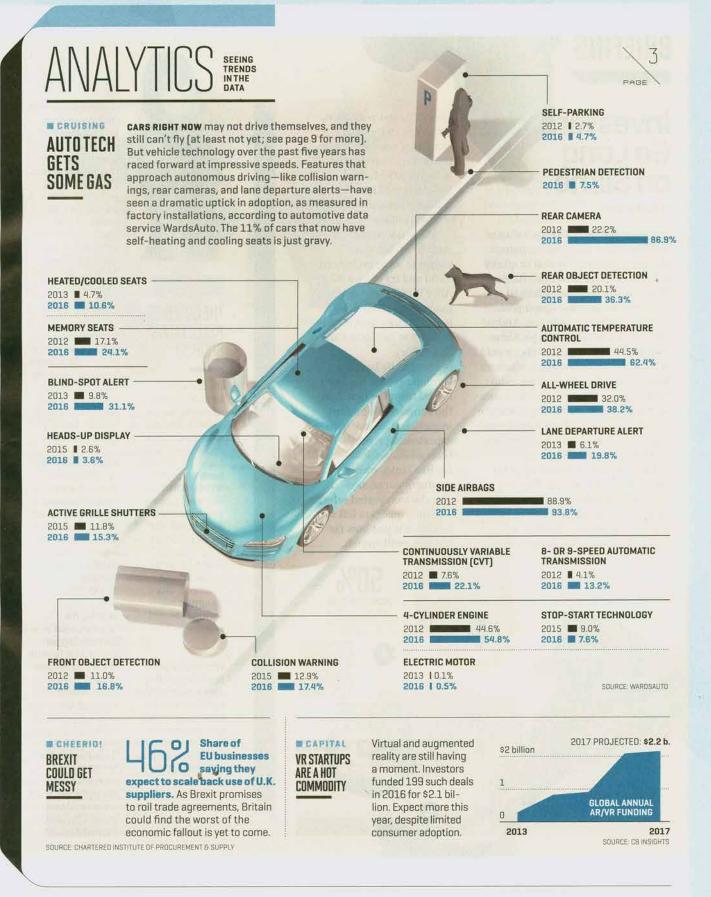
144%

Growth in China's box-office revenue since 2012. North American growth was just 6% in the same period.

40,917

Number of movie screens in China at the end of last year, more than double what it was in 2013, and surpassing the 40,759 in the U.S.

82% Share of box-office sales for The Fate of the Furious that came from outside the U.S.



BY JEN WIECZNER

PITY THE toy industry. This season's hottest plaything isn't a pretty doll or quirky gadget with a movie tie-in-it's slime. This year has seen more than 10 million YouTube and Instagram posts dedicated to homemade goo. And vet even Mattel, whose 1970s hit Slime (tagline: "It's gooey, drippy, oozy, cold 'n clammy!") is now a retro collector's item, today sells nothing that could help it cash in. Instead, the most common ingredients for making slime are mundane household products, including old-fashioned laundry detergent booster borax and Elmer's glue.

That needn't be a sticking point for investors, though. In May the CEO of Newell Brands (No. 434 on the Fortune 500), which makes Elmer's, mentioned slime on an earnings call-four times. Elmer's sales

grew 25% last year, then, according to Barclays estimates, another 50% in the first quarter of 2017. Newell CEO Michael Polk later told investors the new demand was "all related to slime."

"We're not proud," he said. "We'll hitch our wagon to some underlying trend and try to own it." After Elmer's sold out in many stores, Newell said it would more than double capacity at its North Carolina factory.

Meanwhile borax, a commodity that has been mined from the desert in the American West for more than 100 years, is experiencing a similar resurgence. A spokesman for Rio Tinto, which produces borax, says "it literally has created sales." The only question left for investors is just how far the craze will stretch.



# THE QUEEN OF **HEELS TALKS** SHOP(S)

Oh, to walk in Tamara Mellon's stilettos. The Jimmy Choo cofounder built a shoe empire, sold her stake, declared bankruptcy, and is back with a new company (sans physical stores]. In June, Mellon will speak at Fortune's Most Powerful Women International Summit in London. She caught up with Fortune's Michal Lev-Ram.

What's your strategy for rebuilding your business [now called Tamara Mel-Ion]? I relaunched last October as a direct-to-consumer brand. Now we just put new fashion pieces up every month. But we're also trying to build a community. The way brands

communicate with their customers is radically different today. Sports brands have done this incredibly well. This may sound weird, but what people got from church in the past, they now get from brands like SoulCycle. Everyone's in there with a purpose.

Can brick-andmortar retail survive? Yes, but department stores need to think about what they're giving their customers. They can't be just real estate holders with racks of clothes anymore.

Some e-tailers are opening physical stores, though. People still want physical experiences, but they want it in a new way. They want to be part of the tribe. The Nike concept stores are an example.

Besides the Internet, what's been the biggest disrupter in fashion in the past decade or two? The Internet. Now everyone sees fashion shows online, six months before the product is delivered, and it creates fatique. And so many companies, like Warby Parker, have introduced new models [bypassing the middleman].





# **Macron Economics**

Can France's new 39-year-old globalist President banish the country's economic ennui? BYGEOFFREY SMITH

POLITICS

AFTER NO LITTLE DRAMA, the centrist, pro-European, socially liberal

Emmanuel Macron has been elected President of France for the next five years. His triumph over isolationist populist Marine Le Pen promises to deliver a much-needed boost to the French economy. But the former Rothschild banker's agenda will face major hurdles, both at home and in the rest of Europe.

Macron's signature economic promise is to slash

France's nonwage costs, in particular by radically slimming its state pension systems. Macron thinks that could cut 500 euros (\$550) off the annual cost of employing someone. He has also vowed to give more freedom to companies negotiating wage deals with labor unions, to restore tax benefits on overtime, and to encourage social mobility by subsidizing the hiring of

people from France's most deprived areas. All this is aimed at cutting the country's 10% unemployment and narrowing the deficit in a budget that hasn't been balanced in 30 years.

If Macron can do that, he may have half a chance of persuading Germany, finally, to accept the need for a common treasury and budget for the eurozone. Analysts say this is the long-term fix that could save the single currency, but Angela Merkel and her forebears have rebuffed similar demands from Paris for decades, wary of bankrolling other countries' spending.

Before he can do anything, though, Macron must win enough support in France's June 18 legislative elections to push through reforms—which are bound to offend large parts of a sprawling public sector. If this election doesn't go as well as his last, he could become yet another ineffective French President.

FUTURISM

ALLYOUR FLYING CAR QUESTIONS, ANSWERED Do these really exist? Yes, More than a dozen start-ups are working on airborne passenger vehicles that can be loosely defined as flying cars.
Like who? China's Ehang plans

to introduce passenger drone flights in Dubai this summer. A startup backed by Larry Page aims to have a flying vehicle on sale by year-end [prototype shown at right]. Uber wants to

add them to its fleet.
Even Airbus has a
flying car concept.
Do they work?
Pretty close.
What's the catch?
Regulation and
infrastructure is
far from ready for a
personal flight craze.



# BRIEFING

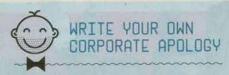
# h PAGE

# THE PUZZLE PAGE

# **BILLIONAIRES PLAY BALL**

IT'S NBA PLAYOFFS SEASON. Here, three owners who show that even 10-figure fortunes can't buy a title-winning team these days (and one that might]. Match the tycoon to the franchise:





The last few weeks have been

time for all of us. We (RDJECTIVE)

apologize for [ROUERB]

\_\_\_ customers with the [ADJECTIVE]

And we apologize especially to

\_\_, who was (ROYAL FAMILY SURNAME) [PAST PARTICIPLE] We pride ourselves on our\_ [NOUN]

percent (NUMBER GREATER THAN 188)

to avoid writ-[SERUND OR NOUN]

ing another apology letter in the future.

# YOUR HANDY **EARNINGS-CALL**

Analysts flattering the execs they cover has become a running joke on Wall Streeta faux pas almost as glaring as when the executives credit the "macro environment" for the "disappointing" quarter. Our take: You can't escape the clichés, so you might as well enjoy them (responsibly).

An analyst says either "Congrats," or 'Great quarter.'

ONE DRINK

The company blames poor results on either Donald Trump "political uncertainty" is also acceptable), or the weather ["heat

TWO DRINKS

wave" will do].

An analyst says, "Sorry, I was on mute."

THREE DRINKS

A company rep uses the words "iterate." "synergy," "disrupt," or 'game-changing."

# OVAL OFFICE INFI LIFNCE

## WHO HAS DONALD

Trump's ear? The latest reports indicate that Jared Kushner's star is rising, while Steve Bannon's has dimmed. Michael Flynn was booted early, while Steven Mnuchin will be an architect of Trump's tax plan-if he can get the President to stop tweeting about it. But Trump has long said he's his own best adviser, something would-be power players may find out the hard way.



**IVANKA TRUMP** SENIOR ADVISER TO THE PRESIDENT



JARED KUSHNER WHITE HOUSE INNOVATION DIRECTOR



STEVEN MNUCHIN SECRETARY OF THE TREASURY

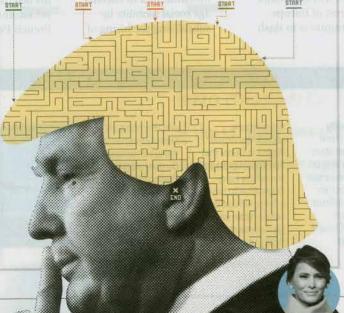


STEVE BANNON WHITE HOUSE CHIEF STRATEGIST



RETIRED

**MELANIA TRUMP** 









# The Rise of the Room-Service Robots

As the hotel industry faces headwinds, hospitality tech comes into its own, BY CHRIS MORRIS

THE SEEMINGLY unstoppable rise of tech-driven home-sharing behemoth Airbnb has put the hotel industry on high alert. To differentiate themselves in an increasingly crowded field, hoteliers are tweaking offerings with their own Silicon Valley wizardry. Here, a preview of your hotel stay in the not-too-distant future.

1. Get to your hotel room and touch your phone to the pad on the door to unlock it. Several chains, including Marriott, Starwood, and Hilton. already have select locations that let you use your phone for smartwatch) as a digital room key, cutting out key cards.

2. Say "Alexa, turn on the lights." The Wynn Las Vegas is installing Amazon Echos in all of its 4,748 rooms, enabling auests to control the lights, thermostat, and drapes via voice command.

3. Switch on the "Do Not Disturb"...app. Las Vegas's Aria

Resort & Casino gives quests a tablet that controls the curtains, climate, alarm, and the "Service Please" status.

4. Take a one-person spin class. Peloton's Internetenabled bicycles let anyone participate in one of more than 4,000 cycling classes. The bikes have been installed in more than 30 Westin fitness studios-and some quest rooms.

5. Get a glass of wine-but not from the minibar, Plum automated wine dispensers, now in several Bay Area hotels, can keep wine fresh for months.

6. Room service, Star Warsstyle. The Aloft Cupertino has a robot named Both that can deliver extra towels or toiletries. Meanwhile New York's Yotel has Yobot, which acts as a bellhop, storing luggage in locked bins.



# **AIRLINES' STOCK RALLY** SHOWS IT'S BETTER TO BE GOOD THAN NICE

IT STARTED OUT as a moral parable: After United Airlines had a man dragged from his seat on an overbooked flight, and the CEO's limp apology for "reaccommodating the passenger," investors reaccommodated the stock's value down \$1.4 billion in two days.

But the comeuppance was fleeting. Despite all the bad press for airlines this spring, the industry rallied in May. United's stock led the pack. hitting all-time highs.

What's going on? Low oil prices helped, and the Big Four airlines are reaping the rewards of years of consolidation. Also important: Fliers seem willing to swallow their moral outrage for cheap, easy flights. Legacy carriers' greatest challenge may not be ill-treated passengers, but competition from the ultra-low-cost carriers who treat them even worse. -ANNE VANDERMEY



# BRIEFING



# Fortune Brainstorm HEALTH



WELLNESS MATTERS. That was one of the definitive conclusions reached after an eye-opening two days of discussion with 230 of the world's leading health care thinkers, scientists, entrepreneurs, and investors. The second annual Brainstorm Health gathering in San Diego focused on the transformative technologies and ideas happening right now-and on the companies making them happen. At the heart of this changing mindset is a new focus on worker well-being, said business luminaries ranging from IBM Watson Health's Deborah DiSanzo to Levi Strauss & Co.'s Chip Bergh. And over the course of our meeting two more ideas kept rushing to center stage: One, there's a widespread sense of humility about what we still don't know about human health. And two, the tools of the digital health revolution, if used appropriately, can accelerate the search for those answers as never before. -BY CLIFTON LEAF AND DAVID B. AGUS, MD



# "MY HEART RATE PEAKED RIGHT BEFORE THE GAME, AND IT GRADUALLY WENT DOWN DURING THE GAME—AND THAT GAME WENT INTO OVERTIME."

- DARRELL STUCKEY JR., of the now-Los Angeles Chargers. The NFL safety is using Whoop's Internet-connected wristband to gauge how quickly his body recovers after stress. "Recovery drops dramatically if you have a couple of drinks before bed," he says.



# A CEO'S UNFLINCHING TALK ABOUT A SYSTEM'S FAILURES

**DOCTORS** told Aetna CEO Mark Bertolini (above) to give up hope after his son Eric was diagnosed at age 16 with a rare form of lymphoma. "The health system viewed him as a disease rather than my son," said Bertolini in a candid talk with Time Inc.'s Alan Murray, That is just one of the many failings in a U.S. system that considers health the mere "absence of disease" rather than the presence of wellness, he said. Though Aetna has recently announced it will withdraw from all ACA insurance exchanges in 2018, Bertolini said he didn't think Obamacare would be repealed. What we need to do instead, he told the gathering, "is admit that it needs to be fixed." And then fix it.







# "WE DON'T LISTEN TO **DUR BODIES."**

SAID JAIME "TABOO" GOMEZ, of the Black Eyed Peas. The musician ignored the pain he'd had in his abdomen and back for years, attributing it to a stage fall in 2006. A 2014 diagnosis of testicular cancer brought him to a personal reckoning-and a new crusade. He's now leading a call for prevention, early diagnosis, and better medical care for a group long ignored by the U.S. health care system: Native Americans.



# "YOU DON'T ALL PLAY

FORMER VICE PRESIDENT JOE BIDEN

ON A CLEAR BRISK NIGHT there was talk of cancer moonshots, of stratospheric drug prices, and of a political star's wrenching personal decision not to run for President. Former Vice President Joe Biden told Fortune Brainstorm Health cochair David Agus and a rapt audience of biopharma execs, investors, and other health care stakeholders that it was high time to cooperate and collaborate in the war on cancer—and that he would continue his efforts here. Quoting a line from JFK's moonshot speech, Biden made his own message clear: "We should be no longer ready to postpone."



# STOPPING THE NEXT GLOBAL PANDEMIC ... BEFORE IT HAPPENS

## "YOU CAN'T BOMB

Ebola or put up a wall to stop Ebola." Those were the words of physician Raj Panjabi, the CEO of Last Mile Health, who eloquently and forcefully laid out "the real consequences of not investing in health care for everyone, everywhere." Panjabi and fellow panelist Dr. Nahid Bhadelia

stood on the front lines of the 2014-16 Ebola epidemic. helping to contain its spread. Bhadelia, a leading infectious disease expert in Boston, said we need a change in culture when it comes to preventing outbreaks: We can't keep "chasing one pathogen after another."



-ADAM GAZZALEY, MD, PH.D., director of UCSF's Neuroscape translational neuroscience center

PAGE

# EXECUTIVE READ

# Summer Reads, but Light on Reading

Three witty titles with more pictures than paragraphs, perfect for the beach bag and carry-on.
BY ANNE VANDERMEY

1. Friction: Passion Brands in the Age of Disruption by Jeff Rosenblum and Jordan Berg This slick volume by digital ad agency execs uses elegant typefaces to dress up a serious critique of modern marketing: Most ads don't work, and brands must adapt.

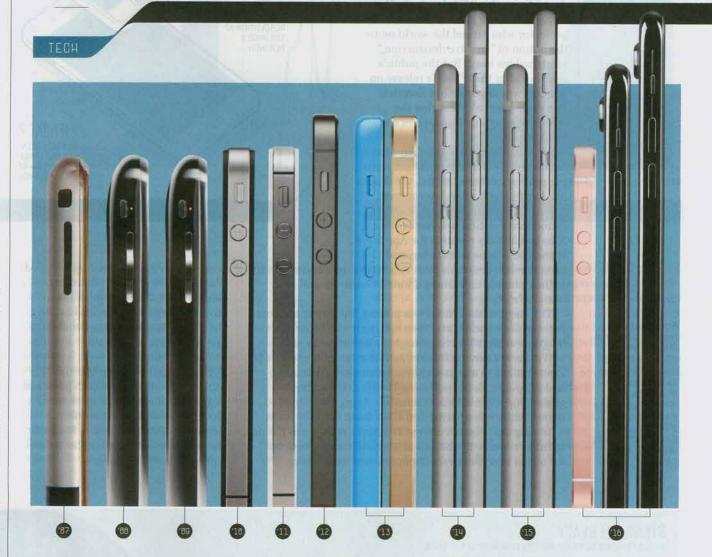
2. Oh, the Meetings You'll Go To! by Dr. Suits In this worthy update to the classic graduation gift, Oh, the Places You'll Go!, the anonymous "Dr. Suits" offers a biting but empathetic poem on entrylevel jobs today. It also rhymes "hero" with "in-box zero."

3. The Executive Coloring
Book by Marcie Hans, Dennis
Altman, and Martin A. Cohen
First published in 1961, this
is the original adult coloring
book. But Zen it is not. Like an
early [more stylish] "Dilbert,"
it pokes fun at executive life,
bidding readers, "Color my
underwear important."



1 8

PRACTICAL EXPERTISE



# THE IPHONE DECADE

One of the tech industry's biggest innovations celebrates its 10th anniversary. BY AARON PRESSMAN

**THE DESIGN FOR THE DEVICE** that would revolutionize mobile phones and, eventually, the culture at large, arose from hatred. When considering whether to create the iPhone, Apple CEO Steve Jobs found that people largely despised the phones that they had.

"Everybody has a cell phone, but I don't know one person who likes their cell phone," he once told John Lasseter, Pixar's chief creative officer.

To create a phone people would actually love, Jobs latched onto an important innovation: the touch screen. The display was the key to creating a computing chameleon: a device that could be a phone one minute, a camera the next, and a gaming pad the next.

The master showman unveiled his smartphone in January 2007 with one of the most brilliant sales pitches ever. "Today, we're introducing

FOCUS

by three revolutionary products," Jobs said with a bit of misdirection, as the iPhone would be all three: phone, iPod, and Internet device. Steve Ballmer, then Microsoft's CEO, laughed. Clayton Christensen, the Harvard business professor who turned the world on to the notion of "creative destruction," scratched his head. But the public's reaction after the iPhone's release on June 29 was anything but skeptical. Ten years later, it's clear that the critics were wrong. Consumers were right. Again.

Sales started briskly and then went into overdrive after Apple cut the starting price of its second model, the iPhone 3G, to \$199 with a wireless contract.

More important, one year in, Apple introduced a critical new feature that Jobs had initially resisted: the App Store. It enabled iPhone users to buy and

install mobile programs from third-party developers directly to their phones, unleashing a wave of creativity and new business models.

The magic of the iPhone was putting "the power of a computer in one's pocket" and then making it easy to use, says longtime analyst Toni Sacconaghi at Bernstein Research.

With help from the iPhone, mobile messaging grew from a nerdy niche to a cultural phenomenon with WhatsApp and Snapchat. Social networks Twitter and Facebook gained big new markets. Games like *Angry Birds* minted money while ride-sharing app Uber burst onto the scene.

During the iPhone's early years, Apple ate the cell phone industry's lunch. By the end of 2009, iPhones accounted for one of every seven smartphones sold worldwide,

IPHONE'S EVOLUTION
Since its debut, the iPhone has been significantly upgraded.

ORIGINAL IPHONE
3.5-INCH LCD SCREEN: 320-by-480-PIXEL RESOLUTION AT 163 PIXELS PER INCH

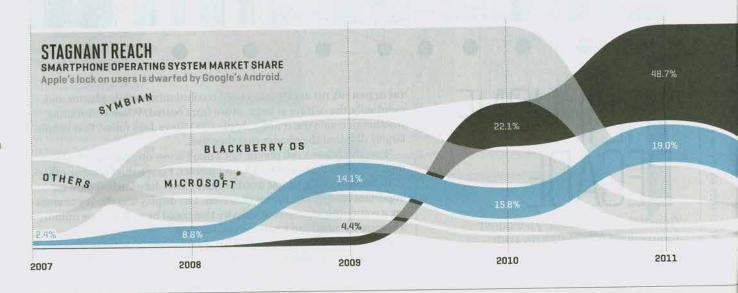
IPHONE 7
5.5-INCH LCD SCREEN: 1,920-by-1,080-PIXEL RESOLUTION AT 401 PIXELS PER INCH

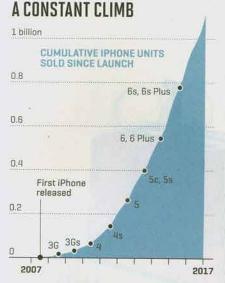
according to IDC. But as Apple lapped BlackBerry, Nokia, and Microsoft, Google started its own push into mobile phones that was inspired by the iPhone and introduced mobile operating system Android.

The gamble paid off.

Unlike Apple, Google courted multiple phone carriers with promises of greater influence and more money. Google also worked with multiple hardware makers including Samsung, leading to better Android phones and a greater variety of designs.

Previous page, from left: original iPhone; iPhone 3G; iPhone 3Gs; iPhone 4; iPhone 4s; iPhone 5; iPhone 5c and iPhone 5s; iPhone 6 and 6 Plus; iPhone 6s and 6s Plus; iPhone SE, iPhone 7, and 7 Plus.

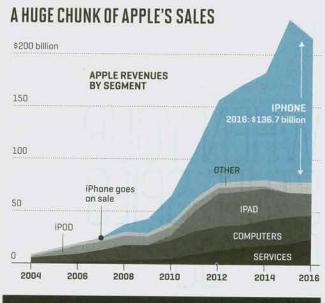




By 2010, more Android-based phones were being sold than those running the iPhone's iOS system. Spurring further gains for Android, Apple didn't quickly recognize the appeal of Samsung's large-screen phones. By last year, the Google-supplied software powered more than five out of six smartphones.

There were other hiccups for Apple, like "Antennagate" in 2010, when Jobs dismissed customer complaints about reception problems with the iPhone. But even with Android's suc-

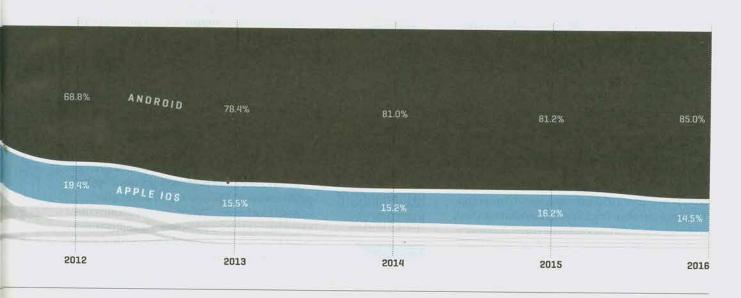




cess, iPhone sales kept climbing. Apple sold almost twice as many iPhones in 2010 than in the year prior, doubled sales again in 2011, and kept growing an average of 25% annually to a peak of nearly 232 million in 2015.

Still, more recently, the iPhone's growth has stalled. Apple sold 215 million phones in 2016, its first annual decline, after making only minor tweaks over the previous two years. Sales have also been held back by Apple's decision not to chase a crop of cheaper Chinese upstarts.

The rumor mill is already churning about the next possible iPhone, a 10th-anniversary edition with a bigger, brighter edge-to-edge screen; glass casing; and wireless charging. Maybe it will be enough to put Jobs' beloved phone back on top.

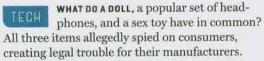


# O TOASTER AND PERISCOPE: ORIGINAL PHOTOS BY ISTOCK

# WHEN YOUR STUFF SPIES ON YOU

An increase in Internet-connected devices in homes is causing privacy problems.

BY JEFF JOHN ROBERTS



In the case of We-Vibe, which sells remote-control vibrators, the company agreed to pay \$3.75 million in March to settle a class-action suit alleging that it used its app to secretly collect information about how customers used its products. The audio company Bose, meanwhile, is being sued for surreptitiously compiling data—including users' music-listening histories—from headphones.

For consumers, such incidents can be unnerving. Almost any Internet-connected device—not just phones and computers—can collect data. It's one thing to know that Google is tracking your queries, but quite another to know that mundane personal possessions may be surveilling you too.

So what's driving the spate of spying? The development of ever-smaller microchips and wireless radios certainly makes it easy for companies to do. But as the margins on consumer electronics grow ever thinner, you can't blame companies for investigating new business models based on data, not just on devices.

All it takes is to persuade people to tether an object—sex toys included—to a smartphone app. That app can then track how the product is used, and relay the information to the manufacturer.

Privacy advocates see a troubling trend in all this. If companies keep this up, they could face



a backlash. In the case of Genesis Toys, which sold a doll and a robot that collected recordings of kids' voices, the company is not just facing U.S. government investigations. German regulators told parents to destroy the toys.

Genesis Toys did not respond to requests for

According to Jay Edelson, whose law firm has filed dozens of privacy class-action suits against connected device makers, judges have become more sympathetic to privacy claims. In his view, many of the privacy concerns arise because product engineers add data-collection features without telling their legal departments.

In most cases, companies can probably avoid trouble by disclosing to customers what they're doing. Usually, all that requires is updating their privacy policies, according to Jeffrey Neuburger, a privacy lawyer at Proskauer Rose.

But there's also the question of whether companies are justified in collecting the data in the first place. In the case of the Bose headphones, many users say the app provides no value. (Bose has denied wrongdoing and claims, as other firms do, that its data collection improves the use of its products.)

In any event, the controversies over "spying" products are unlikely to end anytime soon.

Says Neuburger: "We'll see companies use more innovative approaches when it comes to collecting user data—and I think we'll also see more litigation."

ONE COMPANY SOLD A DOLL THAT COLLECTED RECORDINGS OF KIDS' VOICES.





# WE CHANGED THE WORLD! (OOPS.)

Technology's most powerful companies are learning that making a big impact can come with adverse side effects. BY ERIN GRIFFITH

IF YOU PAY ATTENTION only to statistics, the technology industry is stronger than ever: Profits are surging, tech stocks are up 17.4% this year, and the industry's products are used by more people than ever to do more things than ever. Self-driving cars! Intelligent assistants! Pizzadelivery drones! These companies are truly changing the world!

But profits and pizza drones are only one piece of the tech industry's increasing power. With software invading every sector of the global economy, it's starting to feel like the handful of conglomerates who dominate tech control everything we do. The *New York Times* even dubbed the industry's most valuable players—Apple, Amazon, Alphabet, Facebook, and Microsoft, worth a combined \$2.87 trillion—the



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

"Frightful Five." The newspaper's point is that their dominance should scare competitors, regulators, incumbents, and most importantly us, the humans whose lives they power.

Silicon Valley's giants have always paid lip service to these fears, but they know the data tell another story. People will keep using their products, no matter the scandal. Negative headlines rarely stick around for very long. Why fret over this week's noise when every performance chart points up and to the right?

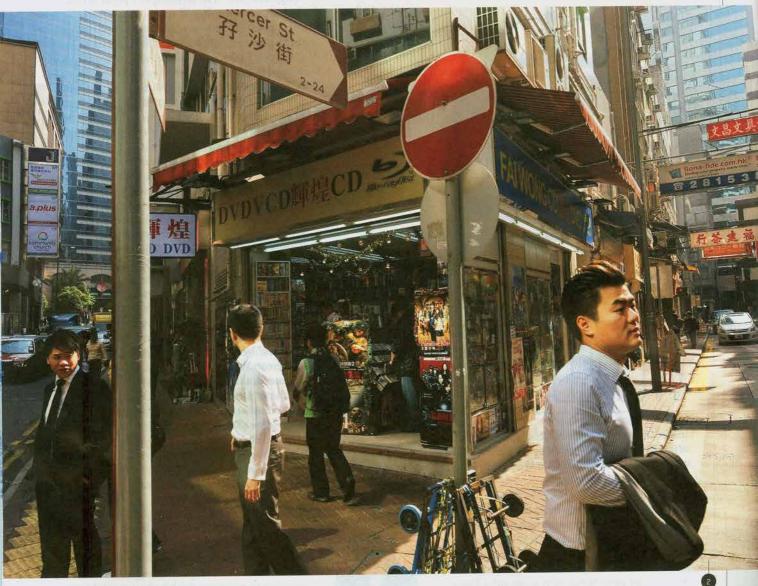
Consider: Amazon's sales continued to grow amid reports of brutal treatment of its warehouse workers. Google's search dominance has never wavered through various privacy outrages and accusations of monopolistic behavior. Airbnb's home-sharing network doubles every year despite legal roadblocks and tales of racism and home-trashing. Facebook steadily signs up users even as they protest new features or complain about its spreading of fake news. And Uber added customers amid this winter's #DeleteUber campaign and bonanza of unsettling scandals. (For more, read "Riding Shotgun With Travis Kalanick" by Adam Lashinsky, page 22.)

"Silicon Valley has learned to tune out the anecdotal feedback and just look at the numbers," Uber investor Chris Sacca said at a conference in May. It's an easy attitude for tech companies to take. Their products are so convenient, so cheap, so ubiquitous, and so addictive that we can't stop ourselves from using them. (The troves of personal data the companies collect from our behavior only make the products more useful and addictive.)

But, Sacca noted, a success plainly reflected on spreadsheets and charts only reinforces bad behavior. Sacca insists that Uber CEO Travis Kalanick, known for his aggressive, win-at-all-costs attitude, is finally softening his tone and listening to criticism. Such a change might not make a difference to Uber's finances or market share. But as powerful companies like Uber and the "Frightful Five" worm their way deeper into our lives, it's more important than ever they pay attention to this intangible, hard-to-measure stuff. You know—the questions, concerns, fears, and feedback from the human beings who use their products and services.

The world's largest technology companies indisputably have great power. Great responsibility? That's a work in progress.



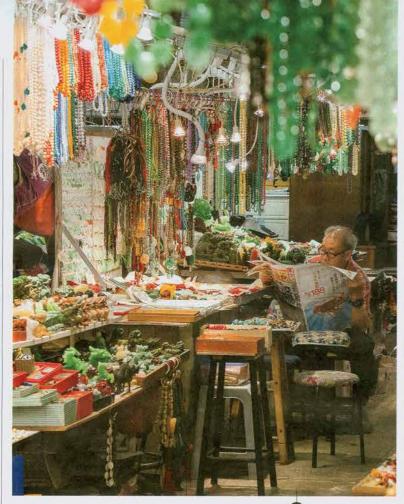


# THE CITY ON THE HARBOR

PURSUITS

BRILLIANT, BUSTLING HONG KONG is jammed with great food, museums, and scenery. But unpacking the riches of this former British colony is best left to a concierge like the InterContinental Hong Kong's Louis Baleros, an HK native who followed in the footsteps of his father, the first concierge at the hotel back when it was known as the Regent. Here's where Baleros sends his guests.

Let our expert concierge show you why Hong Kong is a vacation destination in its own right. BY ADAM ERACE





O
[1] Ajuicy pork and crab dumpling at Din Tai Fung.
[2] Hong Kong's Sheung Wan district at lunchtime.
[3] A salesman at the Kansu Street Jade Market. [4] The Aqua Luna in Victoria Harbor.

### Best new restaurant:

Szechuan restaurant
Qi-Nine Dragons opened
late last year on the top
floor of a new commercial
building and earned a recommendation from the
Michelin Guide. No meal is
complete here without the
braised Mandarin fish in
chili-oil soup.

## Emerging neighborhood:

Whenever I'm on Hong Kong Island, I always make time to walk down to Po Hing Fong and its surrounding area in Sheung Wan district to explore the tiny shops and businesses showcasing art, fashion, and design and the charming small cafés created by young entrepreneurs.

Cocktail spot: Located on the 25th floor of the Prince's Building, Sevva is a stylish restaurant and lounge whose rooftop bar has views of some of Hong Kong's most iconic skyscrapers. The clientele here is usually an eclectic blend of the hip and trendy and young banker types. A great place to people watch.

Dumplings: When locals talk about dumplings, they talk about Din Tai Fung, a restaurant originating in Taiwan that specializes in xiao long bao [steamed pork soup dumplings]. This res-

taurant does not accept reservations, and there is always a queue outside the entrance.

Under-the-radar museum: I personally like the Hong Kong Heritage Museum in the New Territories. The museum's galleries feature collections ranging from Shang Dynasty bronze-work to Cantonese opera costumes to manuscripts from influential martial arts novelist Jin Yong. It reminds me of what Hong Kong used to be when I was growing up.

Shopping spree: For a local market experience, check out the Jade Market, which is chockfull of stalls selling reasonably priced jade and semiprecious stone jewelry, knickknacks, pearls, and Chinese-inspired jewelry.

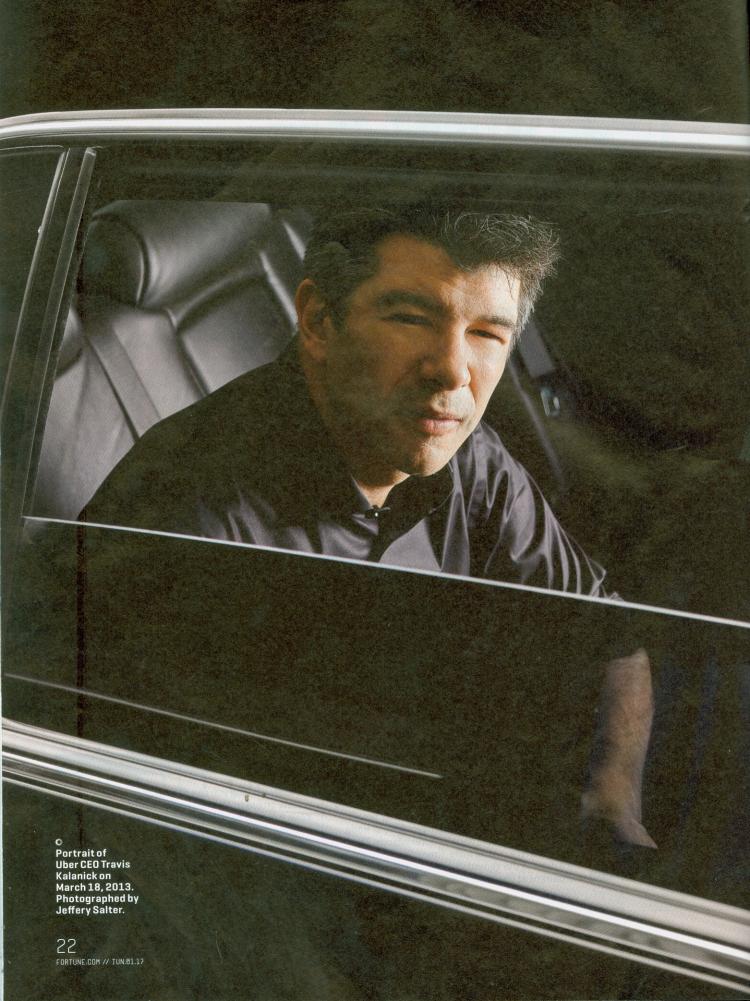
On the harbor: The Aqua Luna is an authentic Chinese junk boat offering short cruises around Victoria Harbor. I recommend one of the evening cocktail cruises during the "Symphony of Lights," a nightly spectacular.

Locals' secret: For an enjoyable trip outside the city, follow the locals to the Sai Kung waterfront seafood market for a casual fresh-seafood meal.



We asked Baleros to plan us a special, singular day in Hong Korig ... Explore Hong Kong by air, land, and sea in one day. Start by chartering a helicopter for a 45-minute sightseeing trip for the best views of Hong Kong Island, Kowloon, and the outer islands. Then hire our hotel's classic Rolls-Royce Phantom VI for a drive to the Verandah, a classic colonial-style restaurant at the Repulse Bay Complex, for lunch. In

the early evening you can charter the Aquo Luna for a private cruise to Aberdeen on the south side of Hong Kong Island or to Lamma Island for a fresh Chinese seafood dinner. Complete your day with after-dinner drinks at the InterContinental Hong Kong's Lobby Lounge, which offers the most magnificent panoramic views of Victoria Harbor and the dazzling Hong Kong Island skyline.



WITH

# TRAVIS KALANICK

IN THIS EXCLUSIVE EXCERPT FROM ADAM LASHINSKY'S NEW BOOK, WILD RIDE: INSIDE UBER'S QUEST FOR WORLD DOMINATION, THE AUTHOR PROWLS THE STREETS OF SAN FRANCISCO WITH THE STARTUP'S PUGNACIOUS CEO AND LEARNS HOW HE FEEDS ON ADVERSITY.

INTRO

LOVE HIM for his audacious ambition or hate him for his tone-deaf ruthlessness, Travis Kalanick is a headline-grabbing corporate villain for the ages. Uber, the privately held company he runs from his base in San Francisco, has

become a global phenomenon in the mere six years since it first began connecting ride-seeking urbanites with drivers via a simple smartphone app. Now operating in 76 countries, Uber booked \$20 billion worth of rides worldwide in 2016 and brought in \$6.5 billion in revenue. As its business has boomed, the startup's investors have continued to bet big on Kalanick's creation. To date the company has raised \$17 billion in debt and venture capital, and has been accorded a gargantuan market value of \$69 billion. At the same time, Kalanick himself has become infamous—seen by many as a brash, win-at-all-costs entrepreneur who'll flout any rule to succeed, as well as a bro-in-chief enabler presiding over a sexist corporate culture.

A new book by Fortune executive editor ADAM LASHINSKY, Wild Ride: Inside Uber's Quest for World Domination, recounts the company's stunning rise—and its headlong plunge into controversy. Lashinsky's quest to tell the Uber story got off to a bumpy start: Kalanick at first threatened to torpedo his project before it started by hiring a competing author to write an authorized account. Over time, Kalanick relented and agreed to cooperate, and Lashinsky conducted hours of interviews with Kalanick and other Uber executives. In the following excerpt, Lashinsky walks the streets of San Francisco with Kalanick as the CEO confronts a nagging concern: Does the public's perception of him match reality? Is he really an asshole?

IT IS 7:30 P.M. on a sunny summer evening when I arrive at Uber's San Francisco headquarters for an extended interview with CEO Trawis Kalanick. I'm a bit surprised to see so few people in the office, given Uber's reputation for long hours. It's mid-July, so perhaps the young staff is out enjoying itself. But it is also possible the company's workforce is mellowing—fatigued, by this point in 2016, from more than five years

of galloping at breakneck speed.

Kalanick himself sets the pace. He's just days away from his 40th birthday and still very much leading the young entrepreneur's caffeine-fueled lifestyle. Over the years he has often had a steady girlfriend, but has remained resolutely unmarried. Multiple friends describe Kalanick as something of a homebody when not working, yet far more committed to Uber than to any other relationship.

A few minutes past the appointed hour, Kalanick arrives at his desk, where I'm waiting. He has a private nook at the far end of one floor, where he keeps some clothes as well as a diorama of Uber's new headquarters under construction in the Mission Bay section of town. (Scheduled to open in 2019, Uber's new HQ will be across the street from where the Golden State Warriors basketball team is building a new arena.) But to the extent that Kalanick sits, which isn't much, it is at an open-plan desk at the edge of the company's fourth-floor main offices. There's nothing fancy or "corner office" about it.

After a year of researching Kalanick, his past companies, and Uber, I know enough to be



flexible: He likes to play it loose, to at least affect an air of spontaneity. We haven't discussed our agenda ahead of time other than that we'll continue the conversation about his career that we began a month before in China. He tells me he has a few things he wants to show me before we start talking—that is, if I'm willing to accept an unconventional suggestion.

"Okay, you've got two choices," he announces.
"We can go in that room," he says, pointing to
a nearby conference room, one of many at Uber
used for private meetings, "and I'm going to fucking pace back and forth the entire time. Or we can
go for a walk."

Understanding my true choice to be between "letting Travis be Travis" on the one hand and trying to pry information out of a penned-in subject on the other, I opt for the walk.

Uber's story isn't strictly synonymous with Kalanick's—the ride-hailing startup wasn't initially his idea—but he is indisputably its central character. Kalanick supplied the critical insight that transformed someone else's startup idea from merely interesting to undeniably groundbreaking, Kalanick speaking at the Baidu
World Congress
in Beijing in 2015.
Last summer the
Uber CEO shocked
many observers
by admitting
defeat in China.

by hitting on the idea of enabling freelancers rather than hiring drivers and buying cars. And he has been Uber's iron-fisted, omnipresent chief executive from the time it first gained traction and began expanding beyond San Francisco. As a result, Uber has become as identified with Kalanick as Microsoft, Apple, and Facebook are with Bill Gates, Steve Jobs, and Mark Zuckerberg, respectively.

Kalanick's timing with Uber was impeccable. The company perfectly exemplifies the attributes of the information-technology industry's next wave. It is emphatically a mobile-first business; if there had been no iPhone, there would have been no Uber. And it expanded globally almost from its beginning, far earlier than would have been possible in an era when packaged software and clunky computers were the norm. Uber is also a leader of the so-called gig economy, cleverly marrying its technology with other people's assets (their cars) as well as their labor, paying them independent-contractor fees but not costlier employee benefits.

Today Uber employs more than 12,000 people full-time, about half in the Bay Area. Because we've grabbed our jackets—even clear July nights in San Francisco can be brisk—I assume a walk means we'll leave the building. And we will. But first Kalanick explains that he wants to give me a tour of Uber's offices. Like other hands-on CEOs before him, Kalanick views his company's offices not only as a reflection of the company's values and aspirations, but also an extension of his own personality.

Jobs was the same way. Six months before his death he sat down next to me on a couch in his Palo Alto living room and proudly showed me a bound book of architectural drawings for the new Apple corporate campus he wouldn't live to see. Months later he personally worked with an arborist to pick the apricot trees for the project.

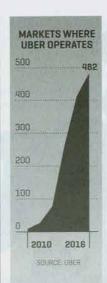
"You know when, like, a city is made from scratch?" says Kalanick. "You've got clean lines everywhere. This is like a manufactured city. So this is 'clean lines.' We have five brand pillars: grounded, populist, inspiring, highly evolved, and elevated. That's the personality of Uber."

We're standing near his desk, looking out over the nerve center of Uber's offices, the row after row of adjoining desks a visitor sees after first passing through security. As Kalanick repeats these brand "pillars"—grounded, populist, inspiring, highly evolved, and elevated—I nod my head in acknowledgment. But I never completely understand what they are really about. It's all a bit squishy to me, no matter how earnestly he explains them.

By "grounded" he generally means practical. Uber is the ultimate in practicality: It uses technology to move people from one place to another. Yet the concept takes on new meaning in the words spoken by the son of a public-works engineer. "Grounded is like tonality," says Kalanick. "It's functional straight lines, the whole thing. All of the conference rooms are named for cities. They're in alphabetical order. It's just very practical."

I had read of Kalanick's willingness to devote untold hours to superficial minutiae. Yet I hadn't personally witnessed his willingness to dive into seemingly arcane and ethereal aspects of such a demanding business.

As an example of Uber's "elevated" nature, Kalanick points to the acoustically pure ceilings in a conference room. A quiet freak—"I don't like sound. I don't do well with lots of noise"—



he proudly identifies the building material, K-13, that pulls off the effect. "When you have 800 people on this floor, the acoustic treatment makes it calm. So I can talk softly," he says, lowering his voice to an almost awkwardly gentle murmur, "and you can hear me."

Nearby is a corridor between the desks and an interior wall. Kalanick invites me to look down at the concrete floor, where an intricate pattern is etched with a series of intersecting lines. "Right here is the San Francisco grid," he says. "I call it the path." It is here that he paces back and forth throughout the workday, often on his cell phone. "In the daytime you'll see me here," he says. "I'll do 45 miles a week."

The tour proceeds around the fourth floor.

# WHAT COULD TAKE DOWN

UBER?

NOT LONG AGO THE
RIDE-HAILING GIANT APPEARED
IMPERVIOUS TO CRITICISM
OR OPPOSITION. NOW IT'S
BESIEGED BY MULTIPLE SCANDALS.
A QUICK GUIDE TO
ITS BIGGEST THREATS.

Kalanick shows me "New York City," the conference room where Uber negotiated the deal in which it raised \$1.2 billion, just before the company moved into the Market Street offices. "The first billiondollar deal that blew people's minds," he says proudly.

We take an elevator to the 11th floor—one of a handful Uber has in the building—where Kalanick has created an austere setting, a place to mimic the entrepreneurial environment, with exposed drywall and smaller-than-usual desks.

"When you're an entrepreneur—at least the 99% of entrepreneurs that are not Mark Zuckerberg—you have hard times," he says. "So this right here is what I call the cave, because when you're going through hard times you're in the dark, you're literally in some dark place. It's a metaphor."

Down on the fifth floor are areas with conference rooms named after science-fiction books. Kalanick knows the sci-fi canon the way a Civil War buff can rattle off important battles. One section is named for Isaac Asimov's Foundation series, another for The Martian, a third for Ender's Game. He brands the sci-fi theme "highly evolved," by which he means the future. Uber is a company obsessed with the future. Elsewhere there's a central area meant to evoke an Italian piazza. The hallways leading to it are confusing, by design. In Kalanick's worldview, disorientation is good. "So if you are a resident you know where everything is," he says. This is his version of populism. "If you are a guest, you're lost. So you can tell who's a resident and who's a guest."

BER HAS ALWAYS been controversial.
Combine a business plan based on upending an entrenched industry with a CEO as aggressive as Travis Kalanick, and conflict is a given.

The sheer volume and severity of the company's woes in the first few months of 2017, however, have altered the tenor of the Uber tale entirely. For the first time, real existential questions began popping up as roadblocks along its narrative journey: Could Uber's wild ride grind to a halt just as rapidly as it revved up in the first place? Could the company survive without its enigmatic lightning rod of a leader? Can it survive with him?

Once a juggernaut that seemed impervious to criticism, bad press, and political opposition, suddenly Uber appears vulnerable. Indeed, it's difficult to find anything that has gone right for the company. At every turn and on multiple fronts, Uber seems to be losing battles, whether in court, in the public's perception, over the loyalty of riders and drivers, even among its own rapidly departing executive team. What's worse,

Uber's woes have played out in plain view despite the fact that it's a privately held company supposedly free from the embarrassing need to disclose its activities.

Already this year the startup has lost a president and embarked on a public quest for a new one. [Rumored names to be Travis Kalanick's deputy: AOL CEO Tim Armstrong; Tom Staggs, formerly Bob Iger's No. 2 at Disney; and Nikesh Arora, the former Google and SoftBank executive.] The Justice Department is investigating Uber's "Greyball" program to deceive taxi regulators. Uber denies any wrongdoing.

A fraud lawsuit recently brought against Uber by Waymo, the Alphabet (previously Google) self-driving car unit, got worse in May when a federal judge referred the case to the Justice Department for review and possible criminal charges. Waymo alleges that Anthony Levandowski, a former Google engineer, stole its technology and that Uber is now using it. Uber denies the allegation. Not surprisingly, Uber's competition has become emboldened. In the midst of Uber's woes, U.S. ride-hailing second banana Lyft

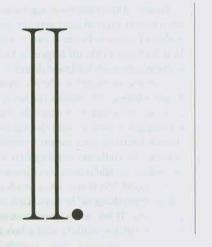
raised money from KKR and joined up with Waymo to deploy self-driving cars.

Uber is quite obviously in a precarious position. It has a global brand and legions of habitual customers. But both the company and Kalanick are suffering near-daily hits to their reputation. Here's a breakdown of Uber's biggest challenges:

# BRAIN DRAIN

Jeff Jones, Uber's short-tenured president of ride sharing who arrived from Target and exited mere months later, isn't the only top Uber executive to leave this year. Amit Singh, a star technologist from Google; Ed Baker, the "growth" guru from Facebook; and Rachel Whetstone, another ex-Googler, who handled communications and policy, were among the most prominent departures.

Hiring a No. 2 to Kalanick—who acknowledged the need after an embarrassing video surfaced of him berating an Uber driver—is the most pressing position to fill. It's also the most difficult, predicated as it is on the candidate having meaningful D



WE FINALLY LEAVE the building by slipping past Kalanick's desk to his secret exit and a staircase that leads directly out onto a street around the corner from the entrance to Uber's office. The plan, he tells me, is to walk down Market Street, the main thoroughfare that cuts through the center of downtown San Francisco, to the Embarcadero along the waterfront. From there we'll head to the touristy Fisherman's Wharf area and then toward the Golden Gate Bridge. Despite the brilliant sunset, the temperature is falling.

Kalanick, forever an Angeleno, can't bear it.
"This is the most upsetting thing for somebody
from Los Angeles," he says. "That's why I sometimes do weekends in L.A. Just to be at the beach."

Kalanick is in a reflective mood, and as we

⊳⊳ influence over a CEO who has shown little interest in sharing power.

# POLITICAL PROBLEMS

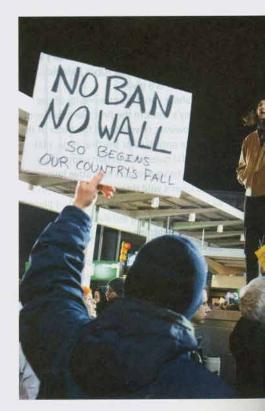
Uber rose to prominence by astutely marshaling the public against its own elected officials and regulators, who sometimes stood in the way of the easy-to-use new service. The political winds have since turned against the company. In the span of a week beginning shortly after Donald Trump's inauguration, Uber suffered mass defections for appearing to thwart a taxi boycott at John F. Kennedy Airport that protested Trump's controversial travel ban. Then Kalanick, who had agreed to serve on a Trump economic advisory council, dropped off before the first meeting-but still incurred backlash for engaging with the new administration.

# LEGAL JEOPARDY

Uber had hoped a federal judge would send the litigation by Waymo to arbitration. He did nothing of the sort, instead ordering a jury trial. He also banned Anthony Levandowski, the ex-Google engineer at the center of the dispute, from working on Uber's self-driving project. At least Uber gets to continue pursuing the technology while the litigation continues—contrary to Waymo's request. Elsewhere, published reports say the feds are investigating Uber's scheme to deny rides to regulators by obscuring the availability of cars; the company says it originally used the technology to protect drivers from phony riders.

# BRO CULTURE BACKLASH

There were rumblings about sexism at Uber before 2017. Many were repulsed by objectionable comments attributed to Kalanick over the years as well as the "brogrammer" milieu that nurtured him. A February blog post by an ex-Uber engineer tipped the scales of outside opinion decisively against Kalanick & Co. by alleging rampant gender discrimination in Uber's ranks. Now the company is bracing for an independent report on its culture it commissioned from former U.S. Attorney General Eric Holder. Results are expected imminently. —A.L.



walk he riffs on all manner of things. I remark, for example, on how little I've heard of late about Square, the payments company headed by Twitter founder Jack Dorsey, whose offices, for now, are in the same building as Uber. Although Uber is private and Square is publicly traded, Square has become decidedly low profile. Muses Kalanick: "We don't really have that luxury."

We begin talking about Kalanick's entrepreneurial history, including his desperate hunt for funding in the early 2000s at his peer-to-peer file-sharing startup, Red Swoosh. By the time we hit the Embarcadero, the curvilinear street that runs along the waterfront between the Bay Bridge and the Golden Gate Bridge, dusk has set in. I wonder aloud if he'll be recognized during

UBER EMPLOYEES

APPROX. 12,000

10,000

5,000

2014 2018

SOURCE UBER

RISE UNITABLE TO INVERSE.

A rally at JFK airport in late January against President Trump's travel ban. Taxis went on strike during the protest, but Uber kept offering rides—drawing the ire of protesters and spawning the #DeleteUber hashtag.

our walk. Not likely, he says, so long as we're in conversation and outdoors.

Out past Fisherman's Wharf, we step into an In-N-Out Burger, the iconic SoCal fast-food chain and a Kalanick favorite. By now we're discussing driverless cars and Kalanick suggests big moves are ahead that he can't yet discuss. He lets on that this six-mile walk, always including the stop at In-N-Out Burger, has become a summer-evening routine and that he typically walks it with one person he won't identify. I later learn his walking partner is Anthony Levandowski, the ex-Google autonomous vehicles engineer who went on to found Otto, a self-driving truck company. Uber will purchase Otto for \$680 million just a few weeks after our walk, and Kalanick tells me he used his time with Levandowski to absorb the technology and business plan vision for autonomous vehicles. (Uber and Alphabet are now embroiled in a lawsuit. See box on "What Could Take Down Uber?")

Having discussed Kalanick's entrepreneurial days, I want to know how he views the bigger, more established company Uber has become. His answers betray a reluctance to think of the company that way. He doesn't know everyone at the company anymore, but he still conducts hourslong interviews with top prospects. Kalanick explains that he likes to simulate what it would be like to work with someone before hiring them.

I ask if he likes running a big company. "The way I do it, it doesn't feel big," he says, falling back on a favorite trope: that he approaches his day as a series of problems to be solved. He obviously thinks of himself as troubleshooter-in-chief as much as a CEO.

Bigness clearly is scary. "I would say you constantly want to make your company feel small," he says. "You need to create mechanisms and cultural values so that you feel as small as possible. That's how you stay innovative and fast. But how you do that at different sizes is different. Like when you're super small, you go fast by just tribal knowledge. But if you did tribal knowledge when you're super big it would be chaotic and you'd actually go really slow. So you have to constantly find that line between order and chaos."

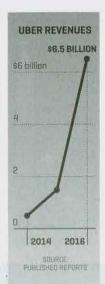
How, I wonder, does he plan to manage the transition out of the pure startup stage, now that the company is no longer composed of a bunch of young, single people with nothing in their lives but work? "I call it the red line," he says. "In a car, you can go fast. But you have a red line. And everybody has their own personal red lines. You want to push into that red line and see what that engine's made of. You might find you've got more under the hood than you thought. But you can't sit over the red line for too long. And everybody's got their own personal red line."

He points out that already there are many "Uber babies" and that parents tend to be more efficient than childless people with fewer constraints on their time. There are limits, though, to Kalanick's aspirations for work/life balance for his employees. "Look, if somebody's producing more, they're going to rise faster. That just is. There's no way around that."

AFTER MORE than three hours of walking, the night has turned cold and dark—and the conversation turns deeply personal. We discuss the narrative arc of how Uber has progressed from media darling to media villain. Kalanick was an almost willing accomplice in this metamorphosis, often managing to stoke the fire by playing the villain himself. He refers to these actions as his "little moments of arrogance where I say something provocative."

I ask if he cares what people think. "Yeah," he says, acknowledging some regrets. "It's not good for Uber. It's not good for me. It's not good for the people that I'm talking to. It's bad for everybody."

Part of his problem is that Kalanick seemingly isn't able to hide his defensiveness or his annoyance. He ascribes his moments of pique



to "fierce truth seeking." Someone willing to say exactly what he thinks, empathy be damned, will be judged harshly. He's not alone. It's a trait that has been repeatedly ascribed to Steve Jobs and Jeff Bezos, as well as to Kalanick's contemporary, Elon Musk. Kalanick is aware of this, referring to the "meme that founder-CEOs have to be assholes to be successful." He rejects that notion, but he's obviously just short of obsessed by it.

"I think there's this question out there," he says, shifting away from general memes to himself. "'Is he an asshole?' Since you've spent time with me, one of the big questions you're going to get is, 'Is he an asshole?'"

Engineer that he is, Kalanick wants to believe there is a scientific answer to the question. I suggest the answer is and always will be in the realm of opinion, not fact. He rejects this. "Understanding whether it's real or not, like do I trigger something in certain people that's related to something that I didn't do? Or am I an asshole? I'd love to know." He continues: "I don't think I'm an asshole. I'm pretty sure I'm not."

But I want to know if he cares one way or the other what people think. "What you're hearing me say is that if you are a truth seeker, you just want the truth. And if you believe that something is not the truth, then you want to keep seeking for truth. That's just how I'm wired."

Kalanick is unlikely to ever hear the version of the truth he craves. Weeks after our walk, *New York* magazine publishes an interview with Bradley Tusk, the political consultant who has worked for Uber on multiple regulatory fights. In discussing his own willingness to take "a few hits" for the right reasons, Tusk compares himself to Kalanick. "He understands to achieve really big things, you're going to piss a lot of people off," Tusk says. Then the writer asks Tusk if Kalanick is an asshole and describes his reaction: "He hesitates. 'Are we off the record?' I tell him we are not. 'No, he is not an asshole.'"

The "asshole" question was answered for good in the eyes of many early in 2017 when a video of Kalanick berating a driver went viral. Kalanick suggested publicly the incident showed his need to "grow up." But he made this statement having recently entered his fifth decade. Youthfulness alone can no longer explain his behavior.

Kalanick, who at this point in our walk is cold

and tired, offers to continue to the Golden Gate Bridge, likely another half-hour down the trail, or to call a car and head back to the Uber offices. I'm tired and cold too, but I ask him to choose. "I think we're getting a car," he says.

He pulls out his smartphone and summons an Uber. It takes the driver just a few minutes of listening to our discussion to realize that the "Travis" he has picked up—all Uber drivers have the first name of their paying passenger—is the

company's CEO.

DRIVER: Are you Travis?

KALANICK: Yeah. How you doing, man?

DRIVER: I never met you. KALANICK: Yeah, yeah.

DRIVER: How you doing, man? KALANICK: I'm good. I'm good.

DRIVER: I can't believe it.

KALANICK: How'd you connect the dots?

DRIVER: I was looking in the rearview mirror a little bit. And you looked so familiar. Damn, I'm with the CEO.

KALANICK: It's good to meet you, man.

DRIVER: Thanks, man.

KALANICK: How long you been doing the Uber thing?

DRIVER: A year, about a year and two months.

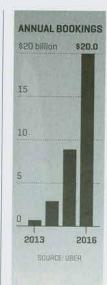
KALANICK: What were you doing before?
DRIVER: I was doing it part-time because I live in San Francisco, so I need more money.

KALANICK: For sure.

DRIVER: And then I got laid off, so I'm doing it full-time now.

The driver explains that he'd recently been laid off after 16 years at AT&T, where he worked in tech support. Kalanick asks if he is "pumped" about being able to control his time now as an Uber driver, and the driver says he likes the flexibility, though the money could be better. When Kalanick says that Uber has lots of ways for drivers "to make an extra buck," the tide turns. "Well, your tech support really sucks," the driver says. "That's true, I'm working on it," says Kalanick, asking for a few months to fix what's broken.

The driver also complains that he's not getting emails and text messages informing him of guaranteed hours, an incentive program that



is a staple for drivers trying to make a living on Uber. He then gives the CEO a lesson on how drivers abuse Uber's rules. For example, many drivers screen rides to avoid undesirable destinations, like far-out suburbs.

By the time we get out of the car, at the same side entrance where we exited the Uber building hours earlier, it's nearly 11 p.m. Kalanick promises to follow up with the driver's concerns. (At 11:07 p.m. he forwards me an internal response from a "senior community operations manager" in Chicago promising to look into them. I ask later if he would have been as responsive if I hadn't been in the car. "You know how many emails and texts I send from cars, from drivers giving me feedback?" he asks. "Uber product managers are like, 'Oh man, here we go.'")



LAST AUGUST, Kalanick stunned many Uber watchers by admitting defeat in what he had touted as the company's most important future market: He sold Uber China to Chinese rival Didi. It was perhaps the most painful failure of his career. But even here the full story is more nuanced. Uber was losing a billion dollars a year in China. And by selling to Didi—which made his company Didi's largest shareholder and brought Didi onto Uber's board—Kalanick in one fell swoop also achieved one of his greatest triumphs.

All of a sudden he had parlayed a failing \$2 billion investment into a stake worth \$6 billion in a rising Chinese monopoly. And by eliminating a no-end-in-sight drain on the company's cash reserves, he shored up Uber's finances, paving

the way for an eventual initial public offering of Uber's shares in the United States.

Meanwhile, Uber showed it hadn't lost the appetite to dream big. In late October 2016 its top product executive, Jeff Holden, published a 99-page white paper devoted to Uber's research into flying cars, of all things. He dubbed the project "Uber Elevate." The report begins: "Imagine traveling from San Francisco's Marina to work in downtown San Jose—a drive that would normally occupy the better part of two hours—in only 15 minutes." It goes on to explain Uber's vision for a network of cars that take off and land vertically and the infrastructure it would take to build it.

The paper might have seemed like an elaborate prank but for its detailed discussion of "market feasibility barriers" and its 17-person contributorand-reviewer roster, including scientists from NASA, Georgia Tech, and MIT. One of those reviewers, a 30-year NASA veteran named Mark Moore, joined Uber full time in early 2017 as director of aviation engineering. Whatever Uber's shortcomings, it's safe to say it literally considers the sky to be the limit.

For all his professed just-the-facts practicality, Kalanick loves nothing more than to bat around ideas, the zanier the better. In the summer of 2016, I traveled by private jet with Kalanick and several top Uber executives from Beijing, the Chinese capital, to Hangzhou, the coastal city near Shanghai that is home to Alibaba and thus an important hub of the Chinese Internet business.

Before takeoff, Kalanick wonders aloud to Emil Michael, his top dealmaker and fundraiser, if Uber could go public without investment bankers. Michael, a lawyer by training, suggests instead a reverse merger, a somewhat dubious technique whereby a private company buys an inferior public company for its listing. Kalanick suggests using no bankers but giving 3% of the capital raised—the fee bankers would have received—to charity. When I suggest giving that money instead to drivers, Kalanick lights up. He says he wants to give equity to drivers, something upstart Juno has begun doing, but Uber has found the securities-law implications to be complicated.

Once airborne, Kalanick turns positively pensive. He tells me he has long dreamed of being an investigative journalist, having once read an anthology of reporting about the Khmer Rouge

UBER VALUATION

\$68
\$70 billion BILLION

50

40

30

20

10

2010 2016

SOURCE
PUBLISHED REPORTS



Excerpted from WILD RIDE: Inside Uber's Quest for World Domination, by Adam Lashinsky, to be published on May 23, 2017, by Portfolio, an imprint of Penguin Publishing Group, a division of Penguin Random House LLC. Copyright

in Cambodia. The "dream job," he says, appeals to his sense of justice. He even has an idea for an investigative project: He and I need to go to Mumbai for six months, he says, and live in the slums and write about the experience. "I'm going to grow out my hair and wear different clothes and go native," he says.

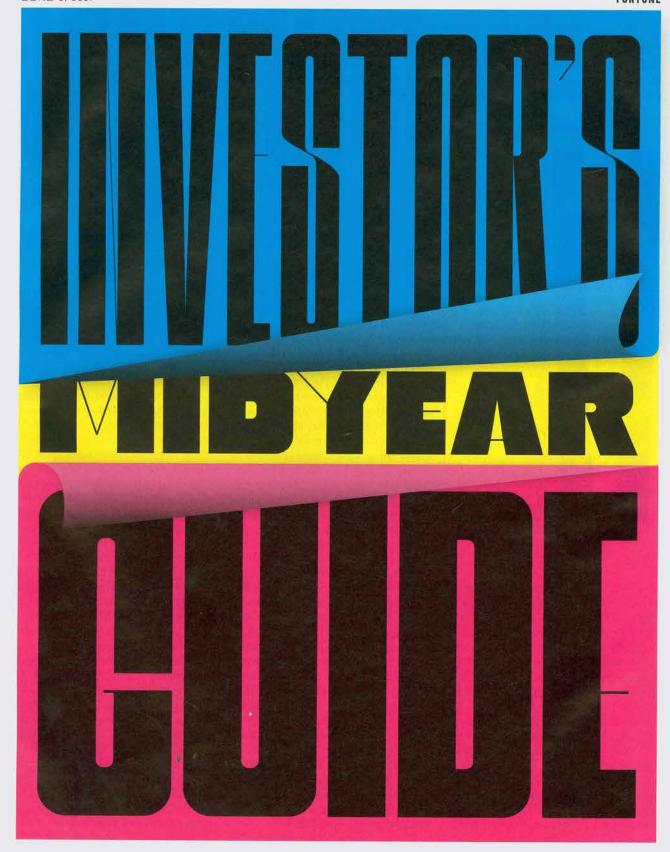
I learn over time that this is partly how Kalanick amuses himself and partly a reflection of his earnest side. He may well be moved by the plight of the Cambodian people under the murderous Khmer Rouge or by the slum dwellers of Mumbai, yet he hasn't done anything about the homeless in his own city of San Francisco. His ideas are thrilling but also baffling. And he relishes challenges to his flights of fancy.

In one of my last conversations with Kalanick, I bring up the topic of Alexander Hamilton, in part to verify my recollection that Kalanick had been interested in the first U.S. Treasury Secretary long before Lin-Manuel Miranda's epically successful musical exploded on Broadway. Why, I ask, did Kalanick admire Hamilton so much when he first read Ron Chernow's biography?

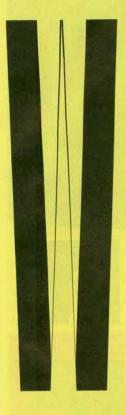
"There's much to admire about him," he says. "He was an entrepreneur in his own time. But instead of creating a company he was creating a country. He was right at the center. The U.S. would be a very different place if he wasn't there. He was a philosopher, but he was also an execution guy. He had a lot of great qualities. I think just so much about how he saw the future. And in many ways America lived that out, and I think we became a prominent country because of his vision."

Hamilton didn't know when to keep quiet, and his list of enemies was long. Did Kalanick identify, I wonder, with the extraordinary amount of public abuse Hamilton withstood? "Well, look," he says, "this guy had a lot of adversity. We have this thing at Uber. We like to say, 'Know what's right, fight for it, don't be a jerk.' He just did what he thought was right. And when you do that, when you're doing something really, really different, you're going to have some naysayers. You just have to get used to that."

Travis Kalanick, a jerk to many but not to himself, very likely will never get used to the naysayers. Adversity, after all, has become part of the journey.



POLITICS IS THE ELEPHANT IN THE ROOM IN EVERY CONVERSATION ABOUT THE MARKETS THESE DAYS. BUT THE SMARTEST BETS IN TODAY'S ECONOMY ARE COMPANIES THAT HAVE WASHINGTON-PROOF BUSINESS MODELS. HERE, THE BEST STOCKS AND FUNDS FOR RIDING OUT ANY NEWS CYCLE. BY JEN WIECZNER



WHAT A DIFFERENCE A FEW MONTHS MAKES. When we last published an Investor's Guide, in December, Donald Trump had just been elected and the Dow Jones industrial average had just passed 19,000. It hit 20,000 in January, and 21,000 a few weeks later, right before the bull market celebrated its eighth birthday in March. Today, the S&P 500 has already broken through the price targets many Wall Street firms had set for the end of this year. "The stock market went up. Interest rates went up. The dollar went up. Confidence, sentiment, all went up," says Andy Goldberg, global head of client investment strategy for J.P. Morgan Private Bank, "There was this newfound optimism."

Of course, politics created that optimism-and what politics creates, it can destroy. As spring turns into summer, investors are coping with the realization that President Trump's first 100 days have come and gone, and the pot of gold at the end of the rainbow known as tax cuts and regulatory reform seems as far away as it did before he took office, if not farther. Republican stumbles on Obamacare repeal-and-replace legislation and the chaos surrounding the Russian-spying investigation have pushed economic policy to the margins and made bipartisan cooperation look ever less plausible. And the rally dubbed the Trump Bump has stalled.

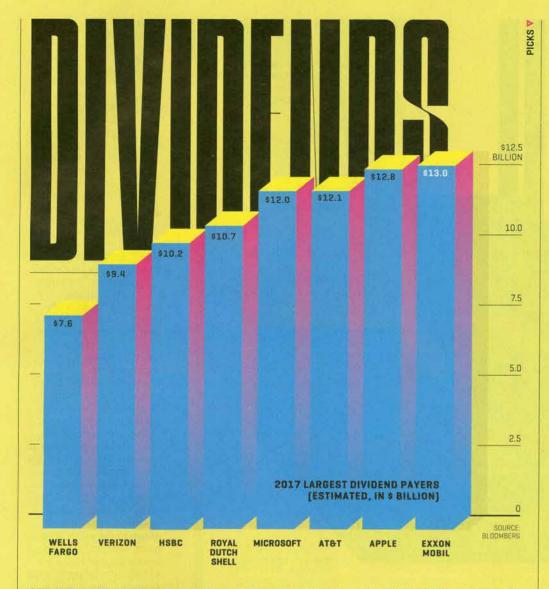
That poses a dilemma for investors, because many U.S. stocks-which already traded at historically high valuations before the election-are now priced as though tax reform and other elements of the GOP agenda were already a done deal. TIAA Investments' Susan Hirsch, for one, bought financial stocks immediately after Trump was elected, but she's already sold a couple. "Some of the 'hope trade' has been priced in," she says. (For three bank stocks that are still worth buying, see page 64.) In health care and other industries, congressional policymaking is such a question mark that investors are leery. The common thread among the pros Fortune spoke with: They're looking for companies that are fully in charge of their own growth, that don't live or die by what happens in Washington.

The good news is, the bottom lines

of U.S. companies are set to grow more in 2017 than they have in years. Wall Street thinks S&P 500 earnings will increase 10% this year—and that's without factoring in any tax reform. It helps that energy producers, whose plummeting profits recently dragged down overall growth, have slowly begun to recover. And if cuts do come, says Goldberg, earnings growth could be as high as double Wall Street's consensus, topping 20%: "If [lawmakers] just lower the corporate tax rate a little bit, they'd be heroes to the market."

The market is also making heroes of its own, especially in technology. The Trump Bump happened so fast that few investors noticed a fundamental change in the fabric of the market. Since the beginning of the year, the ranks of the five most valuable American companies have turned over dramatically, and now consist solely of technology companies that didn't exist 50 years ago. Electric-car upstart Tesla is now worth more than General Motors. And the maker of Snapchat, a company running huge losses, went public in what looked to be one of the most expensive tech IPOs of all time. Not that it worries stock-picking pros much. "Today's valuations are like if you're driving 70 miles per hour in a 65-mile-perhour zone," Goldberg says. "You're a little bit over, but you're not going to get in trouble for that."

To follow, we've found 18 stocks and three funds that market-beating money managers still have high hopes for.



## STOCKS THAT PAY YOU BACK, IN GOOD TIMES AND BAD

Companies that steadily increase their dividends tend to outperform their competitors, especially when stock markets get bumpy.

RISING INTEREST RATES usually hurt dividend-paying stocks, which appeal less to investors as bond yields get bigger. But there's an exception to this rule: stocks of companies that consistently increase dividends, sending "a signal to the market of their own growth prospects," says Anwiti Bahuguna, senior portfolio manager of global asset allocation for Columbia Threadneedle. Such companies tend to outperform over the long term—and to lose less during market corrections.

A prime example is **Apple**. After reintroducing a dividend in 2012, Apple has raised it annually and is on track to pay more over

## HEY, BIG SPENDERS

The chart
above shows
how much
money these
global brandname companies
are expected
to return to
shareholders as
cash dividends
in calendar 2017.
[It's a lot.]

the next 12 months than any other company [edging past current champ Exxon Mobil]. Given that its cash hoard now tops \$250 billion, investors may see more of the same, especially if Congress enacts a tax cut or holiday for overseas cash. Still, Apple trades at a 15% discount to the S&P 500. "That doesn't really compute for us," says Ankur Crawford, manager of the \$5.4 billion Alger Spectra Fund. "It's cheap."

Matt Quinlan, comanager of the \$83 billion Franklin Income Fund, favors **Texas Instruments**, which has raised its dividend for 13 years straight. No. 1 in a

## APPLE [AAPL, \$156, as of 5/12/17]

## TEXAS INSTRUMENTS

[TXN, \$81]

## HOME DEPOT

[HD, \$157]

## **ROYAL DUTCH SHELL**

[RDS.A, \$55]

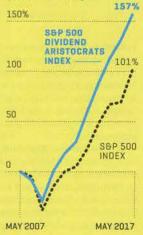
## UBS

[UBS, \$17]

lucrative niche of semiconductors called analog, TI makes chips used in biometric readers, 3D printers, and robotic equipment, giving it a stable revenue stream. Home Depot has grown its dividend 22% in the past five years, while buying back hundreds of millions of shares. With a strengthening economy and real estate market, "you have all of the stuff that makes a Home Depot work at this time in the cycle," says TIAA's Hirsch.

For more yield, Brian McMahon, who comanages the \$15.8 billion Thornburg Investment Income Builder Fund, recommends going overseas, where tax codes often encourage high dividends. He likes energy giant Royal Dutch Shell, whose U.S.-listed shares yield 6.7%, and Swiss bank UBS, which yields 3.6%.

## 10-YEAR CHANGE IN PRICE (TOTAL RETURNS)



SOURCE-BLOOMBERG



## **BIG TECH GETS BIGGER**

The five largest companies in America by market capitalization? They're all tech stocks now. Here's why some of them are about to make their shareholders even happier.

AT WARREN BUFFETT'S annual Berkshire
Hathaway shareholders meeting in early May,
the investor wistfully expressed his regret
for missing out on the booming growth of
America's biggest companies, particularly
Google and Amazon. But top tech investors
have a message for Buffett and others: It's
not too late.

Google's parent, Alphabet, is now the second-largest company in the S&P 500 (by market capitalization) after Apple, followed by Microsoft, Amazon, and Facebook, with a combined value approaching \$3 trillion. Even Buffett marveled at how their business models, built on intellectual property rather

WHERE THE GROWTH COMES FROM Wall Stree

FROM
Wall Street
expects the
technology
sector to be
by far the
biggest driver
of economic
growth in 2017.

than tangible assets, are "so much better" than the industrial core of yesteryear's biggest companies.

Artificial intelligencewhether in self-driving cars, helpful household robots, or software that takes dictation flawlessly and then translates it into another language-is the IP making the most waves in technology right now. And many investors see Google as Al's dominant force. "We look at Google's AlphaGo victory as more important than the moon landing," says Gavin Baker, manager of the \$14.8 billion Fidelity OTC Portfolio, which invests largely in high-

APPENDENCE OF THE PERSON NAMED IN COLUMN TWO
1100

growth Nasdaq stocks and other tech firms. [AlphaGo is a "deep learning" computer program that prevailed last year over the world champion of the board game Go.] Even after Alphabet's more than \$100 billion market gain this year alone, the company trades at just 23 times expected 2017 earnings, compared with about 18.5 times for the S&P 500, and is growing much faster.

The big tech companies' vast computing power makes it hard for others to challenge their dominance. Exhibit A of that phenomenon may be Amazon, which has seemed to have an electric fence repelling those who would go toe-to-toe with it. What's more, "it doesn't just have one business addressing a \$1 trillion market opportunity, it has two," says Ken Allen, manager of the T. Rowe Price Science & Technology Fundits e-commerce business, and the cloud-computing services it sells to other companies. Allen thinks Amazon,

# CHANGE IN MARKET VALUE, 2017 APPLE \$156.3 billion ALPHABET \$102.0 AMAZON.COM \$96.3 \$20.1 PRICELINE GROUP \$17.6 TESLA \$6.5 INTUITIVE SURGICAL \$3.0 CHIPOTLE

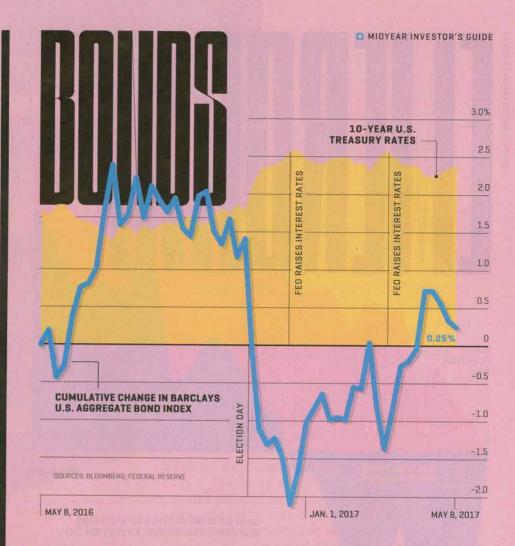
SOURCES: BLOOMBERG: SEP GLOBAL

now worth about \$460 billion. will be "the first to [reach] \$1 trillion in market cap."

Another company likely to reap profits from the cloud, says Hirsch, who manages the \$4.3 billion TIAA-CREF Large-Cap Growth Fund: Adobe. The Photoshop maker's growth has accelerated since it switched to a cloud subscription model. and its revenue is expected to increase more than 20% this year.

It's hard to predict who will be the first winner in driverless cars, the barelypast-imaginary industry that companies from Google to Ford are sprinting toward like predators. Baker invests in Tesla as well as Uber, one of several private companies that make up 3% of his fund. "I think my [future] grandchildren will find it deeply strange that human beings will be allowed to drive," he says. Hirsch thinks Tesla could displace much of the traditional car industry by offering greater value and performance as technology costs come down. Still she acknowledges the risks of investing in Elon Musk's as yet unprofitable company, and she keeps her stake relatively small: "It's not a big bet, because it would give me an ulcer."

For a tech play that's less likely to upset their stomachs, many investors like semiconductor companies such as Nvidia, whose chips are used in Tesla and other autonomous driving systems, smartphones, and more. Chipmakers are already among the market's best performers this year, but Crawford of the Alger Spectra Fund thinks Broadcom, at less than 16 times 2017 earnings, looks undervalued following its merger with Avago. The company supplies semiconductors for both Apple iPhones and Samsung Galaxys, along with a host of Internet-of-things products. "It's levered to all the right stuff," she says.



## FINDING BALANCE **BEYOND STOCKS**

To find assets that could cushion them if the equity markets tumble. investors are looking in some unfamiliar places.

### **CUMULATIVE CHANGE** SINCE ELECTION DAY



NOV. 8, 2016

SOURCE: BLOOMBERG

MAY 9, 2017

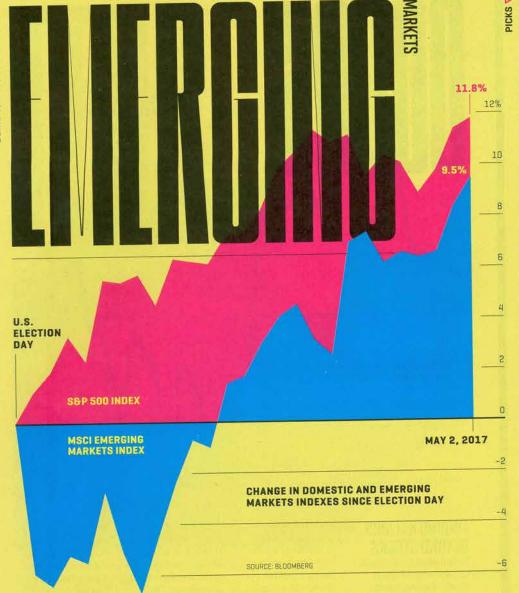
### THE BOND MARKET

is a tough puzzle to crack right now. High stock prices mean a greater chance of a correction, which makes fixed income as important as ever to own for "ballast," says Krishna Memani, chief investment officer at Oppenheimer-Funds. But interest rates on the safest bonds are too low to reward investors with much income-and there's the danger that rising inflation and Fed rate hikes will cause their prices to plunge.

One solution: senior floatingrate loans, which are essentially securitized loans to companies. Their "coupons" are pegged to prevailing interest rates and are regularly reset to ensure their value doesn't drop even if rates rise. The most popular low-cost exchange-traded fund in this cateapry is the PowerShares Senior

Loan Portfolio. Fixed-income investors can also benefit from the comeback in emerging markets,

and in the growing strength of their currencies, by buying local currency bonds. Emergingmarket debt already offers higher yields than those in the U.S. And Memani expects emerging-market interest rates to go down, not up, which could make the bonds more valuable. The lowcost WisdomTree **Emerging Markets** Local Debt Fund, which yields nearly 6%, has considerable exposure to Russia and Latin America, where Memani is bullish.



## BETTING ON INNOVATION OVERSEAS

Entrepreneurial companies are earning big returns in India and China. Here are a few that aren't likely to be buffeted by trade politics.

THE U.S. PRESIDENTIAL election's immediate effect on emerging markets might be described as a Trump Dump. Stocks from Latin America to Asia plunged as investors worried that the candidate's protectionist rallying cries could translate into tradewars. Today, with the President having moderated his rhetoric, those fears have receded, and many markets have surged. BlackRock, the world's largest asset manager, is more bullish on emerging markets than on any developed ones, and its chief

## CLOSING THE GAP

Emerging
markets took a
heavy hit after
the U.S. election
but have largely
caught up with
the S&P 500
this year.

equity strategist Kate
Moore says she is "pretty
excited" about business
and supply-chain reforms
that have made companies
there more profitable.

Michael Kass, manager of the \$3.3 billion Baron Emerging Markets Fund, looks for "EM 2.0" companies that are rich in "intellectual capital" and focused on innovation. He's enthused about India, which he says is in the early days of an expansion as its economic reforms take root. He likes Housing Development

## HOUSING DEVELOPMENT FINANCE CORP. [NSE: HDFC, \$24]

ISHARES INDIA 50 ETF [INDY, \$34]

CHINA MOBILE

(CHL, \$55)

KOTAK MAHINDRA

[NSE: KOTAKBANK, \$15]

ALIBABA [BABA, \$120]

Finance Corp., India's top mortgage provider, as well as private-sector banks like Kotak Mahindra. [U.S. investors can own those stocks through the iShares India 50 ETF, which tracks blue-chip companies.]

Worries about a slowdown in China have kept EM investors on edge. But Thornburg's McMahon, who also comanages the company's Global Opportunities Fund, sees value in China Mobile, a state-owned mobile service provider that has more than 800 million customers-including 500 million-plus on 4G. It trades on the New York Stock Exchange at 14 times earnings and pays a 3% dividend. "Probably, consumption of communications will go up more than consumption of Coca-Cola and Oreos, or McDonald's hamburgers," McMahon says. "But [telecom] companies trade at much lower multiples" than McDonald's, Coca Cola, or Oreo-maker Mondelez.

Chinese tech giants like Tencent and Alibaba better exemplify Kass's preference for entrepreneurialism. Both trade at all-time highs, but there is a cheaper door into Alibaba: buying Yahoo. That tech also-ran will soon be folded into Verizon, but its Alibaba shares will be preserved as a separate entity, called "Altaba," and are currently valued at less than Alibaba's shares on the open market, according to T. Rowe Price's Allen.

## WHEN GUANGZHOU MEETS FORTUNE

## A port city with rich culture



With Beijing preparing for May's gathering of the Belt and Road Forum for International Cooperation, Guangzhou, as a major city along

the 21st Century Maritime Silk Road, also is busy getting ready for a major international event. The 2017 Fortune Global Forum will be held in the city from December 6-8. As China's Southern Gate city, a historically well-known port along the ancient Maritime Silk Road, Guangzhou has witnessed the middle kingdom's millennia-long foreign trade and cultural fusion.

## Guangzhou, the country's open door to foreign trade

On the morning of February 22, 1784 (which happened to be George Washington's 52nd birthday), the American merchant vessel, *Empress of China*, left the New York harbor and made its maiden voyage to Canton loaded with American ginseng, cotton and furs. And on May 11, 1785, the ship, filled with Chinese tea, porcelain and silk, returned to New York and was greeted with a triumphant firing of a 13-gun salute. That one round trip earned a profit of \$50,000, an enormous amount of wealth at that time:

The Empress of China story serves as testimony to the city's centuries of foreign trade. Guangzhou, formerly known as Canton, was once the only port in the nation that allowed to trade with foreigners after the Qing Dynasty (1636-1912) adopted a strict, closed-door policy. Along with its millennia-long foreign trade and fusion, Guangzhou was left with numerous valued relics. Among them is the 1400-year-old Nanhal (South

Sea) God Temple commemorating Daxislkong, the first foreigner and an India envoy to Guangzhou. The city also welcomed the first resident minister of the United States of America to China, Alexander Hill Everett. He is buried in the city's Whampoa Foreigners' Cemetery on Changzhou Island.

Along with the city's foreign trade came the fusion of different religions and cultures. Scattered around the city are numerous temples, mosques and churches, such as *Guangxiao* Temple, *Huaisheng* Mosque and Sacred Heart Catholic Church. They are physical reminders of the city's once flourishing religious scene, which saw the co-existence of Buddhism, Islam and Christianity.

## Guangzhou, root of Lingnan culture

The city of Guangzhou also has cultivated its unique Lingnan culture with vestiges still present in its architecture, music and opera, painting, cuisine, dialect and its particular blend of Chinese and Western cultures. Cantonese Opera, also known as "the red bean of South China," is an iconic symbol of Lingnan culture and is listed on UNESCO's Intangible Cultural Heritage list.

However, the city has never ceased demonstrating its unique charm to the world. As the nation's forefront city of reform and opening-up, Guangzhou has transformed itself into a modern metropolis and fashion capital of South China.

Skyscrapers dominate the city's classy CBD of Zhujiang New Town. The Guangzhou Opera House, one of the region's landmark works of architecture, was designed by the late world class architect Zaha Hadid. The building was rated as one of USA Today's "10 best opera houses around the world " and made the list of the Daily Telegraph's "world's most spectacular theatres." The city's glistening Guangzhou Library, with its unique design resembling stacked books, is one of the world's largest public libraries with 100,000 square meters of floor space.

With culture deeply nurtured and rooted in over 2,000 years of history, the city of Guangzhou will be an inspirational host city of the 2017 Fortune Global Forum.

FORTUNE, FORTUNE GLOBAL FORUM, FORTUNE GLOBAL 500 and Max are trademarks of Time Inc., registered in the U.S. and other countries, and are used by permission.

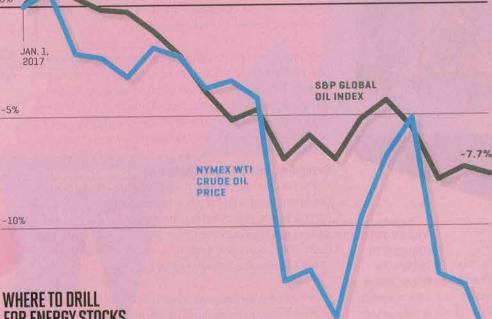
PIONEER NATURAL RESOURCES [PXD, \$172]

[YPF, \$24]

IHS MARKIT

[INFO, \$43]

YEAR-TO-DATE CHANGE IN OIL STOCKS AND OIL PRICES



## FOR ENERGY STOCKS

Oil prices have rebounded from 2016's worst lows, but they haven't lifted the industry out of its overall doldrums. That's why investors are looking past the most famous energy names for potential winners.

UNLIKE TECH, WHERE money managers see virtually bottomless opportunities, the cyclical energy industry has been, well, rather dry lately. "You've got to pick your winners-it's not a slam dunk as a full sector call," says BlackRock's Moore. Case in point: Despite a growing economy and recovering profits, as of mid-May, not a single energy stock mutual fund in the U.S. had made money this year, according to Morningstar.

That said, with oil production out of "glut" territory and the industry's earnings poised for a bounce off recent lows, inves-

## STILL WAITING TO REFUEL

Energy producers may feel bullish about the new U.S. administration, but soft demand has driven energy stock prices down this year.

-15%

SOURCE BUDDMBERG

tors may be able to reap outsize returns. Energy companies' results have beaten expectations by an average of 22% so far this year. That represents "a huge opportunity for energy right now," says J.P. Morgan's Goldberg, because "the market is pricing in more bad news for the sector than actually exists."

-15.6%

MAY 2.

2017

Alger's Crawford owns

## Pioneer Natural Resources, which produces oil and natural das at a lower break-even point than many of its peers, meaning it can still be profitable as long as crude is selling for more than \$40 per barrel. Pioneer has also pledged to retain more of its free cash flow, rather than spending it all and then some on capital

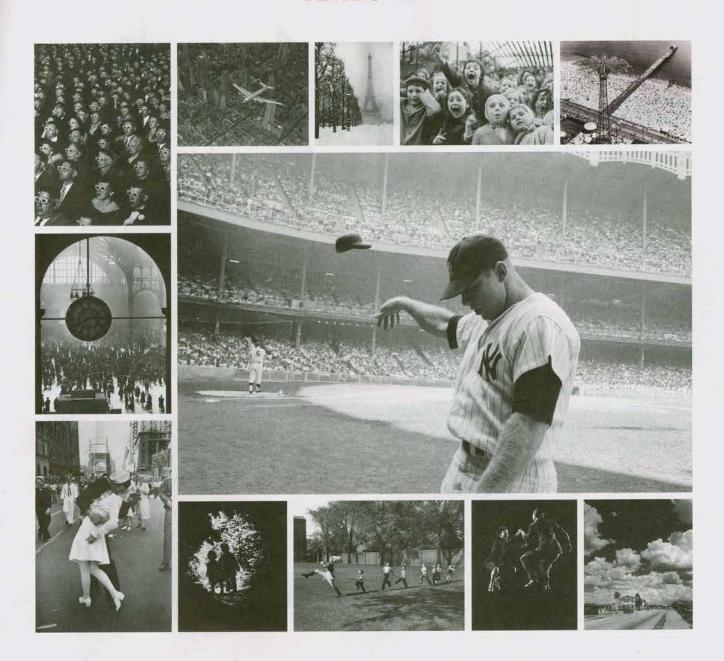
expenditures and incurring debt that could sap future profits, as has been common in the industry. "They're trying to be a little bit more rational and disciplined," she says.

Argentina's state-owned energy producer, YPF, whose stock is also listed in the U.S., is finally offering foreign companies and investors more inviting terms to help it develop its shale reserves. "Until six months ago, nobody ... could look at YPF and ascribe any real value to those reserves because the country was a pariah," says Kass of Baron Emerging Markets. The recent moves, he says, could start a "virtuous cycle" of other reforms in Argentina.

Hirsch, of TIAA, prefers to get her exposure to the energy industry via a company that's less sensitive to the ups and downs in oil prices. She likes IHS Markit, a London-based firm that provides business services to the energy industry, among others, and which is poised for a boost in business from oil and gas clients emerging from their slump.

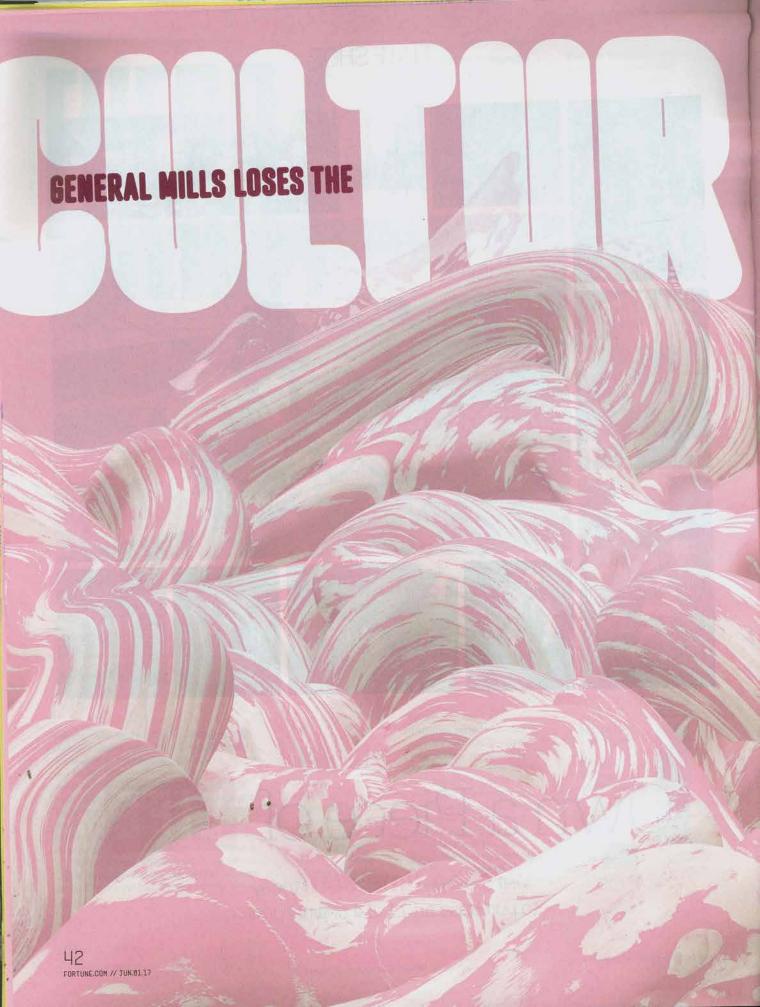


## TIMESHOP



# Own a Piece of LIFE

Visit **shop.time.com** today to purchase an 11x14 original print







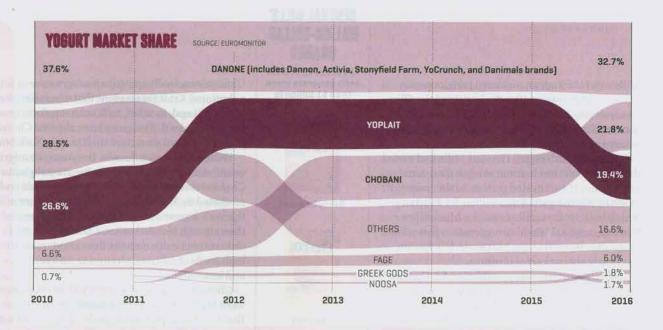
THESE ARE BOOM TIMES in the yogurt business. If you have any doubt, check out the dairy section of your local supermarket. For starters, chances are yogurts occupy a much bigger portion of it than they used to. You're likely to see an abundance of brands claiming heritage from Greece, from Australia, from Bulgaria-even from Iceland. You prefer yours without cow's milk? No problem. There are offerings based on sheep's milk or the juice of a coconut. You can choose an ascetic unsweetened Greek vogurt that makes you grimace at its sourness, opt for a drinkable style-or pick a dessertlike option that lets you mix in "cinnamon-glazed cake pieces," to cite one example. The days when there were only a handful of brands, each with strawberry, blueberry, or raspberry preserves at the bottom, are far behind us.

Last year, nine of the top 10 yogurt brands enjoyed rising sales. Which one managed to sink even as a rising tide lifted all the other boats? Yoplait. Its sales have plunged 23% over the past year, according to market researcher IRI, after a 7% drop the prior year. Yoplait has fallen so much that its crown as the top U.S. yogurt brand was snatched by upstart Greek-style brand Chobani. (Danone, which owns a stable of varied brands, ranks No. 1 when their sales are combined.) Indeed, Yoplait's shipwreck was so epic that its effect overwhelmed the combined sales increases for all other yogurt companies last year and caused the category in the U.S. to decline by 2%.

This is distressing news, to put it mildly, for General Mills, which owns a controlling stake in Yoplait. It's not enough that the Minneapolis-based packaged foods giant—whose brands include everything from Cheerios and Wheaties to Hamburger Helper, from Pillsbury to Old El Paso and Häagen-Dazs—has to contend with consumers' declining appetite for premade items that come in a wrapper or a box. It's struggling even in the category where others are growing.

At 18% of company revenues, Yoplait is big enough—particularly, when combined with weakness in the soups business at General Mills and the sale of its Green Giant unit—for its troubles to affect General Mills' results. Revenue for the company has tumbled from \$17.9 billion in 2014 to \$15.7 billion over the past 12 reported months. The fact that the company's cereal business has been largely flat qualifies as a victory by comparison.

The job of spooning out a new strategy for yogurt—and much more—falls to Jeff Harmening. A 23-year-veteran of General Mills who manages to be seen as both tenacious and well liked, he is slated to become the company's new CEO this month. Harmening, 50, who was the company's



THE CULTURE WARS

heir apparent and is taking over in what appears to be an orderly transition, spearheaded its successful acquisition of the Annie's Homegrown brand (best known for its macaroni and cheese), pushed for the sale of Green Giant, and is viewed as an advocate for organic and fresher food. He's clearly aware of the many challenges facing General Mills.

Solving them is a different matter. The company acknowledges it tarried when Chobani established a beachhead for Greek-style vogurt. "It's no secret we were late," says Joe Moidl, senior director of innovation for global dairy at General Mills. It has been trying to catch up, but the moves have been ineffectual so far. General Mills is once again promising action in the form of new products. But the company's past decade doesn't offer a lot of reasons to expect a yogurt breakthrough.

Meanwhile, a specter looms. It might be viewed as the Death Star for Big Food: Brazilian private equity firm 3G Capital. It has already acquired Kraft and Heinz and made an aborted bid for Unilever. General Mills, like some of its rivals, has been in a race to "3G itself" before somebody else does. The company has laid off 10% of its employees over the past few years and improved its profit margins by several percentage points. It even adopted zerobased budgeting, a signature 3G practice.

But implementing the 3G playbook seemed to distract the company from the steps it needed "IT'S NO SECRET WE WERE LATE." SAYS A **GENERAL MILLS EXECUTIVE OF** 



to take to increase its yogurt sales. That leaves General Mills in a paradoxical position: The very moves it made to fend off the likes of 3G may make it more vulnerable to such an acquisition.

NLY THREE consumer packaged goods companies generate more revenue than General Mills in the U.S.: PepsiCo, Kraft Heinz, and Nestlé. Like those stalwarts, it has a long and intermittently glorious history. General Mills traces its roots to the year after the Civil War ended, when Cadwallader Washburn built a mill on the Upper Mississippi River in Minneapolis. His company's biggest hit would be Gold Medal flour, which remains the top seller in the category today. A few generations after Washburn's death, his operation combined with others during the Roaring Twenties to form General Mills.

In the decades that followed, the company introduced numerous staples that Americans still eat today, including Wheaties, Cheerios, and Bisquick. Its outside PR team invented Betty Crocker, a persona who dispensed recipes (which just happened to call for flour) and who once polled behind only Eleanor Roosevelt as the most famous woman in America. It wasn't until later that Betty Crocker would become a brand of cake mix.

Like more than one venerable titan, General

Mills went through an awkward conglomerate phase: It once owned Play-Doh, started the Olive Garden restaurant chain, and even operated an aeronautical lab that produced the first deep-sea submarine to explore the *Titanic*.

But by the mid-1990s, General Mills had exited those offshoots and become solely a food company again. It committed further to the industry in 2000 when it paid \$10.5 billion for Pillsbury—which built its first mill across the Mississippi from the original Washburn operation just a few years after its rival in the 1870s—to rely less on the slowly ebbing cereal business.

Before yogurt became an affliction for General Mills, it was a boon. In 1977 it started selling Yoplait, a French brand, under license. (Decades later, General Mills acquired 51% of the company.) Unlike the typical U.S. yogurts at the time, which were unflavored, with sweet jam at the bottom of the container, Yoplait sold a blended product.

General Mills pitched it to Americans as "Yoplait—it is French for yogurt," as one '80s ad put it. (The name was actually coined when French dairy cooperatives Yola and Coplait merged years earlier.) No matter. Baby boomers gorged, and the brand helped propel yogurt sales from \$600 million a year well into the billions.

Yoplait's marketing followed eating trends, particularly as diet products proliferated, and General Mills unveiled a steady stream of brand extensions. The brand began targeting women, with one ad touting a custard style as "fat-free and guilt-free." By the turn of the century, Yoplait scored a major hit when it launched Go-Gurt, yogurt in squeezable tubes for kids. By this point, Yoplait had toppled the Dannon brand and become the market leader.

A pattern had established itself: Yogurt seemed to be redefined every five or 10 years, and General Mills was either ahead of the curve or close enough behind it to catch up. "It is a category of constant reinvention of itself," says David Clark, president of General Mills' U.S. yogurt business. But, he adds, "it has a very short life cycle."

Despite that knowledge, General Mills was caught unprepared when Chobani arrived.

DECADE AGO. Greek-style yogurt made up just 1% of sales in the U.S. Hamdi Ulukaya changed that. At age 22 he emigrated from Turkey, where he grew up on a sheep farm, to upstate New York.

## GENERAL MILLS' BILLION-DOLLAR RRANDS

These seven brands each generate more than \$1 billion in annual retail sales:



**Betty Crocker** 



Cheerios



Häagen-Dazs



Nature Valley



Old El Paso



Pillsbury



Yoplait

Ulukaya eventually spotted an advertisement for a shuttered Kraft Foods plant that was selling for \$700,000 and, in 2005, took out a small-business loan to acquire it. Two years later, the first Chobani yogurt appeared on a store shelf in New York State.

Within less than a decade, the young immigrant would shake up a group of multinational giants. Chobani revolutionized how yogurt is made and marketed in America. Greek yogurt is richer and thicker—it seems more artisanal, less processed—than smooth blended styles. Chobani and its ilk claim more health benefits than regular yogurt: high levels of calcium, vitamin D, and protein—and less sugar.

Chobani came on the scene just as consumers were beginning to revolt against the principles that had made packaged goods companies hugely successful. Shoppers began rejecting artificial sweeteners and anything that looked like a chemical formulation. Instead they craved ingredients they could recognize. After decades of fleeing fat at all costs, they began embracing products with whole fat. "Healthy" was no longer a synonym for "diet." Within a matter of years "diet" or "light" would evoke a compromise on taste or ingredients that consumers no longer wanted to make.

It only helped that Chobani was a tiny startup with a compelling backstory rather than a multinational corporation. Chobani tasted—and sounded—fresh, and most of all, *authentic*. Retailers loved the upstart, too, because Greek yogurt commands higher prices than the rest of the industry.

Suddenly Yoplait and other legacy brands found themselves on the defensive. "Consumers are increasingly seeking products that match their personal definition of real food," General Mills' then-CEO Ken Powell acknowledged in a presentation last summer. "It can come to life in foods that have more protein or fiber or whole grain."

In its cereal business, General Mills was able to embrace changing eating patterns with reformulations. In 2008 the company debuted a glutenfree version of Rice Chex and then expanded to Cheerios and Lucky Charms in 2015. Artificial flavors and colors were removed from many products, an initiative backed by Harmening, the incoming CEO. "Cheerios is a brand that is a great example of how General Mills has kept pace, if not ahead, of how the consumer is thinking," says Credit Suisse analyst Rob Moskow.

Those renovations worked. Sales of Cheerios increased in 2016, Euromonitor data shows.

But similar moves simply didn't resonate in yogurt. General Mills removed high-fructose corn syrup from Yoplait in 2012, reduced sugar by 25% in 2015, and replaced aspartame with sucralose in Yoplait Light. And by the time it made those changes, Chobani and others had made inroads.

For its part, Danone handled the newbie's rise by responding faster than Yoplait and by embracing an all-things-to-all-people strategy. "We have the widest portfolio in the market," says Sergio Fuster, chief of the yogurt business for what is now known as DanoneWave. In addition to its original Dannon brand and Dannon Light & Fit line (which avoided the dreaded "diet" label), Danone bought Stonyfield, an organic brand, and launched Activia, which emphasizes purportedly healthy probiotics. And it created a Greek-style line called Oikos.

A cynic might say that all it takes is a little bit of clever labeling—a global food conglomerate slapping a Greek-looking name on a new brand—to fool consumers. And there's at least a dollop of truth in that. Either way, Oikos has succeeded. It was a brand previously held under the Stonyfield trademark but repurposed to be the company's Greek offering. Danone gave it a big push at the right moment, making it the first yogurt to advertise during the Super Bowl. It hired celebrities, including *Full House* star John Stamos and NFL quarterback Cam Newton, to appear in ads.

Yoplait tried to parry with its own new brand, Yoplait Greek, at the beginning of 2010. But it didn't look much like traditional Greek-style yogurt, and there was no catchy ethnic name to conjure authenticity. Yoplait Greek flopped.

Two years later, with Yoplait's sales sliding 5% amid a surging yogurt market, General Mills tried again, adding a second entry called Greek 100. This version was a bigger success: First-year sales surpassed \$140 million, the biggest launch in Yoplait history. That was worth dancing a Zorba-style sirtaki over—until those sales soon began to sag.

"It's still very early days for the U.S. Greek yogurt segment, and we fully expect to earn our fair share of this segment over time," vowed General Mills executive Becky O'Grady during the company's investor day presentation in 2012.

Two years later, General Mills tried a different tack. It began claiming that blind taste tests proved that customers preferred Yoplait Greek to Chobani. Yoplait even opened a pop-up "taste off" space in New York's SoHo, just 300 feet away from Chobani's first yogurt café. It was the kind of

slingshot you'd imagine an upstart David aiming at a corporate Goliath, rather than vice versa.

Alas, the stone missed its target. "They never figured out how to bring a compelling offer to the market," says Greg Kuczynski, a consumer equity research analyst at Janus Capital. "You've already got strong offerings from Chobani and Dannon. They never broke through the noise."

Last September, General Mills made yet another move, this one out of the Danone playbook: It launched two new yogurt brands, both organic, in an attempt to broaden its appeal. The Annie's line is targeted at children; the Liberté brand is aimed at grownups. Neither has registered significant sales.

oday, greek styles make up 50% of U.S. yogurt sales. Chobani is easily No. 1 in that grouping, followed by Fage and Oikos. Yoplait's Greek 100 ranks fourth. Chobani thinks overall yogurt sales could double to \$16 billion within five years. "This category is in its infancy," says its CMO, Peter McGuinness. Just one of every three Americans ate a Greek yogurt in the past year. His company, which hasn't been immune to the occasional stumble, including a significant recall, still has plenty of room for growth.

That point extends to the industry overall. U.S. per capita yogurt consumption was 14.7 pounds in 2015, the most recent year for which data is available. That's a big jump from 6.1 pounds in 1995—but far below the 70-pound average for nations like France and Spain.

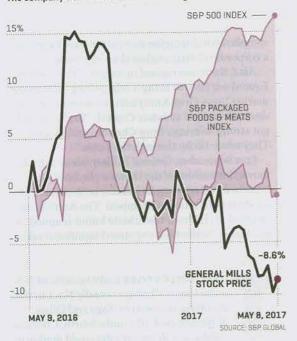
AT GENERAL
MILLS,
UPDATING
INGREDIENTS
WORKED FOR
CHEERIOS—
BUT NOT FOR
YOGURTS.





## A SOUR TIME FOR GENERAL MILLS INVESTORS

The company's shares have been tumbling since last summer.



THE CULTURE WARS

Drinkable yogurt—an area in which Yoplait is particularly weak—has been the hottest area of late. It registered a 14% increase, to reach \$766 million in sales last year, while spoonable yogurt dribbled down by 3.4%. A liquid product called Drink Chobani became a hit last year, the only new yogurt to make research firm IRI's annual new-product pacesetters list. Meanwhile, Chobani is also finding success with its Flip products, which combine yogurt with an attached pouch of sugary, crunchy extras like honey-covered nuts that you can "flip" into the yogurt. It has grown to become a \$350 million business.

So what's the plan for General Mills? Harmening, whose promotion to CEO was announced in early May, has been mum so far. The company declined to make him available for an interview.

Needless to say, he'll face the same profit pressures as his predecessor, at least one of which analysts view as contributing to Yoplait's yogurt problems. In General Mills' quest for improved profit margins to placate 3G or a potential activist investor, it has clamped down on discounting. That has had the intended effect of boosting mar-

A FALLING
STOCK PRICE
COULD MAKE
GENERAL MILLS
ATTRACTIVE
TO THE VERY
TYPE OF BUYER
IT'S TRYING
TO AVOID.

gins, but only made it harder to move its yogurt.

General Mills has continued to launch new yogurt products, like Yoplait Greek Whips and the Greek-style yogurt snack cups Yoplait Dippers. None of these twists have been strong enough to offset the tumbling sales for the company's light products. One retailer calls Yoplait's latest products "not a total swing and a miss."

Meanwhile, the company has been trying to build anticipation for a bigger launch this summer. It touted the news on an earnings call but declined to provide details. Here's what Harmening had to say about it at an industry conference a few months before he was named CEO: "We're seeing consumers expanding out from Greek to more simple, better-tasting yogurts that feel more crafted and artisanal. We call this emerging segment 'simply better,' and this summer we're launching an innovative new line in this segment that leverages our French heritage and global expertise to bring an entirely new yogurt taste and texture to the U.S. market."

Harmening's comments certainly demonstrate his ability to deploy positive-sounding CEO rhetoric. He ticked off almost every buzzword in the food business today. But it's well nigh impossible to discern what the product he's describing will actually be like. In theory, it could be a game changer. But what it largely sounds like is a bunch of Big Food scientists, experts, and executives sitting in a room and trying to conceive the next big thing.

Another option might be to make an acquisition. There just happens to be an attractive asset available. To gain antitrust approval of its recently completed deal to merge with WhiteWave, which makes Silk soy milk and other products, Danone agreed in March to sell organic Stonyfield yogurt. With an estimated \$334 million in annual sales, Stonyfield could reduce the burden on Yoplait and help General Mills compete more aggressively in the fast-growing organic category. The company is rumored to be interested. (A spokesperson declined to comment.)

General Mills needs to act. Its shares have slumped by 9% over the past year, even as the S&P 500 chugged up by 15%. A low stock price, of course, is one thing that can make a company vulnerable to a takeover.

That presents Harmening and his team with a quandary: Does the company focus on cutting costs, boosting margins, and otherwise playing defense to keep 3G at bay? Or does it invest in a Greek counteroffensive and consider cutting some prices to win back market share? By the time General Mills figures it all out, as even Harmening obliquely acknowledged, it's likely the market will have moved on to a new yogurt trend.



Meet 5-year-old Amena.\* Seeing her safe inside a hospital, you wouldn't know that she's a child refugee from Syria, recently rescued at sea from certain death.

At Save the Children, we do whatever it takes – every day and in times of crisis – to ensure children like Amena grow up healthy, learning and safe. No matter who they are or where they're born.

Because every child deserves a future. Every last child.

SavetheChildren.org/Amena
Watch Amena's dramatic rescue and recovery.

## Section 1: Applicant Information

Name: Date:

Section 2: Please answer the following question:

WHERE DOES
THE ALGORITHM
SEE YOU IN
10 YEARS?

Artificial intelligence has come to hiring, and could change staffing and careers forever.

Should we be cheering—or afraid?

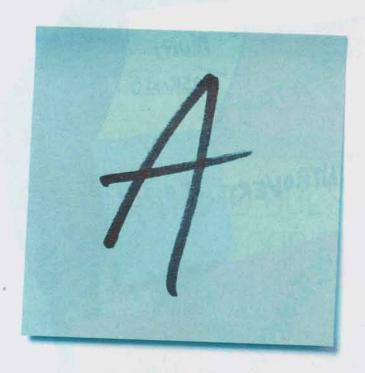
By Jennifer Alsever

Section 3: Please sign below.

SIGNATURE OF APPLICANT DATE

PHOTOGRAPHS BY IAN ALLEN

RELIABLE CAN'T PATEMPROAS MULTI-RULES-TASKING DRIENTED INTROVERT HAPPY SELF. STARTER OPEN-VAIN MINDED HESITANT 115K-ACTIVE ERANT PASSIVI THUTURN 2564154 PONTANEO EXTROVER, EKIST TERSE ANGRY INSULTING TROVERTERVING CHENTE POSITIVE LAN'T PLEARNER FLEXIC



confronted by a classic hiring challenge.

The 10-person startup he had founded,
an online commercial real estate service
called 42Floors.com, was growing and
needed to rapidly staff up. Suddenly, it
seemed, Freedman, who had myriad
other duties as CEO, was spending hours
at a time sifting through towering stacks
of résumés. He was overwhelmed.

The solution appeared in the form of artificial intelligence software from a young company called Interviewed. It speeds the vetting process by providing online simulations of what applicants might do on their first day as an employee. The software does much more than grade multiple-choice questions. It can capture not only so-called book knowledge but also more intangible human qualities. It uses natural-language processing and machine learning to construct a psychological profile that predicts whether a person will fit a company's culture. That includes assessing which words he or she favors-a penchant for using "please" and "thank you," for example, shows empathy and a possible disposition for working with customers-and measuring how well the applicant can juggle conversations and still pay attention to detail. "We can look at 4,000 candidates and within a few days whittle it down to the top 2% to 3%," claims Freedman, whose company now employs 45 people. "Forty-eight hours later, we've hired someone." It's not perfect, he says, but it's faster and better than the human way.

It isn't just startups using such software; corporate behemoths are implementing it too. Artificial intelligence has come to hiring.

Predictive algorithms and machine learning are fast emerging as tools to identify the best candidates. Companies are using AI to assess human qualities, drawing on research to analyze everything from word choice and microgestures to psycho-emotional traits and the tone of social media posts. The software tends to be used in the earlier part of the process, when companies are narrowing a pool of applicants, rather than in the later stages, when employers place a premium on face-to-face interaction and human judgment.

A wave of startups is offering a profusion of services. San Francisco-based Entelo mines the Internet and social profiles to predict which applicants are likely to switch jobs. Another California startup, Talent Sonar, offers machine-learning algorithms that write job descriptions aimed at improving gender diversity; the software even hides applicants' names, gender, and personal identifiers in hopes of overcoming the unconscious biases of hiring managers. Utahbased HireVue uses video interviews to examine candidates' word choice, voice inflection, and microgestures for subtle clues, such as whether their facial expressions contradict their words.

Google has also entered the hiring software fray.

Last fall, it released a new program called Cloud Jobs to some customers. Behemoths such as Johnson & Johnson and FedEx use it on their job-listings sites to communicate better with potential applicants. To build its software, Google scanned millions of job openings to uncover connections between certain attributes and job performance, then applied analytics and machine-learning models. In theory that allows J&J's career page to present search results more likely to match the intent of job seekers. The software also makes J&J's postings more visible to people doing searches on the Internet.

AI for hiring is "hot, and it's competitive," says Josh Bersin, principal at Bersin by Deloitte, the HR arm of the consulting giant. Some 75 startups are now scrambling for a piece of the \$100 billion HR assessment market. "I get emails every day from someone who decides they're going to fix the recruiting market through artificial intelligence," Bersin says. Can algorithms learn to probe one of the most mysterious of all human endeavors—matching a person to a job—better than actual humans can? And will solving some old problems end up creating new ones?

P

eople prefer to make judgments about other people, of course. But it turns out they're not very good at it. Yale School of Management professor Jason

Dana, who has studied hiring for years, recently made waves with a high-profile article in the *New York Times* that excoriated job interviews as useless. "They can be harmful," Dana wrote, "undercutting the impact of other, more valuable information about interviewees." Among other things, he noted the tendency by hiring managers to turn impressions from a conversation into a coherent—but often incorrect—narrative.

A Google veteran agrees. "Most interviews are a waste of time because 99.4% of the time is spent trying to confirm whatever impression the interviewer formed in the first 10 seconds," says Laszlo Bock, the company's former HR chief. Bock authored the book *Work Rules!* after revamping the company's hiring strategy.

Google began reviewing its approach in 2008. In its early years, the company had recruited from elite schools like Stanford and MIT. But when Google examined its internal evidence, it found that grades, test scores, and a school's pedigree weren't a good predictor of job success. A signifi-

FIVE INSIGHTS
ON HIRING
THAT AI IS
BUILDING ON

## FORGET ABOUT GRADES

GPAs and test scores are worthless as criteria, according to research Google did on its own hiring. It found that the proportion of people without any college education at Google has increased over time, and up to 14% of those on some teams never went to college.



## EXPERIENCE ISN'T EVERYTHING

A study by the American Association of Inside Sales Professionals and Al startup Koru concluded that experience didn't predict sales success Another found that grads with mid-level roles in extracurriculars outperformed club presidents, because companies need team players more than stars.

## 4.

## THEIR STAR MAY NOT BE YOUR STAR

A person who excelled at a rival may fizzle at your firm. Some 75% of Koru's predictors vary even among similar roles at similar companies. At one, the number of hours worked in college might be a predictor, while taking psychology courses, an indicator of teamwork, is a predictor at another. The match is crucial.

## 2

## GRIT MATTERS MORE THAN 10

University of Pennsylvania professor Angela Duckworth studied military cadets, rookie teachers in tough neighborhoods, and new salespeople to determine who would endure and succeed. The common thread wasn't IQ, social intelligence, looks, or health. It was passion and persistence.

## 5.

## IGNORE THAT FACEBOOK PHOTO

A study by Al company Fama found that pictures of drinking on social accounts don't imply bad job performance. Such photos are so common that screening for them means eliminating huge swaths of people. By contrast, bigoted comments or posts about drugs were linked to subpar performance.

cant number of executives had graduated from state schools or hadn't completed college at all.

This led Google to rethink how it hires and set it on a path to using algorithms that help identify the traits that its research shows are actually relevant: cognitive abilities, intellectual humility, and the ability to learn. Google created a program called qDroid, which drafts questions for interviewers based on how qDroid parses the data the applicant provided on the qualities Google emphasizes.

Data is crucial here. It would be hard to imag-

ine the proliferation of AI for hiring without the dramatic increase in job-related information. Not that long ago, companies would receive a paper résumé, and software would scan it to compare skills and experience and give it a score. But LinkedIn changed that, offering troves of résumés presented with extensive information about a person's relationships. AI's strength is the ability to comb through such data, examine multiple variables, and find patterns that humans might not see.

Most of the software available today doesn't use the kind of AI that eventually starts thinking on its own, It's what's called "supervised" learning: HR managers and data scientists together may establish and tweak variables that should be weighted based on qualities of high performers.

The software is far from foolproof. People can program their biases into algorithms. Says Bock: "Trying to understand people using computers is far more complicated than trying to understand transactions or commerce."

M any of the AI startups specialize in what you'd expect: using computing power to process

huge quantities of data. One startup, Fama, automates the analysis of a job candidate's identity, seeking online clues about her character or world view. Ben Mones says he started the Los Angelesbased company after hiring a man who seemed great on paper and in an interview but turned out to be a misogynist and racist. Mones says he would have known that if he had seen the man's social media posts. But doing that kind of searching has the potential for bias—and legal risk.

Scanning a candidate's social media for information about race, religion, sexual orientation, or political affiliation is illegal and can spark complaints of hiring discrimination. "It's hard to unring the bell and prove that you didn't use that information in an employment decision," says Pamela Devata, a partner at employment law firm Seyfarth Shaw. "The Equal Employment Opportunity Commission assumes that if you accessed it, you used it."

Mones decided that AI is the only solution to the problem. It can quickly mine thousands of social media posts and web articles and analyze them while shielding employers from liability. But executing that meant teaching computers to read text, image, and video just like a person. Says Mones, "That's tough AI to build." Fama constructed its data set by asking tens of thousands of students to label the same set of text, photos, and videos. It evolved methods to get groups of people to agree that a certain post reflected, for example, bigotry. Fama then trained the algorithm to identify those traits in other posts. The software uses natural-language processing and image recognition to read text, images, and video like a person. It combs through seven years of data and uses comparative analytics, similar to Amazon's "customers who bought this also bought" feature, so users can see how candidates stack up.

Mones says HR managers still hesitate to sign up, given the legal uncertainty and questions about privacy: "There is a healthy fear out there." Indeed, for job seekers, the notion that an algorithm that they don't know exists—based on input from strangers they will never meet—is making judgments about their character might sound like a high-tech version of being subject to the whims of human bias.

## FIVE WAYS COMPANIES ARE USING AL OUTSIDE OF HIRING

3.

KGL Bates uses Al from ROSS Intelligence that combines machine learning, natural-language processing, and IBM Watson tech to process millions of pages, understand a query's context, and draft a memo on its findings.

## PHARMACEUTICALS

Eli Lilly and Merck are working with startups to pore through trillions of compounds to predict which will work best and develop them faster and at a lower cost than in the past.

## 4

### **CALL CENTERS**

Progressive Insurance, Wells Fargo, and Hilton Hotels employ Al that analyzes callers' tone, tempo, keywords, and grammar to route calls to agents with appropriate skills. The software, from Mattersight, reduces call time by 23%.

## 2.

## RETAIL

U.K. grocery chain Morrisons is using Al from Blue Yonder of Germany to tailor daily prices for each product at each store as well as refill inventory based on advertising, weather, and holidays.

## 5.

## TRAVEL

TripAdvisor uses software from Flyr that lets customers lock in prices for two to seven days before booking. And Thomson, the U.K.-based seller of travel packages, offers an Al travel assistant powered by Watson.

MPLOYERS ARE INCREASINGLY deploying Е AI to intuit subtler issues, including whether an applicant will mesh with a company's culture or stay with the organization for a significant time. Adidas, Health-South, Keurig, and Reebok use an AI service called SkillSurvey. It predicts individuals' turnover and performance based on words used by the people listed as references, who are presented with an online series of behavioral-science-based questions tailored to the specific job. The input is then graded and averaged. The results can be compared with a database of thousands of candidates for the same position-providing insight into how the candidate compares with others. HealthSouth, which employs 24,000 people, reported a 17% decrease in employee terminations, a 10% drop in people quitting, and 92% less time spent checking references after one year of using SkillSurvey.

Citigroup is using AI to predict which new college grads to hire as investment bankers. The company wants to ensure diversity and make sure the new crop fits its culture and stays with the company. "We needed a more efficient and more effective screening process," says Courtney Storz, the banking giant's head of global campus recruitment.

Citigroup is rolling out software from a Seattle startup called Koru. It's a two-step process. Koru first seeks to decode Citigroup's culture and the traits of existing employees using a 20-minute survey. Then hiring managers work with Koru to come up with a separate survey for job candidates that looks for key characteristics that would increase the likelihood of a good match.

Former McKinsey consultant Josh Jarrett and tech entrepreneur Kristen Hamilton started Koru four years ago. After culling dozens of research studies on predictors of success, the duo launched Koru's predictive analytics software 15 months ago. The software focuses on candidates in the first seven years of their career because recruiters have little to assess other than grades and the prestige of their college, Jarrett says. "GPA is easy for humans to grab onto and understand and assign too much weight to," he says. "But AI can look across variables, see patterns in between the data."

Those variables, he says, can reveal telltale signs of crucial qualities, such as persistence. Jarrett says the software uses algorithms that search for signs of grit in past behavior. It's less a matter of any individual sign than the accumulation of them. Maybe a candidate was on the volleyball team. But what

AI SOFTWARE CAN DETECT THE FLASH OF CONTEMPT THAT PASSES OVER AN APPLICANT'S FACE WHEN HE DISCUSSES HIS EX-BOSS.

S

really matters is how long the person persisted—while, say, holding down a full-time job—as well as the leadership role she attained and the solo projects she completed. The software can suggest follow-up interview questions that let employers dig deeper.

Koru's software can also identify a company's past tendencies, such as a history of recruiting from certain colleges, and can adjust to look more broadly. The more data the AI software collects on hiring, retention, and performance, the more it learns.

OME AI PROGRAMS ARE now venturing into the most intangible qualities: emotions that a job candidate herself may be unaware of. HireVue, for example,

uses its algorithm to assess applicants' video interviews. Data scientists teach the software to spot tens of thousands of hints about intents, habits, personality, and qualities. The software assesses whether a candidate uses active verbs, such as "can" and "will" or relies on negative words like "can't" or "have to." It also checks for voice inflections and thousands of microexpressions that convey a range of emotion. The latter are based on a taxonomy by renowned psychologist Paul Ekman, who created an "atlas of emotions" with 10,000 facial expressions, which can flit by in 1/25 of a second. It's easier for software to identify and correlate the emotions than it is for humans.

HireVue uses a two-part process. The client company will record hundreds of job interviews and then chart the performance and retention of those who are hired. The software looks for links between traits found in those interviews and the eventual job performance. It aims to predict, say, whether a person will stay in a call-center job for more than two months or perhaps spot animosity toward past employers. "A person may say they loved their boss, but when they say the word 'boss,' a flash of contempt crosses their face," says Loren Larsen, HireVue's CTO. A single frame catches a sneer on one side of their face. That expression is tallied along with thousands of others.

AI that powerful sounds impressive—and a bit chilling. Among other things, it suggests that something as personal as psychotherapy could someday be handed over to an algorithm. Still, these are very early days. "No one has found the magic bullet yet," says Bersin of Deloitte. If someone even comes close to that, the payoff could be huge.

ALEX FRADKIN

56



THREE YEARS AGO, Coach WATCHED ITS SALES PLUMMET AS AMERICANS LOST INTEREST IN ITS ICONIC HANDBAGS. TODAY, UNDER CEO Victor Luis, IT'S IN THE MIDST OF A REMARKABLE RECOVERY. HERE'S HOW COACH IS CLIMBING OUT OF PURSE PURGATORY.

T'S NOT EVERY DAY that you hear a \$3,500 leather jacket described as a bargain.

But that's the argument Coach CEO Victor Luis is making as he shows off a piece from Coach's new collaboration with hip luxury brand Rodarte. He runs his fingers over the hundreds of small brass rivets fashioned into a floral pattern, marveling at the craftsmanship. "These are hand-painted, cut out by hand, and stitched in one at a time," Luis says. "In Europe they'd call this haute couture. The reality is that at \$3,500, it's a steal."

It still sounds steep, even for a high-end retailer like Coach; after all, the average domestic sales price for one of the company's famous handbags is only about \$325. Then again, this jacket is a statement—a symbol of the strides Coach is making in reestablishing the brand's upscale aura.

The same goes for Luis's surroundings:
the company's spanking-new three-story,
20,000-square-foot flagship on New York's Fifth
Avenue, dubbed "Coach House." It's a stone's throw
from Valentino, Gucci, and Harry Winston on the
world's most expensive shopping strip. The store
is guarded by a playful mascot, a 13-foot dinosaur
called Rexy constructed out of 400 Coach bags.

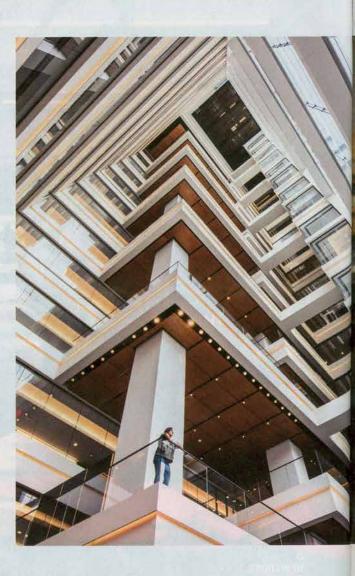
Luis greets store staff by name and happily shows off the shop's monogramming counter and the wall display showcasing classic Coach bags going back to the 1940s. The CEO's favorite design touch: the mosaic floor in the store's elevator, depicting Coach's horse-and-carriage logo. "I've always wanted the store to feel like it harkens back ... to our founding and to the romantic days," he says.

Coming from Luis, that sentiment carries extra meaning. Since taking Coach's reins in 2014, the 50-year-old executive has done what few retail CEOs have been able to do: tapped into his company's successful past to help it compete in a difficult present. Three years ago, Coach was hemorrhaging market share, suffering the effects of a discount-fueled expansion that tarnished its brand and drove customers away. To revive the company, Luis essentially launched a campaign to recover its 20th-century mystique. He shrank the business—on purpose—and repositioned Coach as a smaller, healthier retailer, prioritizing quality over mass-market quantity.

The flagship store and the \$3,500 jacket represent the quality side of the formula. Executive creative director Stuart Vevers has reinvented Coach as a player in high-end apparel—which in turn makes it easier for Coach to sell other products at a premium. But it's the quantity part of the equation that represents the bolder move. Since 2014, Coach has closed dozens of stores, ended most online flash sales, and begun exit-

ing hundreds of department stores, top line be damned.

The strategy caused heart-stopping sales declines; Coach's North American revenue fell by double-digit percentages in its fiscal 2014 and 2015, and shares still trade at barely half what they did in 2012. But the tough medicine is now paying off. Coach recently reported its fourth straight quarter of North American comparable sales growth; and



total sales are on track to tick up for the second year in a row in fiscal 2017, to \$4.5 billion. "This company is materially healthier than it was two, three years ago," says Craig Johnson of Customer Growth Partners, a retail consultancy. Coach is weaning customers away from deep discounts, an achievement most retailers can only fantasize about. And a few weeks ago, it announced a \$2.4 billion acquisition of erstwhile rival Kate Spade, a deal that added an exclamation point to Coach's comeback story.

To be sure, it's far too early for Luis to claim victory. One Citi analyst recently mocked references to Coach's "turnaround," noting that North American sales remain 30% below their peak. The company still gets the majority of its revenue from outlet stores, where cachet takes a back seat to price cuts. And it's still heavily reliant on handbags—a category whose sales growth has slowed to a crawl.



That's why the Kate Spade acquisition is so significant. It's both an assertion of strength by the company and the biggest move to date in a radical strategic pivot. Luis wants Coach to become the first U.S. luxury accessories conglomerate, a smaller, stateside version of an LVMH or Kering or Richemont, whose portfolio will include shoes and high-end apparel as well as leather goods. Evolving into a "house of brands" could protect Coach from the ups and downs of depending on one product and one brand—and secure its future.

York workshop, Coach owes its emergence as a luxury brand to an anything-but-luxurious American pastime. In the early 1960s, it began making wallets out of the hard, durable leather used in baseball mitts. (Industry lore holds that Coach got the leather cheap from a supplier with excess stock to get rid of.) The resulting products became softer and malleable over time, like an outfielder's glove, earning Coach a reputation for quality and a loyal clientele. And Coach's cachet grew immeasurably after the company hired Bonnie Cashin in 1961 to launch its women's line. Cashin created what are now iconic features of Coach bags, like the small hangtag that bears the brand's name, and the signature turn-lock.

Coach wallets, money clips, and bags became standard gifts for someone finishing college or getting a first job. And the company's growth went into hyperdrive under Lew Frankfort, its CEO for more than three decades. Frankfort saw an opening in the market for affordable luxury. "Where they would be pricey, we would be affordable," Frankfort tells Fortune, describing European luxury brands. "Where they would be snooty, we would be friendly." That orientation led rivals to dismiss Coach as "McDonald's luxury," but it also elevated Coach from niche to powerhouse. On Frankfort's watch, Coach's total revenues rose from \$6 million in 1979 to \$5 billion in 2013, a more than 800-fold increase.

Still, that aggressive expansion came at a cost. As Coach grew, it lost focus and prestige. In 2008, as the Great Recession loomed, Frankfort doubled down on store expansion, broadened its lower-end collections with bags made of cheaper fabric, and added far more

O
LUXE INTERIORS
Opposite: The
atrium at 10 Hudson Yards, home of
Coach's headquarters. Left: Designer
Stuart Vevers has
helped Coach make
a splash for the
first time in fashion
apparel.

products carrying Coach's "C" logo. The company also went all in on factory outlets. Coach has never broken out how much those stores generate, but by 2013, Wall Street firms had it pegged at 60% of sales. "That's how industries commoditize themselves," says UBS analyst Michael Binetti. Soon after the recession, more than half of Coach's sales came from handbags

costing a relatively cheap \$200 to \$300.

None of that mattered as long as Coach was growing. The company reached a high-water mark in 2011, leading the U.S. handbag market with a 29.2% share, according to Euromonitor International. But upstart brands like Michael Kors, Tory Burch, and Kate Spade soon began outmaneuvering Coach. Kors was a particularly aggressive foe—opening stores right next to Coach at dozens of malls, to siphon off traffic, and undercutting Coach on price.

Worse yet, Coach's brand was losing its distinc-

tiveness. At one point in 2014, Coach execs showed employees slides of Michael Kors, Kate Spade, and Coach stores with their logos blocked out and quizzed them on which was which. To the dismay of the brass, many of the staff couldn't tell them apart. By that year, customers had gradually turned their backs on a brand many now saw as schlocky; Coach's share of the handbag business had fallen 12 percentage points, and Kors was No. 1. "You literally saw market share just walk across the mall," says Binetti. This was the exodus that Victor Luis would be asked to stop.

PSCALE RETAIL was pretty much unknown on São Miguel, the impoverished island in Portugal's Azores archipelago where Luis was born. Relatives in the U.S. would send young Victor care packages of clothing and Wrigley's gum. Today, in his office overlooking New York's Hudson Yards development, he keeps a glass bowl filled with Wrigley's as a reminder of those days.

Victor's family immigrated to the U.S. in 1973, when Victor was 7, eventually settling in East Providence, R.I., where his parents made ends meet with manufacturing jobs. Victor earned a scholarship to College of the Holy Cross in Worcester, Mass., then studied international economics on a Rotary fellowship at Durham University, in Britain. He seemed destined for academia. "Because of our blue-collar background, luxury was the furthest thing from my mind," he says.

But luxury found Luis. In Britain, he met a fellow expat who had started an import company bringing Portuguese cork, wines, and crystal into Japan. Luis joined the venture in 1991, and it led to a marketing job in Japan with Moët Hennessy, a boozemaker owned by French conglomerate LVMH. Later came gigs as CEO of the Japan unit of LVMH's Givenchy—Luis's first exposure to fashion retail—and as North American chief for French crystal maker Baccarat.

That circuitous journey helped Luis develop what colleagues say is a rare combination of conceptual creativity and skill at execution. As Frankfort puts it, "He can go high and low at the same time." It also taught Luis that he'd have a greater chance of reaching the top at an American luxury company, since family ownership at European conglomerates limited upward mobility. In 2006 he joined Coach as head of its Japan business; he rose to head its international division, and by 2013 he'd been named second-in-command and was being groomed for the top job. Early the following year, he took the reins as CEO from Frankfort.

By then, the board and C-suite were deep into a debate about Coach's direction. The company had made incremental changes, unveiling a new look for stores and moving deeper into clothing and footwear. But Luis decided Coach had to take much more drastic steps. In June 2014 he announced that Coach

would close about 70 North American stores, or 20% of its fleet, to concentrate its store budget on its best locations and spruce up their look. Luis ratcheted back online sales events for outlets (they now do two or three a month, rather than 13), even as he improved the product selection in those factory stores. And he later began pulling Coach out of many department stores, theorizing that those venues'



dwindling shopper traffic and deep discounts on other products were cheapening Coach's reputation.

Coach now has 222 North American stores, excluding outlets, compared with 354 five years ago. You don't need an MBA to know that fewer stores mean lower sales. But even at remaining stores, sales plunged. On the day Luis announced the first closures, Coach's stock dropped 9%. He and his team warned Wall Street to expect about eight quarters, an eternity in retail, before North American revenue

would turn around. To analysts' amazement, the forecasts were spot on, earning Luis and Coach a ton of credibility in the investment community.

The forecasts came true largely because Luis's bet paid off: Becoming less ubiquitous restored Coach's aura. In UBS's recent annual survey of handbag shoppers, 72% of customers had a favorable view of Coach, and respondents gave



Coach higher marks for quality than Kate Spade or Kors. Just as important, in Coach's most recent quarter, 55% of the handbags it sold in North America cost \$400 or more, up from just 30% two years earlier.

Those are heartening numbers in a value-conscious era. During the Great Bag Boom earlier this decade, women would buy several handbags a year to build a wardrobe. "Now it's about collecting one signature item, that one great bag," says Marshal Cohen, chief industry analyst at market

research firm NPD Group. And Coach is often that bag. "They've begun to create buzz around the brand again," says Ron Frasch, a former chief merchant at Saks Fifth Avenue, and now a private equity executive.

But that buzz wasn't built on austerity.

HEN STUART VEVERS wants to reconnect with the DNA of the Coach brand as he sets about designing a collection, he hangs out in the climate-controlled archives on the ninth floor of company headquarters, where it houses 28,000 Coach items going back decades. Among the gems are a 1981 "Stewardess Bag" for United Air Lines' flight attendants, with the airline's logo embossed in the leather, and a 1968 Bonnie Cashindesigned handbag called "Holster," a simple classic that wouldn't look out of place in a Mad Men episode. "It's got a history, and that's why there's trust," he says of Coach's collection.

Though Vevers is British, he's enamored of America's take on luxury, which emphasizes youthfulness and quirkiness over European-style formality. In the five years before he joined the company, Vevers (who doesn't have a driver's license) took frequent Amtrak trips to deepest America, hitting vintage shops at stops along the way. "I was inadvertently researching my first collection at Coach," says the designer. The research paid off: Luis and Frankfort recruited Vevers in 2013, poaching him from Loewe, the LVMHowned European fashion house. Vevers won the job with sketches of a collection of baseball jackets, and the deal was sealed during a weekend visit to Frankfort's home in the Hamptons.

Coach had made a brief foray into haute couture in

AVOIDING **EXTINCTION** Rexy, a dinosaur made of 400 bags (opposite), dominates the New York flagship store. High-end materials (left) have helped Coach recover

its upscale "halo."

the late 2000s, with an eponymous line by former design director Reed Krakoff, an architect of the company's mass-market rise. That effort fizzled; Vevers's has soared. He began with small showings at New York Fashion Week. By 2015 he'd assembled a full ready-to-wear collection, for spring 2016, that anchored Coach's first-ever runway show. The collection drew raves in

the fashion press: Vevers recalls how coworkers wept with relief when the reviews came in. And this year, at the Metropolitan Museum's Costume Institute gala, actress Selena Gomez, Coach's new celebrity spokeswoman, generated buzz on the red carpet in a Veversdesigned dress, a rare Coach foray into evening wear.

Coach is also wooing fashionistas with more casual clothing, like floral dresses and shearling jackets. At Coach's fall 2017 New York Fashion Week show in February, Vevers showed off irreverent fare such as leather doctor bags covered in prints of vintage cars or cherries. "The idea of luxury has shifted so much," he tells *Fortune*.

Apparel remains only a small component of Coach's revenue; couture, even smaller. But their impact on the brand stretches beyond dollar terms: They help fix what UBS's Binetti calls "the brand's halo," reestablishing an aura that burnishes the entire product line. Vevers says he wants to make people feel "cool" when they put on a Coach leather jacket; that, in turn, is one key to commanding higher prices.

N 2015, on his first anniversary as CEO, Luis landed a \$574 million cash deal to acquire luxury footwear brand Stuart Weitzman. The deal immediately made Coach a more serious player in shoes. But it also was a down payment on a strategy that Luis hopes will eventually leave Coach far less vulnerable to trouble in the handbag market.

In Europe, most luxury brands are part of a conglomerate. LVMH owns Christian Dior and Louis Vuitton. Kering has Saint Laurent and Gucci. Richemont has Montblanc and Cartier. Stateside, in contrast, many high-end names are stand-alone public companies: Tiffany & Co., Ralph Lauren, Michael Kors, and of course, Coach. U.S. investors don't generally love conglomerates. They often trade at lower multiples because Wall Street sees diversification as destroying value, notes Aaron Cheris, head of Bain & Co.'s retail practice in the Americas. What's more, conglomerates often subsidize struggling brands rather than act decisively to fix them. "You really want people in a brand to have their hair on fire if they need a turnaround," says Cheris.

But having worked under both, Luis leans toward

HANDBAG

HISTORY

Bags stored in the archives at

Coach's head-

quarters. The

28,000 items in

Vevers and the

firm's designers.

the archives are a key resource for

the European model. "Operating multiple brands allows you to make better long-term decisions for each brand," he says, without the pressure to take shortcuts to resolve short-term crises.

Coach has a lot to offer the companies it buys. In an industry known for indiscipline—"Our industry historically shoots from the hip," says longtime Coach executive

Todd Kahn—it's widely regarded as a superbly run company, with a strong supply chain and a knack for eliminating inefficiencies. And its clout with landlords could make it an ideal partner for fashion brands with rising reputations but fewer resources, helping them secure better real estate. Those brands, of course, would be just as valuable to Coach: They could help the company capitalize on trends in fashion and luxury wherever they appear.

Coach itself has been the subject of takeover rumors, but in the past year executives have sent clear signals that they'd rather eat than be eaten. In April the company hired Joshua Schulman, ex-president of Bergdorf Goodman, to become CEO of the Coach brand starting in June—a clear signal that Coach Inc. is restructuring itself as more of a holding company. At different points, rumors flew that Coach was pursuing Burberry, Kate Spade, and shoemaker Jimmy Choo.



Ultimately, it was Kate Spade that looked most attractive. On the surface, the deal doesn't diversify Coach's product portfolio as much as, say, Burberry might have, since Kate Spade, too, is best known for handbags. But the smaller firm has well-developed product lines in shoes and apparel. As Luis points out, its buyers skew younger: 60% of Kate Spade customers are millennials, compared with less than 50% for Coach's brand. And the acquisition will put Coach in better shape to compete with Kors, which is now having

struggles of its own with the effects of overexpansion.

The purchase will deplete much of Coach's \$1.9 billion cash hoard, making it likely that its next acquisitions will be small. Still, speaking with *Fortune* on the day the deal was announced, Luis depicted the acquisition as a step toward making a luxury conglomerate in the American mold, rather than the European.

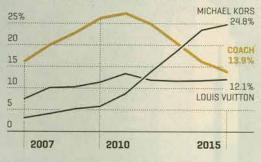
tors—Goldman Sachs, long a Coach skeptic, recently upgraded the stock. Since September 2015, its stock is up more than 50%, roughly double the S&P 500; it rose another 5% the day after the Kate Spade announcement. Even without another big buy, the handbag brand has room to grow in Europe and in China (already a \$600 million market).

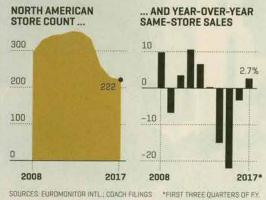


## COACH'S STRATEGIC RETREAT

In the 2000s, Coach's rapid expansion helped create a nationwide handbag boom—and then, a handbag bust. After losing ground to competitors, the 76-year-old brand has shuttered some stores and focused on selling its products at premium prices again.

## **NORTH AMERICA HANDBAG MARKET SHARE**

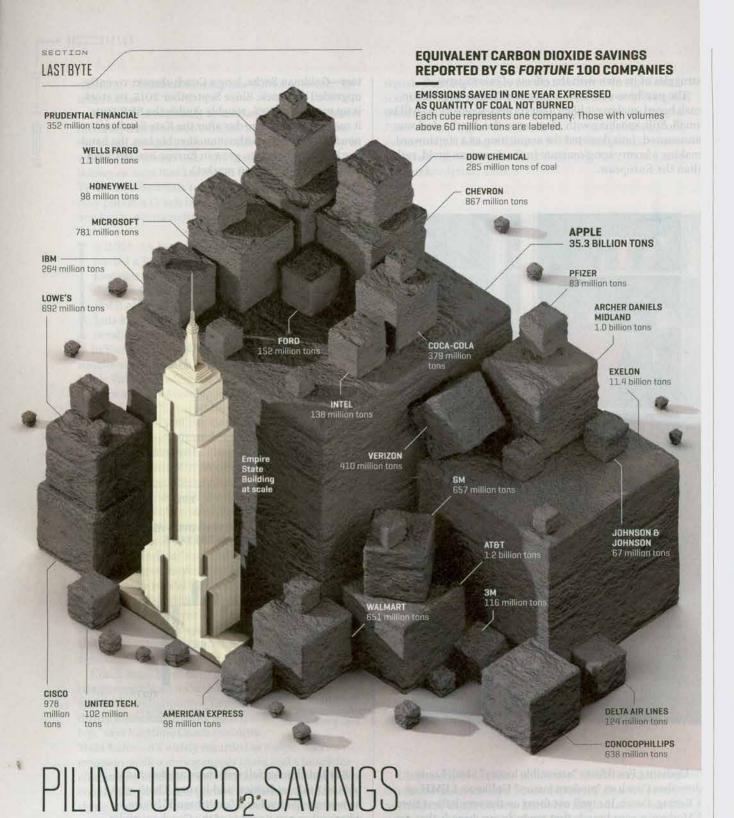




Updating Frankfort's "accessible luxury" ideal, Louis describes Coach as "modern luxury." Unlike an LVMH or a Kering, Coach Inc. will not focus on the very loftiest tiers. "'Modern' means brands that are inclusive, brands that are more approachable, that are not just based on exterior symbols of status," says Luis. "We're not based on exclusivity at high prices that only a few can afford."

For now, Coach's vision is boosting spirits inside the company, and inspiring renewed faith from outside inves-

But Luis knows full well there are few industries as fickle as fashion and luxury. That's why he repeatedly invokes a "multibrand" future where other components of the Coach portfolio drive more growth, in case handbags keep losing steam. "Anytime a brand tries to be the brand for every consumer, invariably it loses its uniqueness," says Luis. That's not a road Coach plans to go down again.

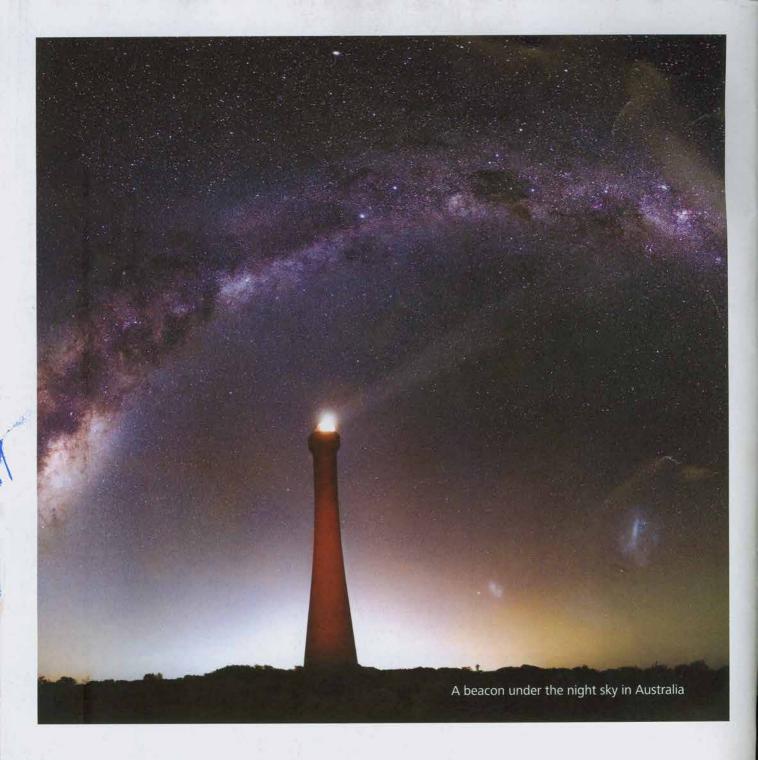


PRESIDENT TRUMP HAS made it clear that boosting business is his priority, not combating climate change. In March Trump signed an executive order to undo Obama's Clean Power Plan, and he's vowed to withdraw the U.S. from the Paris climate agreement. But the biggest companies in the U.S. continue to embrace clean energy policies. So says a new report by Calvert Research, CDP, Ceres, and World Wildlife Fund called "Power Forward 3.0." The study found that 240 companies in the 2016 Fortune 500 had climate-related goals, up from 215 a few years ago. Here, the 2015 CO<sub>2</sub>-equivalent savings of the 56 companies in the Fortune 100 that reported results in 2016. — BRIAN O'KEEFE

## WallpaperSTORE\*

Design lovers say, 'Yes', when you order online at WallpaperSTORE\*





# **Exploration**lights the way forward

The relentless pursuit of innovation enlightens the intelligent world

