

WHARTON

MAGAZINE

PROFILE

Pivotal Moves

JOHNSON & JOHNSON CEO
ALEX GORSKY WG94
PG 48

13 NEWS
The MBA Bonus

18 IDEAS
Adam Grant,
Original

54 PEOPLE
The Team That
Turned Microsoft





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How to Measure Wharton by Its Alumni

WELCOME TO THE new *Wharton Magazine*. We've revamped the magazine from front to back to deliver a more thoughtful and enjoyable experience. Our goal was to create a magazine that reflects the transformational power of a Wharton education as measured by the contributions of our extraordinary alumni.

And when I say "extraordinary," I mean it. Since arriving at Wharton I have had the opportunity to meet with a great many of you. My Global Conversations Tour took me to 20 countries on four continents, giving me the chance to talk with you about Wharton, your organizations and the regions in which you live.

From Shanghai to Miami, from London to Chicago, and at every stop in between, our conversations have brought into perspective some of the most pressing topics for the future of business and, in my role, for the future of business education. The global reach, incredible quality and deep School commitment of our alumni are indeed Wharton's greatest assets. Here's a sample of what I've discussed with and learned from you:

➡ MOOCs and online education are here to stay. It is wonderful that Wharton is a real leader and innovator. Through Wharton Online, we are able to offer a sample of Wharton thought leadership to millions of learners across the globe, who otherwise might never have heard of us. In addition, MOOCs are helping us evolve teaching methods to offer even richer learning experiences for those who do have the opportunity of being on campus to earn their degree.

➡ The private sector will be called on more and more to sustain the infrastructure and social needs of the public sector. We are sending our students into the world with the best possible education to make their mark in this area as we continue to delve deeply into the fields of public policy, innovation and alternative investing.

➡ Wharton's focus on turning analysis into action is more valuable now than ever. We teach

FROM THE DEAN

the importance of using analytics to drive decision-making. In an era of big data and technology-led breakthroughs, a Wharton education helps leaders excel.

➡ We are global in our DNA. Our impact is tangible throughout the world as our graduates fan out to solve problems and create new opportunities. They leave Wharton with a global perspective, having experienced immersive programs from China and India to Central and South America. They are ready to lead, anywhere in the world.

I can't wait for the next chapter of my continued learning and doing at Wharton.

Geoffrey Garrett is Dean and Reliance Professor of Management and Private Enterprise at the Wharton School of the University of Pennsylvania.



↓ Dean Garrett's Global Conversations Tour took him to 20 countries.

Contents

Spring 2016

1

NEWS

13

**INDICATORS
MBA Bonus**
A Wharton degree has never been more valuable.

14

**REGIONS
Wharton's
Global Impact**

“A bridge of hope.”

Father Javier Vidal W91, responsible for public schools in the Dominican Republic for more than 3,000 underprivileged children, p.14



8

**WATCHLIST
Beer &
Cookies**

36

KNOWLEDGE@WHARTON
**How to See the Future
(And Know
When You See It)**
Philip Tetlock
and Dan Gardner



2

IDEAS

18

**FEATURE
Adam Grant,
Original**
His new book goes against the grain.
Richard Rys

24

**ESSAY
Altering the
Cultural Balance**
Cognition needs a dose of emotion.
Sigal Barsade

26

**ESSAY
Mastering
MOOCS**
The flexibility of online ed.

29

**SYLLABUS
Learn
to Define
Your
True Success**
A short course for readers.

31

**WHAT I'M
READING
Books to Expand**

32

**THE CASE
Brazil's
Two Brands**

34

**WHITEBOARD
At the
Whiteboard
with
Chris Geczy**

42

K@W DATA

45

**K@W THE DECK
Density
& Pollution**

“Everyone wants to be more original, and most of us conform more than we intend to.”

Adam Grant, p.18

BOTTOM: CYNTHIA KITTLE; TOP: BEN WISEMAN

3

PEOPLE



54

**FEATURE
It's a Ten**
Richard Rys

48

**COVER STORY
Turning Points**
Johnson & Johnson CEO Alex Gorsky.
Christine Giordano

65

**PIVOT
Submarine to FinTech**
Helping vets with their future.
Steve Weiner

66

**ESSAY
Good at Grades, Better at Google Calendar**
Olivia Nelson

68

**COHORT
Investing in Diversity**
Aria Florant and Brian Vo

“Classes alone can't teach us why or how someone became the person they are.”

Aria Florant and Brian Vo, p.68

COVER PHOTO:
Stephanie Diani

73

**Class
Notes**

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Sep. 19–23, 2016

**The Leadership Journey:
Reimagine Your Leadership**
Sep. 19–23, 2016

Women's Executive Leadership
Sep. 26–30, 2016

News



Network: Watch List—8 Indicators—13 Regions—14



Wharton's newest entrepreneurs to watch: see p.8

Beer & Cookies

Current ventures by Wharton alumni range from med tech to not-so-guilty pleasures.

→ Career Day 365

WEMBA student [Julian Baldwin](#) believes in the power of mentors and role models to change the career trajectory of people born to underprivileged circumstances. He's turning thoughts into actions, and is aiming to level the playing field, with his nonprofit, Career Day 365. Partly based on an online platform that allows mentors and students to connect virtually—ensuring scalability for the concept—Baldwin also believes in face-to-face connections. In early January, for instance, he recruited from amongst his Bay Area network—including his classmates at Wharton's San Francisco campus—to participate in a summit with over 150 local high schoolers. They learned about what opportunities exist as career paths, as well as how to get those opportunities with interview, resume and college/career readiness advice.

NOMsense

Cookie sandwich concept first baked up in Penn's Harnwell College House in 2014, founded by Wharton senior [Roopa Shankar](#) and College seniors [Alina Wong](#) and [Rachel Stewart](#), and now an Entrepreneurs' Organization Global Student Entrepreneur Awards national finalist. Their spring menu features snickerdoodles with chocolate cookie dough filling, semisweet chocolate drizzle and crushed toffee filling, and that's just their "classic." You can also try the "cutie pie," the "nut job" or the "no03" cookies in stores around the Philly area. Or order online.



Scan Our Skin LLC

Born out of the "Longest Running Startup in the History of Startups," 3000BC, a holistic treatment center/spa/boutique that markets an exclusive line of therapeutic and clinical skin care launched by [Korin Korman WG92](#), SOS allows (*forces?*) people to view their skin damage in a new light. Using facial imaging technology and a global database of skin features, you can now see how your pores, wrinkles, sunspots, acne and more score for your age and gender. Then receive the care and products to salve your skin and your confidence.

Illustrations by Cynthia Kittler



→ AiCure

Combine artificial intelligence with mobile technology and you might have the sustainable solution to one of the medical world's top patient problems: getting people to take their darn prescription medicine. Whether their meds are supposed to fight a chronic health condition or are part of sensitive drug trial research, people who fail to take their medicine as prescribed collectively cost the U.S. health care industry \$378 billion each year. Quite a problem for savvy entrepreneurs to solve. Now add in the \$12.25 million in funding raised by AiCure and co-founder [Adam Hanina WGo7](#), and we may have a cure.

Yards

This Philly brewer got started 22 years ago before "craft beer" was coined, and with the froth in the insurgent beer segment today, Yards is booming. COO [Trevor Prichett Go6 WGo6](#) is on the hunt for a new facility, up to 100,000 square feet, which would more than double its current brewery's size. Last year, it sold 42,000 barrels of beer—including such go-tos as Philadelphia Pale Ale and Brawler, as well as unique brews like its Ales of the Revolution series, whose recipes aim to recreate beers made and imbibed by Thomas Jefferson, George Washington and Penn's own founder, Ben Franklin.



Snowe

This is one of those classic campus founding stories that Wharton ought to broadcast far and wide. Then-entrepreneurial students [Rachel Cohen WG12](#) and [Andres Modak G12 WG12](#) knew they wanted to launch a startup as classmates, but it wasn't until they moved to NYC together as a couple after graduation that they saw their opening. The two extremes of home essentials shopping floored them: either ridiculously expensive boutiques or middling quality brand-name retail stores. They began exploring how to fill that market gap, building a direct-to-consumer e-commerce site called Snowe (launched June 2015) and collaborating with European and American suppliers. The company offers luxury-quality homewear at Pottery Barn prices—and does so with the consumer's peace of mind and convenience as a priorities. They focus on limited items—tableware, bath items and bedding—and offer them in one-stop bundles.



→ Nirvana India Pvt.

Beijing gets all the bad press, but pollution readings in New Delhi can peak just as high. [Jai Dhar Gupta W94](#) is making a killing in India by selling stylish masks that help pedestrians from getting killed by air pollution. Gupta sees growth in automobile air purifiers and other technology to help his fellow citizens breathe a sigh of relief.



Havenly

After raising more than \$7 million from investors and being recently named to *Poets and Quants* top 100 MBA startups, interior design service provider Havenly and its co-founders—second-year MBA student [Emily Motayed](#), Lee Mayer and Jessie Dixon—appear to have a blue print for success: flat fees. Customers can sign up for a “small refresh” to one room for \$79, or hand over the keys to their whole home for \$199 per room. Oh, and it can be done all online. Customers choose from a network of designers, upload photos, work with their pro, and order all the furniture and homegoods through Havenly’s store. Some assembly may be required.



→ Penn Vet

TV channel *Animal Planet* is producing an all-new series, PENN VET, getting behind the scenes of what it’s like to be a Vet student at Penn. If they want to show some of the true top dogs in the program, they’ll shadow some of the joint-degree students who are earning Wharton MBAs and VMDs. A rare breed indeed. There is actually just one at the moment.

BG Oil Field Services

BG Oil Field Services is one of the most prominent midstream pipeline service providers in the Rocky Mountain and Northern Plains regions of the United States. You may be surprised to hear that Wharton has an influence there—in the shape of Wharton MBA for Executives Program grads [Thomas Logsdon](#), [John Baltes](#) and [Jeremy Korth](#) (all [WG14](#)). With Baltes in the lead, these classmates are running the firm’s North Dakota operations—in the Bakken Formation. After the price of oil cratered, though, they have their jobs cut out for them. Their fact-based, data-driven, private equity-funded approach is what explains how they were able to deliver almost as much profit with less revenue in 2015—and explain how they’re positioning for success when the oil price rebounds.



The Global CO2 Initiative

In case you didn’t feel bad enough about your carbon footprint, then read up on the Global CO2 Initiative, the efforts of [Bernard J. David C79 W79 WG82](#) to solve the climate change crisis through a systems approach based on science and market forces. After 15 years of sustainability research, David and his team believe they’ve come up with a way to capture and transform CO2 emissions into valuable products. The goal: harness 10% of the world’s emissions. Before you chuff, note that McKinsey & Company is a partner, and the market for these “valuable products” is estimated to become \$800 billion to \$1.1 trillion annually by 2030.

→ Hull Tactical US ETF

[Xiao Qiao EAS11 W11](#) began his career as a researcher while a student in the vaunted Jerome Fisher Program in Management & Technology. Now as a Ph.D. candidate at Chicago’s Booth School of Business, he’s teamed up with brand-name trader Blair Hull to solve the long debate on whether market returns are forecastable. Their answer: yes. This year, Qiao and Hull penned a paper on return predictability, showing that there is “substantial predictive power in combining forecasting variables.” He and Hull have teamed to put the theory to practical test with an ETF called Hull Tactical US (HTUS). Launched in June 2014, the ETF has seen a 1 percent gain while the markets are down near double-digits—though of course Qiao cautions it’s very early days. The ETF’s approach is high returns with low volatility. Qiao’s overall approach is how real-world big data can have big implications for finance.

→ Turtle Wise

This startup online “experience network” offers users confidential advice on life’s decisions—including education, career management, politics, lifestyle and family, the military, and entrepreneurship. Users seeking answers are called “explorers,” while the experts are “gurus.” The gurus in turn earn rewards for their advice. Founded by [Kevin Walker WEMBA26](#) with CTO [Prashant Dasai WEMBA34](#), the site launched in March at the SXSW conference.

Pratiksha Fine Jewelry

[Parag Vaidya W04](#) and his sister [Tisha WG15](#) have a family history in the jewelry industry. Their parents have been in the diamond and gem trading business since they emigrated to the U.S., and they employed the siblings along the way. With Tisha fresh with an MBA, the pair decided to make a go of it with a direct-to-consumer e-commerce approach to a world glimmering with disruption potential. They hope to solve the frustrations of consumers with finding elegant, artisanal, yet more affordable jewelry.



PennPAC

Penn and Wharton alumni in the NYC and Philly areas are harnessing their valuable consulting skills for the greater good through PennPAC. Through the organization, nonprofits that can’t afford traditional consulting services can receive Ivy League pro bono support. Teams of Penn and Wharton alumni, across all majors, careers and fields of study, team up on projects. Grads run the show too, including founder Jackie Einstein Astrof C93 and vice chairs [Anne Turner WG94](#) and [Jeannette Chang W08](#). As always with Wharton projects, the numbers bear out the success. Since it launched in 2010, 300+ volunteers have logged over 10,000 hours of service worth more than \$2 million. Anecdotes pour in from clients, too, about 50 percent increases in fundraising, or 31 percent higher revenues, or growth into a new community—all thanks to alumni’s assistance.



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MBA Bonus

The rewards of a Wharton degree continue to rise. Here are stats on the MBA class of 2015.

\$122,000

Median salary of those entering financial services, plus \$40,000 sign-on bonus and \$60,500 median year-end bonus

98.4%

Wharton MBA Career Management reported a record-high percentage for the Class of 2015 members who had at least one job offer before they walked at Graduation

FIVE YEARS

Median work experience pre-MBA

\$300,000

Highest reported sign-on bonus

ONE

Job function for at least six years running: consulting/strategy, with 30% of Class of 2015 respondents accepting such a position

15.5% vs 24.3%

Change in percentage of MBAs accepting international placements, 2015 vs. 2010

22.3% to 13.4%

Where are those formerly international jobs going? This is the percentages of MBAs accepting jobs in the western U.S., 2015 versus 2010

36.9%

Percent of class who accepted a position in financial services, the top hiring industry

88%

The full-time MBA is notorious for giving students a chance to pivot away from their previous careers (and lives in some cases). But would you guess that nearly 9 out of 10 Wharton MBA students change careers before graduating

\$125,000

Median base compensation

\$4,000 to \$275,000

Range of reported guaranteed year-end bonuses

11.3%

Percent of class who accepted a position in the technology industries

SEVENTY ONE

Number of countries represented in the Class of 2015

Ticker

➔ U.S. News unveils 2016 Best Countries Rankings, based on pioneering research from Prof. Dave Reibstein. See page 32 for a list, and a focus on Brazil.

➔ Congratulations to this year's Y-Prize Winner, Fermento. The team has developed a way to ferment beer more quickly. Congratulate the team on their creative idea and win!



➔ Penn's very own emoji turns the University's shield into a thing of social-media awesomeness.

➔ Wharton Online launched new specializations, including Business and Financial Modeling and Entrepreneurship. These four-part certificate programs bolster the School's

existing offerings, like Analytics and Business Foundations.



Wharton's Global Impact

Downloading Knowledge to Journos

New York City, USA

The Wharton Seminars for Business Journalists program has helped reporters and editors gain a better understanding of economic and business issues for an amazing 48 years. The latest seminar took place on March 3 in NYC, featuring professors [Peter Conti-Brown](#) and [Sam Chandan](#), discussing Fed policy and real estate trends, respectively. Radian Group CEO [S.A. Ibrahim WG78](#) delivered the luncheon keynote.

Talking Innovation and Market Leadership

Toronto, Canada

As the most recent event in the Lifelong Learning Regional Alumni Program, the alumni community in Toronto hosted Wharton's Richard A. Sapp Professor [David Hsu](#), who shared new research on how, when and why innovation can disrupt an entire industry.

Brazil's Two Brands

Rio de Janeiro, Brazil

See The Case, p. 32

Achieving Dreams

Santo Domingo, Dominican Republic

[Javier Vidal W91](#) is a Catholic priest of the Society of Jesus, which runs public schools in the Dominican Republic for more than 3,000 underprivileged children. In March 2015, the Wharton International Program brought a couple dozen students to visit some of the schools. The students' appearance brought Vidal closer to the Penn and Wharton Club of Dominican Republic. Led by club co-president [Fabian Mendy WG92](#), the alumni community established a fund to cover the cost of university education for a student at one of Vidal's schools. Mendy, who serves as territory assurance leader for the Interamericas for PwC, also helped establish professional workshops for the students. "A bridge of hope," Vidal calls the effort.

Gaining Economic Growth for the Long Run

Amsterdam, Netherlands

What are the economic conditions for sustainable development? There's still time to find out the answer—at the Wharton Global Forum Amsterdam, occurring from June 22 to 23—as well as many other insights. From sustainable energy to impact investing, from Uber to branding nations, the selection of topics will be drawing a superstar speaker lineup, such as professors [Katherine Klein](#), [David Musto](#), [David Reibstein](#) and [Mauro Guillen](#), as well as alumni like Big Society Capital CEO [Nick O'Donohoe WG81](#).

Air Masks

New Delhi, India

See Watch List, p. 8

Mobilizing ASEAN

Kuala Lumpur, Malaysia

The Wharton Global Forum Kuala Lumpur featured star speakers such as [Dr. Zeti Akhtar Aziz G74 GR78](#), governor of the Bank Negara Malaysia; [Amit Lohia W95](#), group managing director of Indorama Corporation; Ambassador [Luc Vandebon](#), head of the European Union Delegation to Malaysia; and [Mark Chang](#), founder and CEO of JobStreet. The overarching theme of the Forum was mobilizing economic growth through partnership, but topics were wide-ranging—from tech entrepreneurship to central banks in developing economies.

Seeing the Startup Nation First-Hand

Israel

Students in the Wharton MBA for Executives Program deserve respect. Juggling full-time high-level jobs, full course loads and, for many of them, families, is no easy task. But when it comes to their Global Business Week—their one-week modular course during the second year—there's no need for pity. It's a tremendous educational experience to gain on-the-ground business and cultural insights, not to mention bond with classmates and enjoy the trip. The recent week in Israel, for instance, involved visits to the town of Beer Sheva, where they visited the mayor and its Advanced Technologies Park, and to Jerusalem's crowdfunding startup Our Town.

➔ The first President's Innovation Prize—\$100,000 plus a \$50,000 living stipend per team member—goes to entrepreneurial seniors this month.

➔ Fifth-year Wharton Ph.D. student [Andrew Wu](#) won the BlackRock Applied Research Award for his paper on shock spillover in supply chain networks.

➔ Knowledge@Wharton made Inc. Magazine's list of top 100 podcasts for business and life.



➔ A \$10 million commitment from [Anne Welsh McNulty WG79](#) will drive the expansion and global reach of the Wharton Leadership Program.

➔ In conjunction with Wharton, the World Economic Forum's Global Risks Report had 750 experts assess 29 global risks over the next decade. The risk with the greatest



potential impact: failure to mitigate, and adapt to, climate change.

➔ New research from professors [Donald B. Keim](#) and [Olivia S. Mitchell](#) suggests too many choices in a 401(k) retirement plan could hurt participants.

➔ [Michael Baum WG89](#), a Silicon Valley serial entrepreneur and investor and now CEO of FOUNDER.org, delivered campus' first Leadership Lecture of 2016.

➔ Leaders of new MBA student club, One for the World, ask classmates and alumni to donate 1% of their future earnings.



➔ Penn junior [Theodore Caputi](#) won the annual LDI Undergraduate Health Services Research Prize for interest and initiative in health research services and policy analysis.

➔ A Penn Wharton Public Policy Initiative brief concludes that changes based on U.S. ownership of U.S.-incorporated parent companies may not solve the endemic problems.

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Ideas

2

Lifelong Learning: Syllabus—29 What I'm Reading—31 The Case—32 Knowledge@Wharton—36



Adam Grant, p. 18

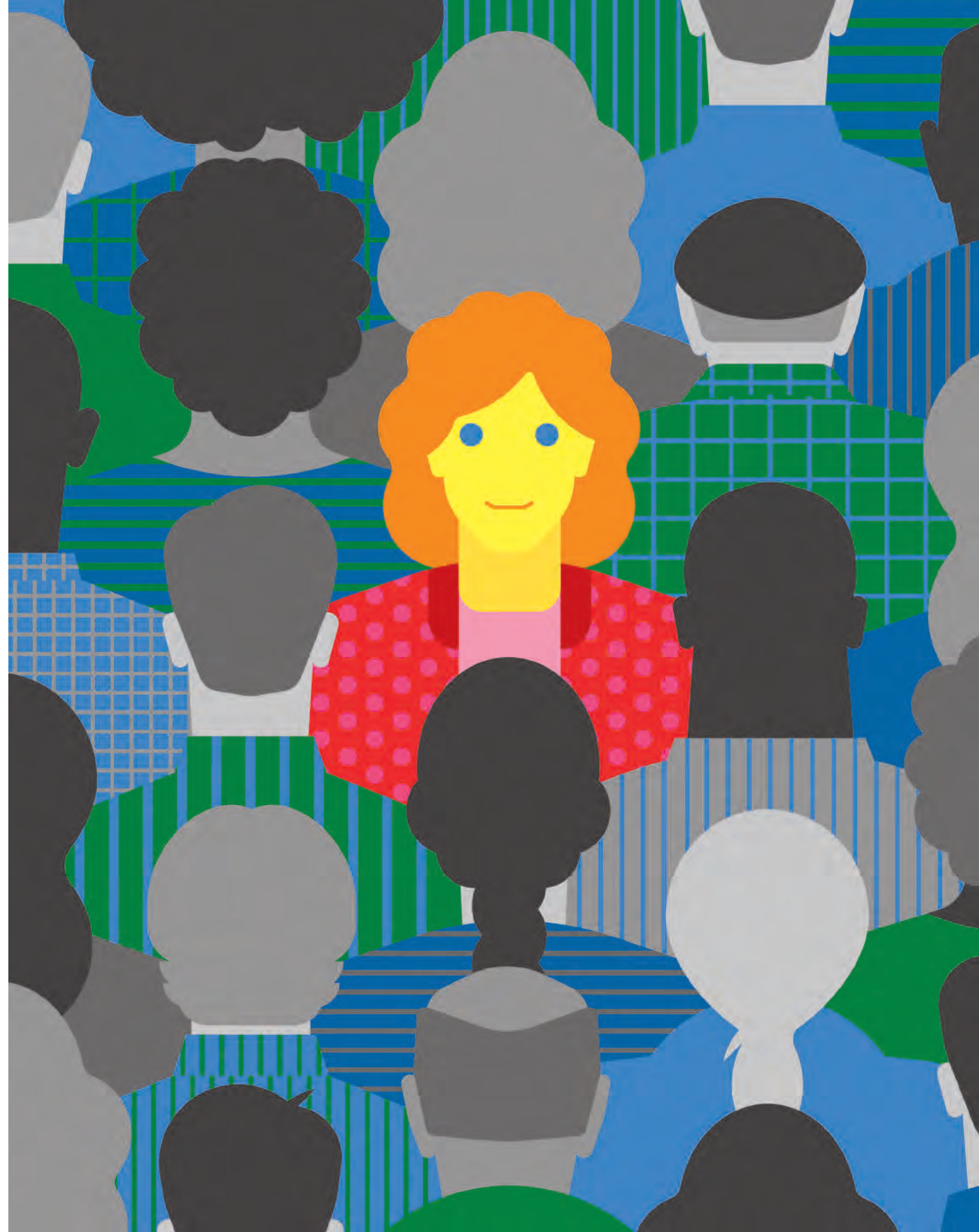
Illustration by Jason Wong

The Wharton
prof's new bestseller
made him ask:
Was *he* a rule-breaker?

Adam Grant, Original

By
Richard
Rys

IT'S ANOTHER WHIRLWIND day for Adam Grant as he hustles into his office on the second floor of Steinberg-Dietrich Hall. Backpack over his shoulder, dressed casually in a North Face jacket, blue flannel shirt and jeans, he shakes my hand and unlocks the door to find his desk covered in mail. Grant hasn't been on campus in a month, thanks to the promotional duties required when you're a bestselling author with a second book, *Originals*, just released to widespread acclaim. Grant's organizational psychology classes are always scheduled for the fall, and it's logical that one might think this warm, bright afternoon in early March would be a quiet one for him. But he's got a tight window for chatting, with a meeting in less than an hour, emails to answer, the third annual Wharton People Analytics conference he's co-hosting in a month, a trip to England in a few days, and those intimidating mail piles to tackle. This is typical. And yet, he says, "There's not a day that goes by where I don't think, you know, I probably could have gotten more done. There are never enough hours in the day." There's also not a day that passes, even if he's nowhere near campus, when Grant isn't teaching.



Spend a few minutes with Grant and it's clear he does not think like most people his age, 34, or any other age for that matter. I ask him how his life changed after his first book, *Give and Take*, a study of the benefits of helping others; it earned raves from the *Wall Street Journal* to Oprah Winfrey. Grant says the demands on his time became so great as a result of its success that he made a list to help him prioritize: family first, then students, colleagues, and in fourth place, everyone else. "But that's also motivating," says perhaps the most productive person you'll ever meet. "It's like, I'm going to be more efficient today."

"No one knows how his brain functions," says Jonathan Tugman, one of Grant's MBA students and a member of his handpicked research team at Wharton (nicknamed "Impact Lab" for its goal of utilizing academic data to effect change). Grant has roughly 300 students across four sections in a semester. By the end of the second week, his goal is to know all of their names; he sometimes promises that for each one he fumbles, he would dismiss class five minutes early. For Grant, this isn't a memorization exercise, it's an opportunity to set a goal and create an incentive that would both benefit his students and motivate him to succeed. "It's like if you took an encyclopedia and gave it humanity," says another former student, Justin Berg.

You can see why Grant has become the Indiana Jones of Wharton. His distinctive look—the shaved bald head that frames a youthful face—makes him instantly recognizable. When he speaks, his eyes widen as if inflated by sheer enthusiasm. Get him going on his research into human behavior or a class project, and Grant's volume spikes like a car engine in park with its engine revving, eager to speed away to some unexplored place. This is why there are lines for his office hours, waiting lists and applications for admission into the lone undergraduate course he teaches, an endless cascade of requests for help, insight, advice, *anything*.

His books have elevated his profile, and in turn, expanded his audience. But for Grant, books are simply extensions of his work in the classroom, teachable moments across 300-some pages for students of all ages, everywhere. Grant will

tell you *Give and Take* was a deep dive into a value system, a worldview that's the very core of who he is—consider it altruistic academia, research designed to help people in practical ways. In a sense, that book was an exploration of himself. With *Originals*, he examines the habits and strategies of trailblazers and non-conformists who make a difference by thinking differently. Sounds a lot like him, too.

But Grant says that in many ways, he's not at all like the thought leaders he learns from in *Originals*. "Everyone wants to be more original, and most of us conform more than we intend to," he says. "The book is aspirational, a chance to reduce the gap between who you are and who you want to be."

Harry Potter and Ask Jeeves

The day before *Originals* was released in early February, Grant is minutes away from taking the stage before a full house at the Authors@Wharton series (which, incidentally, Grant himself launched in 2012). In the audience, a sophomore business major strikes up a conversation with the woman next to him: "Have you ever been to an Adam Grant talk before?" There's a palpable anticipation in his voice, a sense of awe, like a kid who's about to see Bob Dylan for the first time, or the Pope.

Grant's presentation feels more like the lecture you wish you had as an undergrad than a promotional talk. He paces the stage in his usual Silicon Valley semi-casual uniform—untucked plaid shirt, dark denim jeans, sneakers—and ticks off the key revelations in his book, punctuating each with a pop culture reference or an exercise. To show how original thinkers break free from prototypes, he describes a novel that was rejected over and over for not fitting the mold for successful young-adult fiction, given its length and subject matter. "I don't care how long Harry Potter is," Grant yells. "This is a badass book about wizards!" He later illustrates the challenges of communicating ideas by asking each audience member to turn to a neighbor, tap the rhythm of a well-known song, and estimate the probability that your partner will know which tune you're playing. It's harder than some expect, especially when the songs range from "Old McDonald" to

"Call Me Maybe." He peppers his talk with jokes, like this line after explaining that pioneers fail at a higher rate than those who follow: "I think there's a search engine that went this way, but when I asked Jeeves I couldn't get an answer." His pearls of wisdom offer both surprising, data-based insights and a glimpse inside his unique mind: "As much as progress feels like oxygen and delay feels like death, you will discover that if you procrastinate a little bit, you actually become more creative."

Those ideas are at the heart of *Originals*, which represents an evolution of sorts in Grant's thinking. *Give and Take*, his first book, examined the way interpersonal behavior in the workplace

Grant will tell you *Give and Take* was a deep dive into a value system, a worldview that's the very core of who he is.

can lead to success, depending on whether you're a "giver" (generous, helpful), a "taker" (a me-first, dog-eat-dog type), or a "matcher" (trades favors evenly, quid pro quo). Grant himself is a giver, and that book was an attempt to explain his own philosophy towards relationships, backed by data and anecdotes. With *Originals*, Grant explores the habits and strategies of game-changers who think *differently* from him.

He learned that the best advocates for your ideas are not the colleagues who shower you with praise but the disagreeable ones whose trust is hard-earned yet impactful. "They will be much more likely to improve your idea because they're going to push you and challenge you," Grant says. "Disagreeable people are willing to run through walls for you, once they've chosen to support you." *Originals* are often procrastinators who think ahead but don't rush the execution of their ideas; as evidence, Grant cites Martin Luther King, Jr., who planned his "I Have A Dream" speech for months, yet tweaked it right up until the moment he spoke, and largely ad-libbed its indelible climax. As a result of his research, Grant's own habits have changed: he has become a strategic procrastinator, and now keeps an inspiration journal that he updates and re-reads weekly. Rather than risk a "false negative"—quickly dismissing an idea that might not be so bad after all—Grant returns to it with fresh eyes, and often finds patterns of thinking he'd overlooked, or new angles into thoughts that felt half-baked at first.

Across the vast galaxy of gifted professors, at the University of Pennsylvania and beyond, Grant's star is bright and easily seen with the naked eye. His bona fides span the full range of his pursuits. He's won the Class of 1984 teaching award as Wharton's highest-rated professor for four consecutive years, and in the decade since earning his doctorate, has published 38 A-list journal articles—an impressive output for anyone, especially a researcher who's also a regular *New York Times* op-ed contributor and blogger. After Grant earned tenure at 29, the youngest ever to do so at Wharton, his name appeared on one list after the next: top 25 most influential management thinkers around the globe, top 40 business professors under 40,

GEORGE LANGE



biggest idea of the year for his insights in *Give and Take*. His recruiters for presentations and consultant work are a who's who of industry, from Google to Amazon to Goldman Sachs to Disney to the NFL. Malcolm Gladwell praised Grant as one of his favorite thinkers. Facebook COO Sheryl Sandberg calls him "one of the most important influences in my life."

Sandberg's forward to his new book begins with this line: "Adam Grant is the perfect person to write *Originals* because he is one." That stands in sharp contrast to the portrait Grant paints of himself. As an undergraduate at Harvard, Grant had no master plan for his future. He had ruled out careers like investment banking and management consulting for one essential reason—both would limit his impact on the world. If that sounds grandiose, well, Grant himself wouldn't blame you for thinking so. But while he had big ambitions and a precocious drive, Grant was also an introvert and a self-described conformist. "I followed *every* rule," he says. "I remember getting called to the principal's office in elementary school and crying. Even though I wasn't in trouble, just the idea of going there was like I'd done something horribly wrong. In high school and college, I was terrified to be in a room with someone underage drinking alcohol."

Grant's light-bulb moment arrived when he took a personality psychology class with Brian Little, a pioneer in the field and one of Harvard's most beloved professors. "It was a completely transformative experience," Grant says. "I'd walk away from class torn between pondering the meaning of life and laughing at his jokes. I gained a tremendous amount of self-awareness in that class. I thought if I could have even a *fraction* of the impact on students that Brian has had on me, then this would be the most meaningful career I could imagine."

Now a professor of psychology at Cambridge, Little describes Grant as unlike any student he's ever taught. To illustrate that point, Little says he wanted to nominate Grant for a Rhodes scholarship, fully confident that his student would win the honor. (Besides being a star undergraduate, Grant met the Rhodes traditional athletic qualification by dint of being an all-American springboard diver.) But Grant demurred, given he was intent on heading to the University of Michigan's top-ranked organizational psychology program for graduate school. Grant saw a path to his future and (politely) refused to veer from it. That single-minded focus was just one of Grant's remarkable traits. "I was struck by his alacrity, his quickness—you ask a question and he's done more

research before you've had a second cup of coffee," Little says. "He had a fulsome, wholehearted engagement with whatever it was, academic or collegiality. When you meet a student like Adam, you just try to get out of their way, help them in any way you can because you know he's destined for great things."

Great things came Grant's way, but not easily. Research came naturally. With every other step forward in his career, though, Grant had to re-engineer himself to achieve his goals, like some supercomputer updating its own operating system. The early feedback from his students, first at Michigan and later at the University of North Carolina, was brutal (one wrote in an evaluation, "You're so nervous it makes me uncomfortable."). Public speaking beyond the classroom was another skill to learn, a performance that was unlike the dialogue he fostered with students. Grant's hard work in both arenas paid off: now he earns near-flawless student evaluations and recently spoke on the same TED talk bill with Little, an experience Grant compared to "opening for the Beatles."

Writing his first book was a similar challenge, and it almost didn't happen at all. Grant planned to help noted psychologist and author of *The Paradox of Choice*, Barry Schwartz, with his next book, until a group of Grant's students insisted that he pass in favor of striking out on his own. "I didn't know if anyone would believe my ideas or read a book I wrote," Grant says. He took their advice, but his first crack at *Give and Take* was a disaster. "My agent said, 'Write like you teach, not like you write for journals.' I was like, oh yeah. I'm going to rewrite this." Grant threw out his 102,000-word first draft and started over.

To most writers, the suggestion of scrapping an entire manuscript and trying again from scratch is akin to testing out a medieval torture device. (Could we interest you in taking the rack for a spin? A few minutes in this iron maiden, perhaps?) Grant was frustrated, sure; despite evidence to the contrary, we can confirm he is indeed human. But that feeling didn't last long. Where some might see crushing defeat, Grant saw an opportunity to learn a new skill, to speak to a new audience. The result was his first best-selling book. But the reward

was exactly what he explored in *Give and Take*—the benefits of helping people.

Starting with a Failure

A week after my visit to his office on campus, I'm trying to get Grant on the phone for a follow-up interview. As you can imagine, this is no easy feat. Fifteen minutes past our scheduled time, I'm thinking *finally, a sign that he's imperfect, stretched a little too thin*. My inbox dings. It's Grant. "So sorry I'm late—at the UK prime minister's office and they ran behind. Now need to go to next event. Can we reschedule?" Among the reasons for missing an appointment, a sit-down with David Cameron's staff to share ideas, promote innovation and encourage fresh thinking ranks pretty high. For Grant, it's (sort of) just another day, like the one he had recently at the White House for an audience of about 150 science, technology and employment officials. "These groups are very different," he says. "But they're all grappling with the same issues—how to lead, how to manage people."

Grant begins *Originals* in typical self-deprecating fashion—with a failure, not a success. A few years ago, a Wharton student pitched Grant on investing in a retail startup he hoped to launch with three classmates. Grant saw red flags everywhere and passed. The online eyewear outfit, Warby Parker, became a monster success; *Fast Company* named it the most innovative company on the planet last year. Grant called the missed opportunity "the worst financial decision I ever made."

He tells me another story about an email chain he helped to start as a high school senior, hoping to connect with other incoming Harvard freshmen. By the time he arrived in Cambridge, the list had over 200 members and Grant had dozens of new friends. (One of them would later be the best man in his wedding. Did I mention that Grant is also married with three young kids?) His friends encouraged him to expand the idea, to create an online gathering place for people to talk about classes or spread the word about a party, but he let it be what it was. A year after Grant graduated from Harvard, a kid who lived in the house next door created his own version. That kid was Mark Zuckerberg. "It nev-

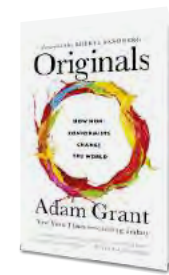
er in a million years would have crossed my mind to try and make that a reality, to become an entrepreneur," Grant says. "I wrote this book to encourage more people to take that kind of initiative."

Unlike his first book, *Originals* is Grant's quest to find people who think in ways he does not, like the NBC executive who gambled on a weird sitcom with unlikable characters called *Seinfeld*, or the bold mid-level CIA analyst who changed that rigid, inflexible agency from the inside, at great professional risk. He also wanted to learn from the mistakes of geniuses like Steve Jobs, who—in the inverse of Grant's move with Warby Parker—threw his full support behind the Segway.

With Originals, he examines the habits and strategies of trailblazers and nonconformists who make a difference by thinking differently.

Grant's triumphs, his failures—he uses all of them to make larger points. A former student says he's heard talk from cynical peers who don't know Grant and suspect he's showing off with his mental gymnastics and tales of first-hand encounters with boldfaced names. That's laughable to anyone who has sat in his class, says Justin Berg, who took Grant's first undergraduate course at Michigan and followed him to Wharton for a Ph.D. "At the end of a course, professors want to sound like experts. Adam was talking about all the ways he messed up. It was very unconventional. It was the first time he talked about himself all semester. At that time, he was already a rising star. It was just very humanizing." At his Wharton book talk, Grant recalls a time early in his career when he confided in a supervisor after seeing some troubling behavior from a higher-up. She dragged him into a bathroom and said if he told anyone else, he'd be fired on the spot. Ever the conformist—at least in terms of workplace politics and job security—Grant kept quiet. But a spark had been ignited. Why is it so hard to speak up?

That question would eventually lead him to write *Originals*, and his books have led him to rub elbows and exchange ideas with some of the world's most influential people. Still, Grant is humble to a fault. When I ask if it's strange to be a celebrity of sorts these days, a rock star in the arena of fresh ideas, he cringes: "It's slightly unnerving to hear you describe it that way." Yes, he considers Sheryl Sandberg a close friend. "She's a big leader," he says, as his mind's engine prepares to rev up. "But she's also a data geek and *those are the kinds of people I hang out with all the time!*" After Grant spoke at Bad Robot, *Star Wars* director J.J. Abrams's production company, Abrams said his favorite part was hearing Grant quote both Robert Benchley and Erma Bombeck. "This is something you'd expect to hear on campus," Grant says. "As you get to know these people, you remind yourself they're changing the world, not just really smart, intellectually curious people who you learn a lot from. But I am nothing like these people. I'm doing research on things I'm curious about. They're having a fundamental influence on the world."



Originals by Adam Grant
Published in February, *Originals* shot to the top of New York Times bestsellers—no surprise to fans of Adam Grant's first book, *Give and Take*. While both books show how to change the world for the better, *Originals* focuses on championing novel ideas in the face of common wisdom. While a brisk, easy read, the book is no lightweight; Grant backs up his key points with research and data that would warm the heart of any Wharton grad.

Improve or Enjoy?

Back in Grant's office, I ask him what seems like a simple question: Is the feedback you're getting on *Originals* similar to what you heard about your first book? Grant rarely hesitates to answer or stumbles through a response, and this is no exception. "I'm going to do a two-by-two for you," he says, "so it will be like, similar positives and negatives, and then new negatives and new positives." It's as if there's a chart on a PowerPoint in the room that only he sees.

The criticism he's heard about both books highlights how Grant now straddles the worlds of academia and popular culture—not enough focus on the studies he draws from unless you dig through all the footnotes. But one new positive is that *Originals* has inspired people, which is perhaps only surprising to Adam Grant. Grant doesn't have any tattoos—way too nonconformist for him, even in this ink-friendly cultural moment—but if he ever considers one, I'd suggest the phrase "Pay It Forward," a philosophy he lives, rather than subscribes to. He encourages his students to use his star-studded LinkedIn page as a resource. Justin Berg's research is discussed at length in *Originals* and in Grant's speaking events. His mentor, Brian Little, is mentioned after a quote from E.B. White: "I arise in the morning torn between a desire to improve the world and a desire to enjoy the world." For Grant, that's not an either/or proposition. Even those moments when he's forced to prioritize and occasionally utter that dreaded word—*no*—get a positive

spin. "Every no," he says, "is a chance to say yes to something that matters more."

Brian Little echoes the sentiment I hear over and over regarding Grant's seemingly boundless instinct to help people. "With all of his brilliance and enthusiasm, he's also just a hell of a nice guy," he explains. "Somebody that driven can often have a negative side. They're a bit abrasive, inconsistent in their allegiances. Adam is just a really good man."

Still, I wonder—does all of the pressure to squeeze more hours out of each day, to constantly better himself, to be a giver and an original, stress him out? Just thinking about his schedule and his output makes me sweat (let's not even contemplate his inbox). Grant admits he feels that weight, but usually only when he falls behind on his lengthy to-do list. "If anything," he says, that mental engine humming again, "I want to put *more* pressure on myself. The higher my expectations of myself are, the more I'm able to contribute."

Maybe Grant doesn't think like Jobs or Sandberg or Abrams. But by inspiring leaders like them, he is influencing the world. He's also an original, by perhaps any definition other than his own. The proof is that gap he spoke about wanting to help people close, the one between who they are and who they want to be. For Grant, that chasm never narrows. There's always something to learn and a new lesson to teach.

Richard Rys is features editor of *Philadelphia Magazine*.

Balancing Emotional and Cognitive Culture

Companies that build the optimum ratio of cognitive and emotional culture for their employees can succeed in generating the best worker performance with the lowest turnover.



THE NEW YORK TIMES published a front-page report on Amazon.com Inc.'s allegedly "bruising workplace" on Aug. 16, 2015. Authors Jodi Kantor and David Streitfeld described a culture that appears to sacrifice employee well-being to insatiable performance expectations. Amazon and *Times* editors sparred over the story's accuracy, and journalism scholars debated the objectivity of a report based largely on anonymous, anecdotal evidence. But if the *Times* piece is even somewhat truthful, that leaves us to wonder why a workplace that espouses cultural values such as "Hire and Develop the Best," "Insist on the Highest Standards" and "Think Big" can become toxic.

Amazon's focus on results, innovativeness and high standards is one that companies often strive for, yet its employees were reported crying at their desks. Why were employees driven to "practically combust," as one interviewee put it? Other companies practice Amazon's values but don't suffer these consequences.

To understand why ostensibly similar cultures can produce drastically different results, we must look at workplace culture through a new lens. The *Times* authors focused on Amazon's cognitive culture: the shared intellectual values, norms, artifacts and assumptions that guide group behavior. When people use the term "culture," this is what they usually mean. Amazon's troubles, however, may lie in its *emotional* culture: the shared affective values, norms, artifacts and assumptions that govern what employees feel, what emotions they express and which they know they are better off suppressing.

In my research, I focus on this less-explored dimension of organizational culture.

Many business leaders shy from discussing emotions, which comes at a high cost to their companies. Over the past decade through research with colleague Olivia O'Neill, a management professor at George Mason University, I have found that emotional culture influences "hard outcomes" like absenteeism and financial performance, as well as employee satisfaction, burnout and teamwork. When business leaders ignore emotional culture, they overlook a fundamental part of being human and thereby stunt the potential of their companies.

It may be that a poor mix of cognitive and emotional cultural values exacerbated Amazon's troubles. While company management seems to permit flares of joy when employees are successful, the *Times* report described what seems like primarily an emotional culture of fear. Fear may work short term, but it can't support employees long term in the face of an outcomes-driven cognitive culture.

In a recent study conducted with O'Neill and Francesco Sguera, a professor of organizational behavior at Catolica-Lisbon School of Business and Economics, we saw the importance of having the right mix of cultural values. In a major U.S. medical center, for instance, a strong emotional culture of anxiety existed due to a very competitive external environment and anxiety-raising human resources practices, including a "point system" that chastised employees for tardiness, sick days and other minor transgressions. This Pavlovian practice led to negative outcomes like stunted financial performance, burnout and low employee satisfaction. On the other hand, in units where this anxiety was paired with an emotional culture of companionate love—affection, compassion, tenderness and caring expressed and felt among employees—financial performance and employees' attitudes did not suffer. At this medical center, seeing these feelings expressed among staff buffered the culture of anxiety.

Additional research attests to this interplay between cultural values. In a recent study of firefighters, professors O'Neil and Nancy Rothbard, Wharton's David Pottruck Professor, found an interaction between a culture of joviality and

Many business leaders shy from discussing emotions, which comes at a high cost to their companies.



companionate love. Even as the firefighters played elaborate pranks on and heckled one another, if they supported one another with caring and compassion, they were able to cope with the stresses of the job more effectively. They were also better able to cope with the natural work-family conflict that arose from such an intense and often unpredictable job.

Could Amazon move away from a culture of fear and balance its exceptionally demanding cognitive culture with joy, fun, companionate love or other emotions? Perhaps, but Amazon's organizational structure must support the new emotional culture, which is created in the micromoments, facial expressions, body language, décor, rituals and routines that permeate a workplace. Executives must verbalize, model and reward the emotions they want the organization to cultivate. In turn, middle management and front-line supervisors must transmit these emotions to their subordinates.

To enact that change, Amazon's first practical step would be to measure its emotional culture, which, given its data-oriented cognitive culture, would be something they should be very good at. Yes, you can quantify feelings. You can do it through surveys, interviews and observations. When my colleagues and I measure emotional culture, *we don't ask how employees themselves feel* but rather ask them to report on what emotions they see expressed by the colleagues around them. Emotional expression is what sets culture in motion.

By quantifying feelings, you can identify the dominant emotions in a workplace. It's relatively easy to accentuate the positive emotions. To address pervasive negative emotions, the most important thing is to model the positive emotions you wish to propagate in the group. My research about emotional contagion has shown that emotions spread among people in groups just like a virus. Executives, managers and supervisors can spread these emotional "viruses." They need to be aware that every time they are in a room they are doing so. When you see a group suffering from low morale, the first question to ask is how the manager enters work in the morning. Scowling or smiling? Managers and leaders often do not realize how important their own emotional expressions are to their people and how carefully they are watched.

Ultimately, companies need an emotional and cognitive culture and an organizational structure that helps them execute their strategy. Intentionally or not, Amazon seems to have created a strong culture of fear that may succeed in motivating short-term performance at the expense of long-term employee retention and performance. Amazon could temper its results orientation and strengthen a culture of companionate love. Its leaders could begin to model compassion when employees fail, struggle or suffer emotionally. A culture of joy or companionate



love doesn't mean that honest critique is going to be stifled, as Amazon's leadership may fear.

That said, company policies and practices might clash with a change toward a culture of companionate love—such as Amazon's performance management system and its Anytime Feedback Tool, which encourage employees to send anonymous feedback (good and bad) directly to other employees' bosses. Mostly likely, these practices support the culture of fear. Would Amazon's leaders be willing to change these organizational structures and others to support the new culture?

Of course, my aim here is not to fix Amazon. Rather, the point is that business leaders should give as much attention to emotional culture as they give to cognitive culture. The two will intersect and interact in ways we are just beginning to understand. To perform at their highest potential, organizations must investigate, measure and manage emotions. Even in a workplace like Amazon that self-selects hard-charging, thick-skinned people, emotions at work can't be suppressed and denied. They are part of what makes us human and in turn influence both employee attitudes and firm performance.

An award-winning researcher and teacher, **Signal Barsade** is Wharton's Joseph Frank Bernstein Professor of Management.

Mastering MOOCs

Using Open Online Courses to Achieve Your Goals

SINCE FIRST MAKING headlines in 2011, hundreds of universities have begun offering thousands of MOOCs, or massive open online courses, to millions of students around the world. While researchers are still looking at what this relatively new technology means for education, many business professionals are already yielding the benefits.

In the new ebook *Mastering MOOCs*, published with Wharton Digital Press, Knowledge@Wharton reports on how business professionals are using MOOCs to further their careers and to help their companies and teams succeed.

The following essay is excerpted from the e-book:

MAX BUCKLEY WAS on the cusp of graduating from the Cork Institute of Technology when he stumbled upon a relatively new form of online learning—the massive open online course, or MOOC.

Although he was studying business administration, Buckley had an eye for the technological side of things and was regretting not pursuing a more computer-related field. The Circuits and Electronics MOOC from the Massachusetts Institute of Technology caught his eye, so he enrolled in the free course.

Final exams prevented him from finishing it, but he was hooked on the concept—free classes that he could take online, on his own schedule and offered by some of the most prestigious universities in the world. He kept enrolling in interesting classes and eventually steered himself toward computer programming courses. As luck would have it, he enrolled in a data analysis course at the same time he interviewed for an internship with Google.

An even bigger stroke of luck was finding out his interviewer was also enrolled in that class. Buckley landed the internship and then was hired full time. He is now a product quality analyst, charged with helping the tech giant fight spam.

“It wasn’t the sole reason [I got the internship], but a good part of it was that I had this blend of programming and business, and [the learning] was self-directed,” he said of his MOOC background. “I had the formal education box ticked, but this extra work was

interesting. Obviously, I’ve learned a lot more by using them, and that has fed back into my formal studies.”

Buckley’s story may be extraordinary—not everyone is going to land a job with Google by taking a few free online courses—but it demonstrates the growing power of MOOCs as a way to bring world-class education to anyone with time, commitment and an Internet connection.

Why Take a MOOC?

For Shawn Jones, a MOOC represented an escape from a dead-end retail job and the chance to get traction in an in-demand tech field.

For Michelle Warner, a MOOC was a way to learn the basic legal ins-and-outs of establishing a startup.

And for Abhay Tandon, MOOCs taught him global business practices that put him at the forefront of new technologies.

MOOCs gave these three learners a chance to make professional leaps that either a lack of time or money would have otherwise prevented. Working at their own pace and around the demands of their full-time jobs, they were able to crack into new professions, start businesses and position themselves to make deals on different continents.

Many of the benefits of a MOOC can be found elsewhere on the learning spectrum: textbooks, workshops, webinars, executive education courses or college degrees. Each can provide similar benefits to lifelong learners. Where MOOCs have a unique advantage, however, is in their capacity to help self-directed learners more deeply immerse themselves in new knowledge or gain new skills with relatively few barriers.

The courses are open, so you don’t need to apply and be accepted into a program, and most are free. They offer deep dives into a wide range of subjects but offer learners the flexibility to take only a portion of a course if they so desire. Because the courses are online, they allow learners to weave learning around their day-to-day responsibilities.

But MOOCs aren’t easy. The best MOOCs are academically challenging, especially if the course is in a new field for the learner.

Getting access to that knowledge, even if only for one online lecture, gives learners access to world-class institutions and their top talent.

“Independent learning is difficult, but you can learn from a MOOC,” said [Deidre Woods](#), executive director of the Open Learning Initiative at the University of Pennsylvania. “It’s not a degree, but you learn things that can be applied immediately.”

The ROI of a MOOC

Jones said he found enormous value from his MOOC experience. He can draw a line straight from his CS50 course to a new job and increased earnings. Measuring the return on investment of a MOOC isn’t always such an obvious process, however.

Since the classes are often free, it’s not as easy as calculating X money spent brought in Y dollars of savings or additional business. The ROI will depend specifically on what each learner came into the MOOC hoping to accomplish and how much the MOOC is able to meet those goals.

Warner, a Denver-based entrepreneur, has been a MOOC learner nearly since the format’s inception. Along with brushing up on her skills and refreshing her memory on key business topics, Warner said one specific MOOC helped her be a smarter consumer when she was starting a new company.

Law and the Entrepreneur, a Northwestern University Law School MOOC offered on Coursera, helped her get basic legal information on establishing her business. Since the source was a world-renowned law school, she felt comfortable using that

information as she worked on building a new company while providing think-tank services for other startups, founders and small businesses.

Getting startups off the ground doesn’t leave much space for free time, so the flexibility MOOCs offered were invaluable to Warner’s learning process. Sometimes that meant completing an entire MOOC; other times, it meant jumping into one briefly to audit a specific topic.

“I’m an entrepreneur; I have to be self-driven,” she said. “I have to look at what I need to do to round out my skills. If that means two weeks, to me, that’s a success. Sometimes it’s just watching the lectures.”

MOOCs also offer a value beyond the skills or knowledge that can be gleaned from the courses. Major universities offer MOOCs, including top-tier programs that normally come with stiff costs and high barriers to entry. Getting access to that knowledge, even if only for one online lecture, gives learners access to world-class institutions and their top talent without having to worry about admission exams and tuition bills.

“When I add a course from a reputable business school, it adds value [to my CV],” Tandon said. “It’s not too much time to invest in learning something new. In the long run, it’s nothing [compared to] what I’m learning from these courses.”

A new e-book from Wharton Digital Press helps readers use open online courses to achieve their goals.



On the Web

Find out more about Mastering MOOCs at knowledgeatwharton.com/books.

To take a Wharton course on Coursera, visit online.wharton.upenn.edu/.



Illustration by Janne Iivonen

UPCOMING ALUMNI EVENTS



GLOBAL FORUMS

- 2016**
Amsterdam
- 2017**
Miami
Hong Kong
- 2018**
Sydney



2016 REUNIONS

- May 13-14**
MBA Reunion Weekend
- October 15**
MBA for Executives
San Francisco
- November 5**
MBA for Executives
Philadelphia

Learn to Define Your True Success

Take the short version of the Wharton course that sets students up for a lifetime of success.

THERE'S NO SHAME in pondering your exact definition of "success," no matter how many professional honors, cars, homes, happy children and partners, and gadgets you might have. At various stages of your life, it helps to take a step back and ponder what your goals are for the next stage of your life.

G. Richard Shell, Wharton's Thomas Gerrity Professor and chair of the Legal Studies and Business Ethics (LGSB) Department, has devoted some of his teaching to helping students understand their own theories of success. Author of *Springboard: Launching Your Personal Search for Success*, he has taught about success for a decade on campus. His LGSB 227 course, "The Literature of Success: Ethical and Historical Perspectives," helps students answer two age-old questions: What does it mean to be "successful"? How can you achieve success? Shell's top suggested readings—along with resources such as personality assessments—let you examine your personal strengths, traits, and achievement orientations. When you finish, you might attempt Shell's final "assignment": Write an essay on your theory of success and how you plan to achieve it.

Meditations

The literature of success is hardly new. One of the earliest self-reflections on record is what essentially is Roman Emperor Marcus Aurelius' diary, written in large part when he was serving on military campaigns. A "philosophy of life" from the Ancient Greek and Roman worlds, stoicism centers around the understanding that the natural world is out of our control. Does this belief provide you any serenity? Pick out a "most favorite" and "least favorite" quote from this classic.

Benjamin Franklin's Autobiography

The last time you read this may have been eighth grade, and all you may remember is how hard to follow it was. Give it another chance—with a particular focus on his relationships with his family, his term "errata" (the mistakes he made in his life) and his youthful obsession with a list of 13 personal virtues. For homework, Shell requires his students to pick one of Franklin's virtues and practice it all semester. You can pick your own, practice it diligently, and then report your successes and failures to a close friend or family member.

VIA Survey of Character Strengths

Developed by Penn's Positive Psychology Center, this online assessment will order your 24 "Character Strengths." Take it here: <http://www.viacharacter.org/www/The-Survey>. Take note of your top five and your bottom five virtues.

The Happiness Hypothesis and The Power of Habit

Both of these books serve as centerpieces in the discussion about virtues, vices and other habits. Why can't our conscious intentions overcome our non-conscious impulses? How can we rid ourselves of bad habits and replace them with positive ones?

The 7 Habits of Highly Effective People

Stephen Covey's classic is worth a reread in the context of Professor Shell's course—particularly in comparison to Franklin's tome. Covey viewed his effort as a revitalization of Franklin's classic approach to success. But note the differences: e.g., religion, outward behavior. Then ask yourself: Which of the seven habits do I most relate to?

Death of a Salesman

Watch the original Broadway cast production of Arthur Miller's classic. Ask yourself: Has your family provided a burden with their expectations for your success, or unconditional support?

My Beloved World

Sonia Sotomayor's 2013 memoir tells the Supreme Court Justice's rags-to-riches story. Her rise from a modest background to the highest court in the land is a testament to the power of education—and to the fact that power can equate to success as much as wealth. But ask yourself: Do you think Sotomayor is really happy?

Strengths Finder

Another exercise during the class involves taking Rath's StrengthsFinder 2.0 online personality profiler (Here: <https://www.gallupstrengthscenter.com/Purchase/en-US/Index>). There's a slight charge for it (\$15). Another option is the SAME profile in Professor Shell's *Springboard*. Your homework afterward: Survey your network of friends and family about what they feel are your virtues and talents—and how these qualities match your choice of work.

Final Assignment:

What is my personal theory of success, and how will I achieve it?

@ Care to share?

Submit your final paper to us at magazine@wharton.upenn.edu, and we will share it with Professor Shell and, with your blessing, perhaps the wider Wharton community as well.



I expect Wharton will have tremendous impact on my career. It already has. It's had a tremendous impact, really, on every aspect of my life.

Suzie Amer, WG'16
 Director, Thought Leadership
 AlixPartners LLP



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Books to Expand

A reader of useful books discovers the mind-blowing value of literature.



For most of his life, **Myron Weiner WG51** read technical and management books. He was a professor at University of Connecticut's School of Social Work, Masters of Public Affairs and Institute of Public Service and had been in the "computer game" since serving as a radar technician in World War II. Then he retired to emeritus status, moved into a condo complex and joined a reading group. It blew his mind.

What follows are some of the titles that have since stuck with him, as well as a couple books that touch back on his life-long professional interests.



1
All the Light We Cannot See
Anthony Doerr

Winner of the 2015 Pulitzer and the 2015 Andrew Carnegie Medal, Anthony Doerr's 2014 novel is a work of great literature—which admittedly, Weiner doesn't often read. Weiner looks for great stories. But he can appreciate the WWII storyline as well.



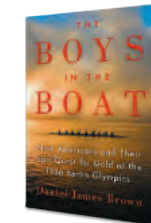
2
Becoming Steve Jobs
Brent Schlender

If you can only read one Jobs' biography, read this one by journalists Brent Schlender and Rick Tetzeli, says Weiner (an Apple user). It's the human, unedited take on the Apple co-founder, one gained from decades of research and personal interaction (contrasted with the more "canned" version authored by Walter Isaacson).



3
Benjamin Franklin
Walter Isaacson

Walter Isaacson (who also wrote a Jobs biography) gets high marks for the depth with which he details Franklin's seemingly contradictory natures—his pivotal public diplomacy versus his tempestuous private relationships—as well as his unprecedented scientific and business innovations. The book was published in 2003, but brought to Weiner's attention recently by his grandson.



4
Boys in the Boat
Daniel James Brown

Weiner loves great stories, and this 2013 historical novel by Daniel James Brown is a good one. Undoubtedly a hard-working man his entire life, Weiner was struck by the training, commitment and overall effort displayed by the University of Washington's nine-man crew team on its way to winning the gold medal at the 1936 Berlin Olympics.



5
One Hundred Years of Solitude
Gabriel Garcia Marquez

Weiner's book club read the masterpiece by Gabriel Garcia Marquez after the Nobel Prize winner's death in 2014. Readers can approach the 1967 novel in many, many ways, wondering at its magical realism or pondering its messages about nation and state. Weiner sees in it the grounded reality of how tough day-to-day life can be. Weiner's biggest takeaway: One thing all of us can't deal with is being by ourselves, which we do everything to try to escape.



6
Platform for Change
Stafford Beer

In this classic 1995 tome and in his other writings, "Father of Management Science" Stafford Beer predicted exactly what is happening in the world today: money is no longer the ultimate goal of organizations, it is a constraint; eudomony, or the sense of well-being, is now society's goal; and this is attained through variety and the law of cybernetics, roughly defined by Weiner as every individual's right to shape their life in any way the want. Companies market to individuals now in a world that's far from simple and ever-more complex.



7
Reclaiming Conversation
Sherry Turkle

Once upon a time, as Weiner recalls, people were scared of computers. He once snuck one into his classroom in a Manischewitz matzo box. Now, we're hooked on them like a drug. People bond with the pieces of glass, plastic and metal in their hands. MIT sociologist Sherry Turkle makes the case in her 2015 book that we've gone too far. People are allowing their devices to take away their humanness.

Brazil's Two Brands

Can a two-sided nation improve its ranking in the world? And why should it care?

DO NATIONS, like products, have brands? Yes, says Wharton Professor [David J. Reibstein](#). He teamed with *U.S. News & World Report* and WPP's BAV Consulting on the "Best Countries" study to help the world understand why nations brand—and how nations' brands can be improved.

On October 28, 2016, Professor Reibstein will present his conclusions when he hosts the Wharton Nation Brand Conference in Philadelphia. The conference will gather policymakers, executives, and academics to discuss what nations do that affects their brands and how that affects their economies.

With the 2016 Summer Olympic Games to be hosted in Rio de Janeiro, Reibstein and his team apply the lessons of the Best Countries study to Brazil, one of the most dynamic and confounding brands in the Western Hemisphere.

1. Brazil's Brand Perceptions

Brazil is a study in extremes. Boasting a population of almost 207 million and the sixth-largest economy in the world, the nation drew 3.5 million attendees to the 2014 World Cup. However, one in four Brazilians lives below the poverty line. Brazil's brand holds two identities in conflict: beautiful, sexy, and fun vs. poor, corrupt, and out-of-control. More than 16 million people—8.5 percent of the population—subsist on less than \$1.30 per day. Former president Luiz Inácio Lula da Silva has been indicted on corruption charges. Brazil lost an estimated average of 17,000 square kilometers of rainforest per year in the 1990s and 2000s. How do these contrasts affect Brazil's ranking among the Best Countries?

An answer comes from the Best Countries survey. Wharton and Huntsman alum [Anna Blender W07](#) took a leading role. A Senior Vice President of BAV, Blender teamed with Professor Reibstein in 2015 to apply BAV's "BrandAsset Valuator" Model of Brand Building to nations. Together with [Jeffrey Cai GRW15](#) and Wharton SEI Center Senior Fellow [Bruce Brownstein W80](#), they studied the financial return that nations can expect from nation branding efforts.

Next, Reibstein and Blender joined forces with BAV's CEO John Gerzema, in consultation with

U.S. News, to create the Best Countries study. The criteria the team chose included GDP, tourist arrivals, foreign direct investment inflows, and human development. For the 60 top-scoring nations, the team surveyed more than 16,000 global participants, asking about 65 core brand attributes—such as bureaucracy, strength of international alliances, sexiness, economic stability, religious freedom, gender equality, and richness of history. The team grouped the 65 attributes into nine general subrankings that reflect how the nations were perceived in terms of (1) Adventure, (2) Citizenship, (3) Cultural Influence, (4) Entrepreneurship, (5) Heritage, (6) Movers (up-and-coming economies), (7) Open for Business, (8) Power, and (9) Quality of Life. The overall Best Countries rankings were derived from nations' scores in the nine subrankings.

The team released the results at a well-branded conference: the 2016 World Economic Forum in Davos, Switzerland. To the consternation of many Americans, including late-night television host Jimmy Kimmel in an opening monologue, the U.S. ranked only fourth. Brazil ranked No. 20.

Why should Brazil care? Because, according to Reibstein, it affects their economy just as brands for companies affect their sales and profits. Why did Brazil end up so far down? After all, it ranked highest in fun, sexiness, and beauty, as well as No. 1 in Adventure. What's more, only New Zealand and Australia ranked higher than Brazil for happiness. In the subranking of Cultural Influence, Brazil was behind only France, Italy, the U.S., Spain, the U.K. and Japan. What perceptions brought down Brazil's overall score?

Citizenship, for one thing. Brazil ranked No. 25 in that category. It came in close to last for caring about the environment. Brazil ranked No. 29 for Entrepreneurship, No. 37 for Open for Business and No. 43 for Quality of Life; and close to last for the attributes of well-developed public education and health systems, transparent government practices, and income equality. Brazil's average per capita GDP (\$11,600 in 2011) ranks it 100th in the world. As Naercio Menezes, professor of economics at the University of Sao Paulo, told the BBC, "Brazil is one of the most unequal countries on the planet. . . . If you are born into a poor family it is very difficult for you to eventually become rich."

2. Rebuilding Brazil's Brand

Brazil's efforts to strengthen its brand might include a two-pronged approach: (1) solving its complex problems; and (2) publicizing its repertoire of strengths. The nation could see an immediate brand upside by raising its global perceptions for caring about the environment. Among the nine subrankings, Citizenship (of which caring about the environment is a component) has a significant

US NEWS BEST COUNTRIES RANKING

1 Germany
Tops for entrepreneurship

2 Canada
Best quality of life

3 United Kingdom
Entrepreneurship, power

4 United States
First in power; low in "open for business"

5 Sweden
Best in citizenship

6 Australia
High quality of life, citizenship

7 Japan
Second in entrepreneurship

8 France
Leads in cultural influence

9 Netherlands
Good in citizenship, quality of life

10 Denmark
Fourth in "open for business"



DEAN MOUHARROPOULOS

correlation to Gross Domestic Product purchasing power parity per capita: 16.94%.

Some of Brazil's efforts to improve its environmental reputation are showcased in a book by John Gerzema and Professor Reibstein about the Best Countries study, *Best Countries: Defining Success and Leadership in the Twenty-First Century*. In an interview published in the book, Luis Alberto Figueiredo Machado, Brazilian ambassador to the U.S., asserted that although deforestation remains a problem, this is an area in which Brazil has been making remarkable progress. Figueiredo said that Amazonian deforestation fell by 82 percent between 2004 and 2014.

However, improving Brazil's environmental reputation is just one piece of its brand puzzle. Unfortunately, its reputation for Adventure only has a 3.24% correlation to GDP purchasing power parity per capita. More important would be to raise Brazil's low scores for Entrepreneurship (17.42% correlation), Open for Business (11.99% correlation), and Quality of Life (16.89% correlation).

Still, Brazil has reason for optimism. Among those countries with more than half the population living in nonurban areas, Brazil trails only Argentina in the attributes of connectivity, access to capital, and developed infrastructure. In addition, Brazil launched a multi-billion dollar social welfare program called "Brazil Without Misery" to eradicate extreme poverty.

Brazil's brand can also capitalize on the nation's many perceived strengths. The country has long been included in the BRICS bloc of nations, comprising 42 percent of the world's population. The BRICS alliance helps the member countries develop and bolster their economies.

Brazil's continued bid on the world stage is recognized in the Best Countries rankings. Brazil was ranked No. 11 for political influence, behind such countries as India and South Korea but above Indonesia and Sweden. Brazil also ranked No. 6 in the Movers subranking—evidence of Brazil's perceived opportunity to prosper.

3. Lessons to Learn at the Wharton Nation Brand Conference

As Rio prepares to host the Olympics—while fending off the mosquito-borne Zika virus and fishing garbage from the venue's still-befouled waterways—it's anyone's guess whether lightning will strike twice and deliver another mega-event to rival the World Cup. Skeptics refer to the long-running joke, "Brazil is a country of the future, and it always will be."

What holds true for Brazil holds true for every country: It is vitally important from an economic standpoint how others perceive our nations.

Tom Lincoln is a consultant and attorney in Philadelphia.

↑ Little help: While the World Cup burnished its brand, Brazil's high corruption rate and poor quality of life pushed it down to 100th in the *U.S. News* ranking.

At the Whiteboard with Chris Geczy

Is diversification dead? Not entirely, but with the democratization of Modern Portfolio Theory it's not your father's 60/40 world anymore.

THE KEY INSIGHT of Modern Portfolio Theory (MPT): Don't weigh an asset's risk independently, but by how it contributes to the portfolio's overall risk. MPT, the brainchild of economists Harry Markowitz and others, dates from a 1952 Markowitz essay describing a system for assembling a portfolio of assets maximized for a given level of risk.

When *Wharton Magazine* invited finance professor [Chris Geczy](#) to deliver a "class" for us, he presented on MPT and risk factor investing. Most investors in the seventies and eighties thought of their portfolios in the context of the Capital Asset Pricing Model (CAPM). Described by Sharpe in 1970, CAPM theoretically helps investors by relating expected return to systematic risk.

Many investors think of a well-diversified portfolio in terms of a 60/40 allocation that eventually reallocates toward less-risky investments. Geczy, who directs the Jacobs Levy Equity Management Center for Quantitative Financial Research, thinks the model's usefulness may have ebbed. Until recently, a well-managed 60/40 portfolio saw a return of around 8%. "Since 1961, traditional models forecasted 9.1% (9.2% in the U.S. at the index level); but today most are expecting 4% to 5%."

What are the options? Seek *more* risk, and diversify across it. Pursue higher returns by leveraging up such a better-diversified portfolio, or by concentrating on higher-risk assets like small caps, real estate or venture capital. However, Geczy doesn't recommend sacrificing diversification for concentration in equities or assets that may be exposed to the same risks or losses at the same time.

Today's MPT broadens your choices. Thanks in part to expansions in the theory and investing practices, now instead of focusing only on allocating a portfolio's assets, we can directly characterize and allocate risk across the portfolio.

That's why, according to Geczy, diversification isn't dead. It's shifting from asset-based allocation to risk-based. —[Louis Greenstein](#)

Introducing Modern Portfolio Theory

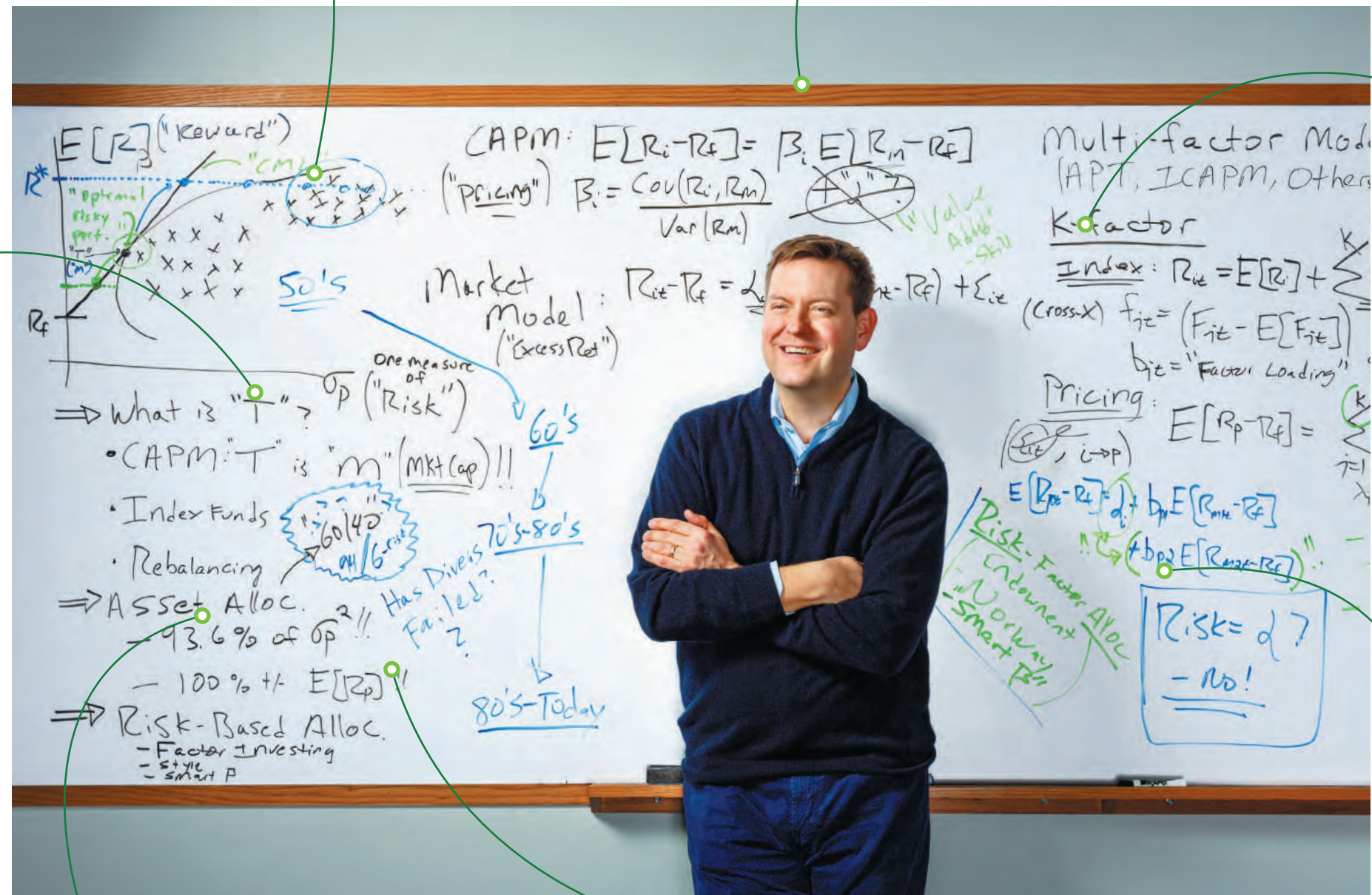
Developed in the 1950s, classical MPT is deeply intuitive: If you must take risk—whatever your definition of it—do so with a purpose such as maximizing expected reward per unit of risk.

Equilibrium Risk and Expected Return

The CAPM predicts that all investors will hold the value-weighted market portfolio and that beta determines expected risk premia across assets.

Optimizing Reward and Risk

The optimal portfolio balancing risk and reward has a key role in investment theory as the "best" diversified portfolio available to be geared down or levered. The CAPM tells us this portfolio is the market capitalization-weighted portfolio of all risky assets.



A Finer Articulation

Multiple-factor models generally presume a structure on returns, co-variances, and other ways investment pay-offs associate across time or states of the world. This structure contemplates a more finely articulated potential set of risks to which investors might gain exposure.

More Risks, More Opportunity

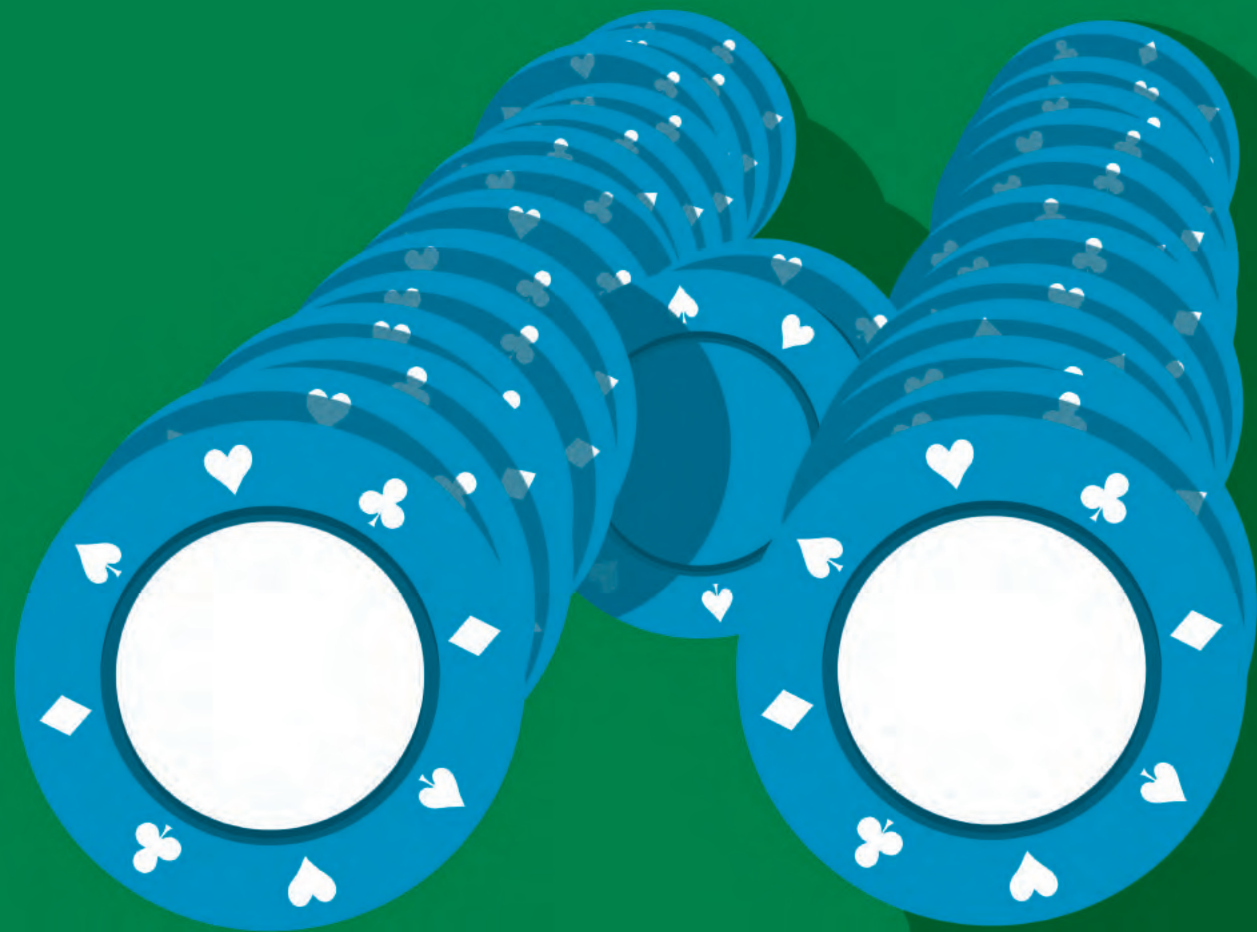
With more uncorrelated risks they get paid to bear, investors could access the possibility of more enhanced diversification and return-generating opportunities targeted by more sophisticated approaches to diversifying investments.

Rethinking Allocation: Capital vs. Risk

Modern applications of MPT concepts to allocations across classes of assets developed in the 1970s and 80s highlight simple "naïve" approaches such as the famous 60/40 weighting of stocks and bonds. But this approach is not risk-balanced since 90%+ of the risk is attributable to equities.

Asset Allocation is Fundamental

More recent approaches such as the endowment model, factor-based investing and "risk parity" choose different weightings with an eye toward better risk diversification.




How to See the Future

(And Know It When You See It)

Our best pundits don't have a solid track record. So how can the rest of us become better forecasters? In their new book, *Superforecasting: The Art and Science of Prediction*, Wharton professor Philip Tetlock and co-author Dan Gardner share the results of decades of research into futurism. The following is based on an interview between Tetlock and Knowledge@Wharton.

—PHILIP TETLOCK AND DAN GARDNER

 Imagine you're a big-shot pundit. What incentive would you have to submit to a forecasting tournament in which you had to play on a level playing field against ordinary human beings? The answer is: not much. The best possible outcome you could obtain is to tie it. You're expected to win. But there's a good chance, our research suggests, that you're not going to win.

In our early work, which goes back into the mid-1980s, we used the metaphor of the dart-throwing chimp to capture a baseline for performance—which is, if you had a system that was just generating forecasts by chance, how well would you do relative to that?

That actually is a baseline that some people can't beat. For a lot of reasons. Sometimes, the environment is just hopelessly difficult. If you were trying to bet on a roulette wheel in Las Vegas, you're not going to be able to do any better than a dart-throwing chimp. But people sometimes fail to beat the dart-throwing chimp even in environments where there are predictable regularities that could be picked up if they were being astute enough.

You don't want to be too hard on people because there's a lot of irreducible uncertainty in some environments. It's very difficult to bring down the uncertainty below a certain point. It's unfair to portray people as being dumb, in some sense, if they're failing to do something that's impossible. Of course, we don't know what's impossible until

we try. Until we try in earnest. You don't discover how good you can become in a particular forecasting environment until you run competitive forecasting tournaments. You plug in your best techniques for maximizing accuracy. You see how good you can get.

That's essentially what we did in the forecasting tournaments with the U.S. government, one sponsored by the intelligence community, the Intelligence Advanced Research Projects Agency, or IARPA. These are forecasting tournaments that were run between 2011 and 2015 involving tens of thousands of forecasters trying to predict about 500 questions posed by the intelligence community. We found that some people could do quite a bit better than the dart-throwing chimp, and they could beat some more demanding baselines as well.

We recruited forecasters by advertising through professional societies and through blogs. A number of high-profile bloggers helped us to recruit forecasters, people like Tyler Cowen and Nate Silver.



Learn more at knowledge.wharton.upenn.edu

We were able to gather initially a group of several thousand, and we were able to build on that in subsequent years.

I have to be careful about making big generalizations about how good or bad people are as forecasters. As I mentioned before, you can make people look really bad if you want to. You can pose intractably difficult questions. Or you can make people look really good. You can pose questions that aren't all that hard. So you want to be wary of research that does cherry-picking.

What we were looking for was a process of generating questions that wasn't rigged one way or the other. The method we came up with was generating questions through the U.S. intelligence community. They were questions that people inside the U.S. intelligence community felt would be of national security interest and relevance and reasonably representative of the types of tasks that intelligence analysts are asked to do. The questions asked people to see out into the future several months, occasionally a bit longer, occasionally shorter. We scored the accuracy of their judgments over time.

We didn't have people make judgments one way or the other. It wasn't yes or no. We had people make judgments on what's called a probability scale ranging from zero to one. We carefully computed accuracy over time. We identified some people who are really good at making these judgments—we called them "superforecasters"—and they were later assembled into teams. They dominated the tournament over the next four years. But we did a number of other experiments and looked for techniques that could be used to improve accuracy, and we found some.

Ask people in the political world, "Who has good judgment?" The answer typically is, "People who think like me." Liberals tend to think that liberals have good judgment and good forecasting judgment, and conservatives tend to think that they are better at it. It turns out that good forecasting accuracy is not very closely associated with ideology. There's a slight tendency for people who are superforecasters

to be more moderate and less ideological, but there are lots of superforecasters who have strong opinions. What distinguishes superforecasters is their ability to put aside their opinions, at least temporarily, and just focus on accuracy. That's a very demanding exercise for people.

Eventually, you're going to reach a point where you're not going to get any better because, as I mentioned, the environment itself has some degree of irreducible

uncertainty. So no matter how good you are, you're probably not going to do a very good job predicting what the value of Google is going to be next week on Nasdaq. There are some things that are very difficult to do. It's not clear that even using superforecasters is going to let you make appreciable headway on that.

But there are many things that are quite doable that we previously didn't think were doable, and there's a lot of room for improving the accuracy and probability judgments on those things. Those are things like predicting whether international conflicts are going to escalate or de-escalate, whether certain treaties are going to be signed or approved by legislatures, or whether Greece is going to leave the eurozone—many problems that have relevance to financial markets and to business decisions, where there is potential to improve probability judgment and where people typically don't do that. People typically rely on vague verbiage forecasts. You've heard people say, "Well, I think it's possible. This could happen. This might happen. It's likely." Those terms are not all that informative.

If I say that something could happen—for example, Greece could leave the eurozone by the end of 2017—what does that mean? It could mean there's a probability of 1 percent or a probability of 99 percent. Or we could be hit by an asteroid tomorrow. Asking people to make crude, quantitative judgments, which become progressively more refined over time, is a very good way to both keep score and get better at it.

Fox and the Hedgehog

In our book *Superforecasting*, we refer to the famous fox-hedgehog metaphor, drawn out of a surviving fragment of poetry from the Greek warrior poet Archilochus, 2,500 years ago. Scholars have puzzled over it for centuries. It runs something like this, and of course, I don't know ancient Greek, so I'm taking on faith that this is what it actually says: "The fox knows many things, but the hedgehog knows one big thing."

Think of hedgehogs in debates over political and economic issues as people who have a big ideological vision. The writer Tom Friedman might be animated by a vision of, say, globalization: the world is flat. Libertarians are animated by the vision that there are free market solutions for the vast majority of problems that beset us. There are people on the left who see the need for major state intervention to address various inequities. There are



Superforecasting: The Art and Science of Prediction
By Philip E. Tetlock and Dan Gardner

The bad news: Experts tend to be fairly awful at making predictions. In fact, Philip Tetlock's research shows them doing hardly better than mere chance. The very good news: some predictors are extremely good at predicting, and we can learn from their techniques. *Superforecasting* is riding high on the New York Times bestseller list, fueled by rave reviews. The Economist rated it one of the best books of 2015.



There are many things that are quite doable that we previously didn't think were doable.

environmentalists who think we're on the cusp of an apocalypse of some sort. So you have people who are animated by a vision, and their forecasts are informed largely by that vision.

Whereas the foxes tend to be more eclectic. They kind of pick and choose their ideas from a variety of schools of thought. They might be a little bit environmentalist and a little bit libertarian, or they might be a little bit socialist and a little bit hawkish on certain national security issues. They blend things in unusual ways, and they are harder to classify politically.

In our early work, we found that the foxes who were more eclectic in their style of thinking were better forecasters than the hedgehogs. In later work, we found something similar. We found that people who scored high on psychological measures of active open-mindedness and need for cognition tended to do quite a bit better as forecasters.

Now, imagine you are a producer for a major television show, and you have a choice between someone who's going to come on the air and tell you something decisive and bold and interesting—the eurozone is going to collapse in the next two years, or the Chinese economy is going to melt down or there's going to be a jihadi coup in Saudi Arabia. He's got a big, interesting story to tell, and the person knows quite a bit and can mobilize a lot of reasons to support the doom-and-gloom prediction. The person is charismatic and forceful.

Contrast that with someone who comes on and says, "Well, on the one hand there's some danger the eurozone is going to melt down. But on the other hand there are these countervailing forces. On balance, probably nothing dramatic is going to happen in the next year or so, but it's possible that this could work." Who makes for better television? To ask the question is to answer it.

There is a preference for hedgehogs in part because hedgehogs generate better sound bites. People who generate better sound bites generate better media ratings, and that is what gets people promoted in the media business. So there is a bit of a perverse inverse relationship between having the skills that go into being a good forecaster and having the skills that go into being an effective media presence.

The Question Generator

Let's use the example of Tom Friedman versus someone like Bill Flack. Friedman is, of course, a famous *New York Times* columnist, a Pulitzer Prize winner who is a regular at Davos and the White House and circulates in networks of power. Flack is an anonymous, retired hydrologist in Nebraska who also is a superforecaster. We know a huge amount about Flack's forecasting track record because he answered a very large number

of questions in the course of our tournament and demonstrated he could do so effectively. But we know virtually nothing about Friedman's forecasting track record, notwithstanding that he's written a great deal over the last 35 years and that he's a powerful analyst and a writer who has done many things very well. But there's no way to reconstruct with any degree of certainty how good a forecaster he is. Friedman has detractors, he has admirers. His admirers might say, "Well, he was right that it was a bad idea to expand NATO eastward because it would provoke nationalist backlash in Russia." Or, "He was wrong about Iraq because he supported the 2003 invasion."

We did a careful analysis of Friedman's columns, however, and one of the things we noticed is even though it's very difficult to discern whether he's a good forecaster, going back after the fact, it is possible to detect some really good questions. He's a pretty darn good question-generator. We've actually begun to insert some of his ideas for



questions. They tend to be rather open ended. We've managed to translate some of them into future forecasting tournaments.

But there's tension between being a super question generator and a superforecaster. Here's an example: Before the 2003 Iraq invasion, Friedman wrote a column on Iraq in which he posed the following question, which really cut to the essence of a key issue in deciding whether to go into Iraq: Is Iraq the way it is today because Saddam Hussein is the way he is, or is Saddam Hussein the way he is because Iraq is the way it is?

It's the old chicken-and-egg question. What would happen if you took away Saddam Hussein? Would the country disintegrate into a war of all against all? Or would it move toward a Jeffersonian liberal democracy in the next 15 or 20 years? Friedman didn't know the answer to that question. Many people think he made a big mistake in supporting the invasion of Iraq in 2003, but he was shrewd enough to pose the right question. If we'd been running forecasting tournaments in late 2002, early 2003, that would have been something we would have wanted very much to include in that exercise.

The right way to think about Friedman and Flack is that they are complementary. Friedman's greatest contribution to forecasting tournaments may well be his perspicacity in generating incisive questions. He may be a good forecaster, too, but we just don't know that yet.

Sometimes it's also a matter of reframing the questions. In our book *Superforecasting*, we conducted an interview with David Ferrucci. When he was an IBM scientist, he was responsible for developing a famous computer program known as Watson, which defeated the best human *Jeopardy* players. We asked him about his views about the human/machine forecasting. One line of questioning was particularly interesting. It was very clear to him that it would be possible for a system like Watson to answer the following question reasonably readily: Which two Russian leaders traded jobs in the last five years? For that question, Watson could search its historical database and figure it out. What if we reframe the question as: Will those same Russian leaders change jobs in the next five years? Would Watson have any capacity to answer a question like that? Ferrucci's answer was: no. Our next question was: How difficult would it be to reconfigure Watson so that it could answer a question like that?

A lot of people spend quite a bit of money on advice about the future that probably isn't worth the amount of money they are spending on it.



His answer: massively difficult. Think about what would be required to do the sorts of things that superforecasters collectively do—the amount of informed guesswork that goes into constructing a reasonable forecast—it is difficult to imagine artificial intelligence systems doing that in the near term.

Getting Down to It

A lot of people spend quite a bit of money on advice about the future that probably isn't worth the amount of money they are spending on it. They have no way of knowing that because they have no way of knowing the track record of

the people whose advice they are seeking.

The best example is probably in the domain of finance where a lot of money changes hands and is directed to people who claim to have some ability to predict the course of financial markets. That is an extraordinarily difficult thing to do. I'm not saying it's impossible or that nobody can do it any better than a dart-throwing chimp, but it's a very difficult thing to do. If people were more skeptical about the people to whom they turn for advice about possible futures, I think finance would be a case in point. But, I think, more generally people should be very skeptical of the pundits they read and the claims that politicians and other people make about the future as well. It's very common for people to make bold claims about the future and offer no evidence for their track records. It's almost universal.

It comes down to human psychology. We take our cues about whether somebody knows what he or she is talking about from how confident he or she seems to be. That's a problem, and it suggests that people need to think a little bit more carefully when they make appraisals of competence and not rely quite as heavily as they do on what we call the "confidence heuristic." It is true that confidence is somewhat correlated with accuracy, but it's also possible for manipulative human beings to use that heuristic and turn us into money pumps.

The answer is to learn for ourselves what makes a good prediction. And that answer? It's a focus on the questions themselves.



Philip Tetlock's research interests include "responsibility" and "assessing good judgment"—social phenomena not commonly discussed in academia. But his career has been crossing boundaries for decades. His titles alone speak to that diversity: Leonore Annenberg University Professor in Democracy and Citizenship, Professor of Management, and Professor of Psychology. His research in judgment led to the creation of forecasting tournaments, bringing together 284 expert forecasters and 28,000 predictions. Other tournaments have followed, producing forecasts about geopolitics for the intelligence community. His research eventually led to his latest book.

DATA INTERPRETED

28%

Rate at which corporate investors tend to convert innovation laggards into innovation leaders within four years after investment.

That's double the rate seen by biotech startups funded by independent venture capitalists, according to research from Gary Dushnitsky, a Mack Institute senior fellow and professor at London Business School, and Elisa Alvarez-Garrido of Georgia State University. Why? Corporate investor-backed startups can leverage knowledge, infrastructure, laboratories and other resources, as well as better navigate clinical trials, compliance and other requirements on the way to a marketplace. Startups were rated by performance of patenting and scientific publication.

Source: Listen to Dushnitsky explain his findings on a K@W podcast at: <http://knlg.net/20d0Yai>.



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THOUGHT

For the Love of Games?

Experts gathered at a Wharton conference entitled, "Gameful Approaches to Motivation and Engagement." The following is conference attendees' discussion about the latest research and practices of gamification, a fledgling field that often gets held up with high promise for marketing, employee engagement and other business purposes. For as much as we know people like games, however, it turns out we know very little about how game elements can work in non-game situations.

FOR-PROFIT AND PUBLIC ORGANIZATIONS have caught the gamification craze. In a 2013 survey, over 70 percent of *Forbes* Global 2000 companies said they planned to use gamification for marketing and customer retention. Starbucks and Unilever have tried it for training and customer loyalty programs. Even the U.S. Army produced a "virtual army experience" to recruit at shopping malls.

It must be working, right? For the most part...who knows?

Jonna Koivisto, a researcher at the University of Tampere Game Research Lab, identified over 800 papers on gamification. Of those with "some actual concrete evidence," she said, "the number is very, very few. ...We can't very confidently say much of anything about what works and what doesn't."



Hoping to change that is Wharton's Edward B. and Shirley R. Shils Assistant Professor, [Ethan Mollick](#). Mollick and colleague [Nancy Rothbard](#) tested an online sales game called "Slam-Dunk" with several hundred e-commerce salespeople. Imagine leaderboards ranking people by leads, cold calls and deals, describing them as layups, jump shots and baskets.

Mollick studied "consent" among the players—the extent to which they embraced the game. Those who consented showed strong increases in positive feelings toward their company. For those who didn't, the game caused negative feelings and even performance decreases.

The takeaway: Gamification can have a large impact, but forcing "mandatory fun" can cause target audiences to want to hit "reset."

THOUGHT

James Madison once said that if people were angels, we would have no use for law. My work in legal philosophy and moral philosophy shows that James Madison wasn't right about this.



Robert Hughes, professor of legal studies and business ethics at Wharton. Hughes' research indicates that the law "can be morally binding on us quite apart from the effect that any sanctions have."

DATA INTERPRETED

1 in 100

Proportion of patents in nanotech space that were breakthroughs in both knowledge and economic value.

In an exciting field like nanotechnology, you might expect breakthrough, enriching ideas to be everyday occurrences. Not so. [Sarah Kaplan](#), a senior fellow at Wharton's Mack Institute, and [London Business School's Keyvan Vakili](#) declared it rare that innovations are both novel in knowledge and massive in economic impact. Their research approach was a new method, "topic modeling," allowing them to analyze patent language.

A crucial takeaway is how double-breakthrough innovations occur. Traditional wisdom says innovations occur with diverse project teams. But inclusive brainstorming isn't enough. A deep dive in a domain is crucial, too, to first identify possible breakthrough opportunities.

Source: "The Double-Edged Sword of Recombination in Breakthrough Innovation," published in the Oct. 2015 *Strategic Management Journal*.

THOUGHT

Overconfidence is the biggest psychological predictor of whether or not you're going to become an entrepreneur.

Wharton management professor [Ethan Mollick](#), on his research behind the reason male entrepreneurs outnumber female ones. You can hear an interview with Mollick on the [Knowledge@Wharton](#) podcast.



THOUGHT

Your Animal Brain

Wharton marketing professor [Michael Platt](#) wants to know why people make the decisions that they do and what influences those decisions. He is a professor of neuroscience at the University of Pennsylvania's Perelman School of Medicine and a professor of psychology at Penn's School of Arts and Sciences.

ONE OF THE FASCINATING takeaways from our research is that people and animals tend to make very similar kinds of decisions when they are in similar contexts. Moreover, their brains seem to make these decisions using a similar set of mechanisms.

What this means is that we can infer that much of our own behavior, the choices we make, even in a very complex situation, such as a market, are driven by forces that evolved a long time ago to solve the kinds of problems that animals need to solve, such as finding food, finding a mate, and making friends and allies that will help to solve the problems that they need to solve.

I think we're all aware that the kinds of choices we make are influenced by the people around us. In fact, this is true of other animals as well. One thing that we have learned from studying the choices that animals make and the choices that people make and what happens in their brains when they make these choices is that there are very specific, highly specialized mechanisms that detect the presence of other individuals, identify who they are, evaluate their importance to us and allow us to learn from their behavior. More recently, we've identified a very specific set of brain cells that actually responds when another individual feels a reward.

A really interesting and important potential practical application of this discovery is that we might find ways, either behaviorally or pharmacologically or using other means, to activate these cells. And if we did so, we might be able to promote pro-social behaviors such as charitable giving. This could be a very important and practical way of enhancing the welfare of society.



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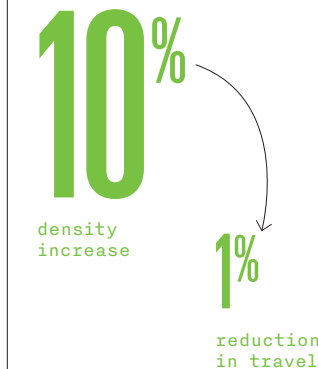
THE DECK

Does Greater Density Reduce Pollution?

City planners are urging greater density, bringing services and retail closer to the areas in which people live, on the theory that this will reduce the amount people need to drive. But new research by Wharton real estate professor Gilles Duranton and Brown University professor Matthew A. Turner shows that such policies may not work as well as the experts think.

Their study relied on a large-scale survey by the U.S. Department of Transportation, covering nearly a million trips; satellite imagery; and the ways long-term residents responded to changes in an area's population.

1 COMMUTES POLLUTE



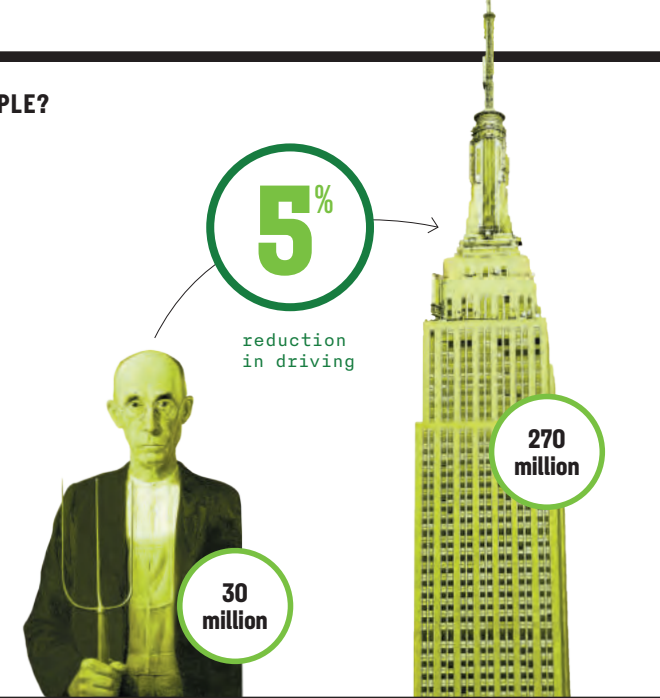
One reason for increasing urban density (the abundance of residents and jobs within a 10 kilometer radius) is to help the environment. The shorter the commute, the lower the social and economic costs of greenhouse gases and particulates.

2 MOVE ALL RURAL PEOPLE?

Imagine if all 30 million Americans who live in low-density rural areas were somehow persuaded to move to urban areas. The reduction in driving would total only 4-5%*.

Conclusion: Urban policy to increase density will not significantly reduce carbon emissions.

*And, if you left some behind, they would drive more, offsetting the reduction.



3 SOLUTION: A TAX FOR CONGESTION

Getting people to take mass transit is a more effective way to reduce pollution. City governments can do that with a congestion tax—imposing a fee based on the concentration of traffic in particular areas. Professor Duranton concedes that taxes are “a really hard proposition in this country.” But he adds: “That’s the one thing that works. Everything else will not do very much.”

Learn more at knowledge.wharton.upenn.edu

4 NEEDED: THE COST OF CONGESTION

“We have no serious idea about the economic cost of that congestion,” Duranton says. New data from mapping services like Google Maps, showing travel in real time, can help the researchers dial in the true cost of congestion.

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People

3

Headlines: Alex Gorsky—48 Microsoft—54

Pivot—65 Cohort—68

“The military’s mission-oriented nature fails to encourage thinking about career paths.”

Steve Weiner, p.65



Illustration by Sarah Tanat-Jones

TURNING POINTS

JOHNSON & JOHNSON CEO
ALEX GORSKY WG94
TALKS OF THE MOMENTS
THAT PREPARED HIM
FOR THE CHALLENGES
OF RUNNING A GLOBAL
HEALTH CARE COMPANY.

BY CHRISTINE GIORDANO



ALEX GORSKY, CEO of Johnson & Johnson, is still amazed by how close he still is with the members of his learning team from Wharton's Executive MBA program, and how far they've each gone in their careers. In 1994, selecting a team was a little less scientific than it is today. "There were about 100 of us in a room, to be divided into 15 study groups based on where we lived, our background and how we got along," said Gorsky. "As one of my classmates described it, it was a little bit like a cross between picking a dodgeball team when you were in high school and pin the tail on the donkey." But from that day forward, the study group formed tight personal and professional relationships.

At first, it seemed, their careers couldn't have been more varied. The group included Gorsky, a product director at Johnson & Johnson, an OB/gynecologist at Lehigh Valley Medical Center, a leader of a data processing company, a plant manager of a Pennsylvania automobile brake manufacturer, a Finance Professional from Johnson & Johnson, a product manager for Air Products and a controller for a furnace company.

They all brought something very different to the table. "I think we managed to not only take a lot away from the curriculum and the instructors, but we also had a great time," he said. "All of us like to work hard and play hard. And we really learned how to work as a team

and how to rely on each other. We all had a great sense of humor, which I think is so important in leadership."

Since graduation, the group has stayed in touch, getting together at least once a year, no matter where they are geographically. "We've been to bat mitzvahs, bar mitzvahs, weddings, funerals—you name it. And we're very proud of the fact that we're all still such close friends. I'm also really proud of just how far everyone has gone," he said.

The OB/gynecologist, Steve Klasko, is now chief executive of Thomas Jefferson University and Jefferson Health. Linda Johnson, who led the data processing company, is chief executive of the Brooklyn Public Library System for

New York. Mike Pisch, who was the accountant at the furnace company, is a Venture CFO and has worked on multiple ventures; along the way Dave Buckley, who worked for the brake company, has been a CEO at several different successful ventures. Terry Hahn, the product manager for Air Products, now serves on the senior leadership team at Honeywell. And the J&J Finance Professional, Bert Bruce, now runs the Commercial Development & Community Engagement for the Global Rare Disease Business at Pfizer Inc.

Gorsky pauses, reflecting. "As our careers developed, we've all coached and mentored each other, and, in some cases, people have worked for each other and taken on ventures together, so there's just been a tremendous amount of intersection between our personal and professional careers and lives. It's really a talented, successful group of people that, frankly, I consider family, not only friends."

Pivotal Career Moves

Gorsky chose Wharton's Executive MBA degree to learn both the technical and the strategic skills that the MBA could provide. He was fortunate to have the full support of his leadership team at Johnson & Johnson.

He notes two crucial turning points in his career after Wharton that can be directly linked to his career's success. The first was after he had been with Johnson & Johnson about 14 years and was approached about moving to Europe. "There was some risk to the decision. It meant relocating my family and learning about entirely different markets and many different health care systems, versus staying in a comfortable place where I had been for a long time. My son was heading into his freshman year of high school and that's never an easy time to move," he said.

Nevertheless, his family has a motto: *it's not good or bad, it's just different*, and they try to take on that mindset with everything they do. Their move to the United Kingdom proved to be a rewarding experience, both personally and professionally. "Professionally, I learned so much more about the business. As a family, it brought us closer together because you don't have all the distractions and the weekend activities that you have here in the United States," he said. They did more activities together, and his son had a good experience at an international school.

The second pivotal career point was returning to Johnson & Johnson. After working in Europe, he had taken a job with the Swiss-based company, Novartis, in the United States for four years, where he served as head of the company's pharmaceuticals business in North America. The company did well under his leadership, and Gorsky said he learned a lot from the opportunity, but he returned to Johnson & Johnson four years later. "I always knew I wanted to come back and finish my career at Johnson & Johnson," he said.

The CEO Selection Process

Gorsky had always aspired to earn a position of significant responsibility. When he was notified that he was one of two candidates to be the CEO of Johnson & Johnson, he said he was both excited about the opportunity and humbled by that level of responsibility.

The in-depth CEO selection process in which he participated set a new standard. Gorsky said it was driven by the board of directors and involved strategic reviews about the businesses and the company's future. It involved in-depth 360 reviews from managers over his entire career—from managers 20 years prior, to mentors and people he'd worked with along the way. Then he did individual interviews, team interviews and interviews with the entire board. "I felt

that they had every opportunity to really understand who I am, who I had been, and what kind of a CEO I was likely to be going forward," he said.

He said the selection process wasn't so much about pitching himself for the position; it was more about explaining how he thought about the business, the company, the culture, about people and how he made decisions. Those characteristics and traits meant much more to the board than a pitch, per se. They had chosen him because of many different factors—including all the different businesses he had run. He'd begun his pharmaceutical career as a sales representative, and risen through the ranks in marketing and general management. He had served as the president of Janssen's U.S. operations and had been responsible for its functional areas, which included everything from administration and community affairs to medical affairs. He also oversaw the launches of several drugs. He had left the company and had come back with outside knowledge, and he had a chance to run the pharmaceutical business in Europe, the Middle East, Africa and Russia and learn how the geographic locations affected the different markets.

Making Health Personal

His position as Chairman and CEO obviously takes endurance, and Gorsky lights up with enthusiasm as he talks about health and wellness. His square-shouldered physique hints of a disciplined routine, and, sure enough, he awakens at about 4:50 everyday, and after a quick cup of coffee and a splash of cold water on the face, his next stop is the gym, usually for 60 to 90 minutes. He does a combination of cardiovascular, weight training, swimming and cycling and still competes in triathlons; J&J is the primary sponsor of the Philly Tri-Rock, one of the premier triathlon festival weekends in the country. He has completed the race at least five times. "Last year, 600 people from our company participated and

raised about half a million dollars. All you saw was a sea of red tee shirts flying across the trail," he said, chuckling.

The event suits the company's evolving mission. Johnson & Johnson is increasing its focus on wellness, and not just sick care. The company's diversity of businesses gives him a unique perspective on the issue. He asserts that some 75 percent of chronic disease—such as cardiovascular disease, cancers, metabolic ailments, and pulmonary disease—can be significantly reduced by lifestyle and choices such as not smoking, not drinking too much, along with maintaining a healthy diet and a consistent exercise program.

"Jim Burke, one of my predecessors in the seventies, actually kicked off a wellness program at J&J called Live for Life," he said. "And we've continued to build and improve upon that. Now, more than 90 percent of our employees know their vital statistics like their heart rate, blood pressure, cholesterol level—and it's voluntary." He adds: "If you know your data, you're going to be more aware and tend to take it more seriously. Now more than 95 percent of our employees have access to fitness programs such as a fitness facility, healthy dining in the dining facility, exercise education, things like that. And we try to emphasize it in everything we do."

As the world's largest and most diversified health care company, he wants employees to make their health a personal experience, believing that taking care of themselves is the most important thing that they can do for themselves and their families. "These jobs are challenging," he said. "You don't have to run a marathon or do a triathlon, but I encourage everyone to really think about how they can carve out time to stay healthy." The return on investment is enormous. "If you're healthier, if you feel better, you'll have more energy. You'll be more present. And ultimately, what you don't want is to spend your entire career working so hard, making all those sacrifices, and then have some health event that maybe could have been prevented had you taken better care of yourself."

Advice on Distinguishing a Career

When others aspiring toward leadership positions ask him for advice, he tells them, "The most important thing is to distinguish yourself by having

+ WE ALL HAD A GREAT SENSE OF HUMOR, WHICH I THINK IS SO IMPORTANT IN LEADERSHIP.

a consistent track record of demonstrated performance. I think, too often, people get caught up in the politics or the positioning, and I would say, of those three P's, performance is, by far, the most important. If you have a very consistent track record of performance in different markets, different businesses, different business cycles. That's really important."

The second critical factor is a strong track record of developing people. Sometimes, he said, you'll inherit a team. Your mission is to make the team better or turn it around completely.

Finally, you need the right value system incorporating trust, judgment, and resiliency.

Gorsky says his own values came from his life experiences. He was born as the fourth child in a family of six children with a 17-year spread. "Being part of a large, very middle-class family taught me a lot about how to work with others and how to get along," he said. "Look, *you're* the best person you know how to be. Companies and people don't want perfection—they want real leaders they can identify with, whom they think have empathy, compassion; who aren't afraid to set a high standard and challenge and debate. But at the end of the day, they want a real and authentic leader whom they know is going to be with them."

Happily Uncomfortable

Before beginning his career, Gorsky spent six years in the military. He went to Ranger school and Airborne school, earning a Captain's rank while serving in Panama, Europe, and the United States. "It taught

me not to care about things like how high the wall is or how far across the river you need to swim—you've just got to figure out a way to solve the problem," he said. "And you never have enough resources; things always happen that are unexpected." While still in his early twenties, he was put into tough situations while learning to work with a diverse group of people. But then, an injury came back to haunt him.

When he was a boy cutting grass in his backyard near a lake in Michigan, he'd suddenly heard a sound and saw something cut into his shin. A doctor examined it and told him if there was an object lodged under his skin, it would eventually work its way out, and sent him off with a bandage.

About 10 years later, he was a cadet in the middle of Ranger school spending much of his time doing patrols, traversing different landscapes and setting up ambushes. Moving at night was safer than in the day, but when walking through the woods in the dark, he would repeatedly hit his shins on the downed trees. The frequent blows caused an infection in his lower leg. And it persisted, but the young cadet could only be out of Ranger school for 12 hours or he'd have to retake the course, which he didn't have time to do. About a week before the end of Ranger school, his leg was too infected to go on. In the hospital, doctors discovered something remarkable. "When they took me in, they basically extracted a fish hook from my shin that had been there for 10 years," he said. Eight hours after they sewed him up and administered antibiotics, he was back in the woods. And yes, he did his final

patrol, passed and received his Ranger Tab along with his Airborne Wings.

He credits the military with helping him to develop resilience, one of the most important characteristics needed in the role of a CEO today. "Because, frankly, whatever organization or company, the reason that you're there as a leader, is to manage through challenges and seize opportunities," he said. "You need to be comfortable with being uncomfortable, to be able to face a series of challenges and crises at times, and to do it in an inspiring, non-robotic, real way. You need to maintain calm when there can be a lot of anxiety; to maintain perspective."

First Days as CEO

When he took the helm as CEO in 2012, he focused on the culture of the organization. He made lists considering what would remain the same, evolve and change. For what would remain unchanged, he took inspiration from Johnson & Johnson's Credo, and value system that is over 70 years old. It talks about the company's commitment to patients, mothers and fathers, physicians and nurses that use its products; and its commitment to its employees, its communities, and ultimately, to its shareholders.

When it came to making changes, he knew he needed to elevate the bar for innovation—not only with products, but with innovation methods. "And I think we've become much more externally focused versus just internally focused on where we source a lot of our innovations," Gorsky said. He accelerated the pace of change in the global organization; 49 percent of the

+ IF YOU'RE NOT CONSTANTLY SEEKING OUT INFORMATION, IT'S EASY TO BECOME VERY INSULAR IN YOUR DECISION MAKING.

company's sales are now outside the United States. He placed a very strong emphasis on daily execution, and improved the quality systems and supply chain.

He also put an even greater emphasis on "leading with purpose." In today's world, he said, "both our stakeholders outside the company and our internal stakeholders, our employees—millennials in particular—want to be part of something bigger than themselves."

Staying Engaged

CEOs must learn constantly, ask questions and stay connected and engaged to keep a hand on the pulse of their organizations. And as a result, they gain increased perspective. "I always say a couple of things happen when you become a CEO," Gorsky said. "The news tends to become very good or very bad and your jokes can get very funny. If you're not constantly seeking out information, it's easy to become very insular in your decision making. I put a lot of time, energy and effort into connecting," said Gorsky.

Johnson & Johnson has an employee blog that functions as a two-way conversation. In addition, Gorsky holds numerous town hall meetings where he tries to

engage with people at all levels of the organization. He also makes one-to-one telephone calls. "I call 10 people each week, to connect deeper down in the organization with skip-level meetings," he said.

Every two years, the company does a comprehensive survey, of all 127,000 of its employees. More than 90 percent respond. The survey asks employees to evaluate how the company is meeting its Credo responsibilities. It uses the feedback to evaluate its businesses and leaders. "If you're a business leader, our expectation is that you not only deliver strong business results, but that you set the right tone, the right climate, the right culture in your organization that fulfills our Credo obligations overall," said Gorsky.

During the last Credo survey, J&J identified three areas for improvement: innovation, collaboration and talent development. When it takes the leadership team to Korea, for example, they meet with the leaders in Asia. For two days, they run a series of breakouts, town halls and other sessions that focus on those three areas. "We'll collect those ideas and really embed them into the goals and objectives for that region," said Gorsky.

The meetings have taught him something integral. "At the meetings, I'm constantly amazed at how important the Credo is to the people in our organization," he said. As a result, he tries to start and end each session with comments about J&J's Credo.

On Family

When asked if there is something that few people know about him, his answer is almost immediate. "There is no way that I would be where I am without my immediate family," he replied. "I've been able to share my career with my wife because she's a nurse, and our son, who is actually a Wharton graduate. They and my brothers and sisters are my best friends." He also likes to think of Johnson & Johnson in some ways as a big family. "And in our family, you can argue, you can debate, you can dislike each other from time to time, and you can still have very high expectations of each other. But at the end of the day, there's a lot of commitment and love and I think that's the way I try to lead the company."

Future Forward

Gorsky believes one of the biggest challenges that we face as a society is the question of how we will provide high-quality, innovative, value-added health care to aging populations and increasing middle classes around the world. And that will put significant pressure on governments, on health care providers and our entitlement systems around the world. Because of its diverse portfolio, size, breadth, global position and scale, Gorsky said the company is positioned to be a central part and partner of the new solutions that will be needed to innovate and help patients and consumers in a sustainable way.

By company estimates, Johnson & Johnson touches about a billion patients or consumers every day with their products. "I think there's really few other places in the world where you can have such a fundamental impact on global health care than here at J&J," Gorsky said. "It's both an incredible responsibility and an awesome opportunity for us."

Christine Giordano is a business journalist and a columnist for *Newsday*.

CAREER PATH

Gorsky's life journey has included England, Wharton, and the top of the corporate ladder.

Here are snapshots of stops along the way.



AGE 27
Alex Gorsky's military career



MAY 2013
The new Wharton grad speaks at the first MBA for Executives graduation ceremony.



JUNE 2014
Alex Gorsky participating in a roundtable discussion with President Barack Obama to discuss policies at the Summit for Working Families



NOVEMBER 2014
Alex Gorsky, Group WWC Sandi Peterson, and Operation Smile founders in China meeting with families whose children were having surgeries to repair a cleft lip



MAY 2015
Alex Gorsky and wife, Pat Gorsky along with their son, Nick at an Operation Smile event



FEBRUARY 2016
Alex Gorsky teaching class at Wharton Business School

IT'S A 100

Wharton grads
formed the core of a team
that revolutionized
Microsoft Windows.

BY JIM COLLINS

IN JANUARY 2014, a handful of Microsoft's smartest engineers slipped away for a three-day off-site at a lodge in Woodinville, Washington, a few miles north of the company's sprawling Redmond campus. On the table was the future—some were saying the survival—of Microsoft's faltering flagship product, the Windows operating system.

Photography by Jose Mandojana



THE MOST RECENT release of the operating system, Windows 8, two years earlier, had—to put it politely—not met expectations. The disappointing reception from users coincided worryingly with plunging PC sales as consumers, developers, and mindshare flocked to mobile computing platforms such as Apple's iOS and Google's Android. Windows still powered more than 90 percent of the world's personal computers, but the world was becoming a different place. Personal computers had lost their dominance. Windows was found on just 14 percent of all computing devices, and its traditional market was shrinking. In the ZDNet blog “Between the Lines,” a few months before the meeting in Woodinville, Steven Vaughan-Nichols wrote, “Most people in our recent debate over the future of Windows thought that the operating system could be saved. I'm sure many people in 1491 thought that the Earth was flat, too.” Suddenly, almost unthinkably, industry observers were talking about the end of an era that had defined the tech giant for nearly three decades.

There were other dark clouds. Microsoft CEO Steve Ballmer, who had made Windows a top priority, was on the way out, and the organization faced uncertain change. Some of the people in the room at Woodinville were leaders of Ballmer's ill-fated foray into the mobile-phone market through the purchase of Nokia, an investment that was turning out disastrously. Windows Phones, coming late to the mobile bandwagon, had sold poorly, following the Kin, a much-hyped phone designed for social networking that was on sale for all of 48 days before Microsoft

and Verizon killed it. Never mind that the Windows Phone had impressed reviewers with its brilliant design, and had tanked chiefly because it came with so few apps. The phones had repeated the kind of copycat, late-to-market pattern that critics said had characterized the company's new offerings in recent years. The Zune MP3 player had chased the iPod into the music space and flopped. The Surface tablet had chased the iPad. The search engine Bing was still playing catch-up to Google, and lagging far behind.

The company was struggling with what Wharton Adjunct Associate Professor of Management **Saikat Chaudhuri** called “the incumbent challenge.” In an industry where growth and opportunity demanded nimbleness and innovation, Microsoft had become a mature business built around a dominant business model. Now the model was in danger of losing relevancy. Wharton Associate Professor of Legal Studies **Kevin Werbach**, quoted as far back as 2011 in the business school's *Knowledge@Wharton*, said, “Microsoft's great fear was always that it would turn into IBM, which it viewed as a bureaucratic organization living off of past glories...” Bill Gates's legendary vision of powering a computer on every desk in every home had essentially been accomplished years before. From the outside, the prospects of any real success in Woodinville seemed slight. It had been a long time since anyone had called the company “visionary.”

Inside the room was a different story. The makeup of the group was not Microsoft personnel-as-usual. The company's business and product development had historically, and famously, been driven by developers. (A common phrase around Redmond captured the company's engineer-first approach: “We *could* build it, not we *should* build it.”) Indeed, here in Woodinville, leading the meeting was a brash 40-year-old engineer named Terry Myerson. But Myerson—in charge of the recently consolidated Phone/Windows/Xbox platforms—wasn't all about the code. He was an evangelist for a consumer-first approach who wasn't afraid to shake things up. He'd invited **Jeremy Korst WGo3** to the table, a 40-year-old Wharton MBA who had just taken the helm for Windows brand and



Bernardo Caldas

A 15-year Microsoft veteran, Caldas oversaw the financial modeling that justified giving away the Windows 10 upgrade for free.

product marketing. Another key voice belonged to fellow Wharton grad **Bernardo Caldas WGo1**, a veteran general manager with expertise in pricing and business modeling. “Bernardo and I were part of the early strategy conversations,” said Korst later, “only because of the shifting organization. We were at a table we normally wouldn't be.”

Their roles turned out to be crucial.

Industry analysts had identified two possible courses for Windows to thrive in an increasingly mobile world. Paul Thurrott put it this way on the website IT Pro: Microsoft could follow the Apple model and continue to develop iterations of its traditional desktop operating system while creating a separate mobile platform on the side. Or it could protect Windows at all costs and simply build mobile platform features into it. The course that Myerson's team mapped out bet on a third way. It was bold to the point of being visionary.

Four fundamental but risky objectives underpinned the plan. On the development side, the new operating system would be designed to work seamlessly across all of Microsoft's platforms, from the miniature Raspberry Pi 2 to smartphones and phablets and tablets and Xboxes and laptops and 2 in 1s and PCs and mainframes, all the way up to the 84-inch video conference/touchscreen of Microsoft's “Surface Hub,” which was still in development. There would be none of the usual Microsoft walls around product lines. Consumers switching from one device to a second to a third would work with a comfortable, familiar system across all three, whether using a keyboard or mouse or swipe or voice control or game controller. Developers around

“IT WASN'T JUST A SET OF SKILLS THAT THE PHONE MANAGERS BROUGHT. IT WAS AN ORIENTATION.”

the world, attracted by the size of the combined market, would respond with a flood of innovative applications. First, though, Microsoft engineers would need to write all those lines of code. Ensuring quality would be difficult, given the number of different devices in the world, each with its own screen size and configuration, and given the dizzying number of applications they supported. The thousands of distinct end products needed to look and feel “similar and familiar,” no matter where they appeared or how they were accessed. The scaling challenge of such a plan, alone, was monumental.

The second objective was to get the operating system as quickly as possible onto as many devices as possible. Bernardo Caldas was tasked with designing the models on pricing and licensing. He would also run the analytics of a strategy that was completely foreign in Redmond: giving away the new upgrade, for free, to the massive market of users already operating earlier versions of Windows. What was the payback on the hundreds of millions in revenue the company stood to forgo? What would happen to the partnerships with Intel and the OEMs whose customers would be given incentive to stay on the machines they already owned, rather than buy new? And how would the manufacturers provide technical support in the meantime? How could Microsoft shift its business model that had sustained it for nearly 30 years towards a new model that combined new device sales with post-sale monetization?



Jeremy Korst

With a “challenger mindset,” General Manager Jeremy Korst served as a lead architect of the Windows 10 brand marketing, roll-out, and go-to-market strategy.

Third, the new operating system wouldn't be guarded like a state secret until coming out in a customary, splashy, over-the-top unveiling. Rather, the company's developers would share the evolving code with users, to beta-test and help work out the bugs. For Microsoft, which had long prided itself on being in complete control of everything it touched, the strategy contained anxious amounts of uncertainty. What if opinion leaders such as Mary Jo Foley or Tom Warren didn't like the direction? What if the blogosphere blew up with criticism from impatient users who thought they were seeing a product more fully baked

than it actually was? Wouldn't this open the door to reverse engineering in Cupertino and Mountain View?

Finally, in a shift that was every bit as symbolic as strategic, Jeremy Korst and the marketing team would work in tandem with the engineers from the outset, to make sure the programmers were actually creating something that customers wanted and that would fly in the fast-changing marketplace. At the same time, the marketing team would build campaigns that aligned with what the engineers were creating. As Korst noted, that collaboration was a radical break from the typical Microsoft process. “There's an old saying here,” he said, “that engineers build what they want, then hand it off to sales and marketing to go and sell. Windows 8 was a pinnacle of that model. Which is a big reason it wasn't successful.”

Taken together, the risks looked almost entrepreneurial. But far more was at stake than the prospects of venture capital and growing up out



↑ Windows 10 offers password-free security, continual streaming updates, and an elegant personal assistant.

of the garage. Microsoft's core business supported a company with some 110,000 employees worldwide—more than 20,000 in the Windows division alone—with ripple effects into every corner of the global economy. The plan for the new operating system was a departure on so many levels from the core Windows business that the team in Woodinville adopted an internal code name for the upgrade. They would call it “Threshold.”

IN IMPORTANT WAYS, the timing of the new plan was fortuitous. Microsoft's stock had dropped nearly 12 percent during Steve Ballmer's tenure, and the drying up of the PC market was sobering. But in February, less than a month after the off-site in Woodinville, Satya Nadella was named CEO. A well-respected consensus-builder from within Microsoft, Nadella believed in the power of Windows and vowed his support—and challenged Myerson's group to turn Windows into a dynamic ecosystem built for the new “mobile first, cloud first” environment. Nadella was willing to sacrifice any momentum the Windows Phone had in favor of building the ecosystem—he immediately went about shedding jobs in the Phone division, and eventually wrote off the \$7.6 billion investment, more than Microsoft had paid for Nokia in the first place. He encouraged collaboration across divisions and the cross-pollination of the best minds, wherever they came from. A bunch of senior people who had been used to managing silos left around the

WINDOWS 10 FEATURES

Secure Log-In With just a look or a touch (accessories needed).

Tiles Familiar and easily customized, the new start menu provides continual streaming updates. One reviewer called it “a computing Swiss Army knife that's idiotically simple to use.”

Continuum Lets you work seamlessly across all devices and screen sizes, even switching between touch and mouse on the same documents.

Cortana The voice-activated personal assistant offers reminders and information without you leaving the page you're on. Can even help you before you know what you want.

same time that the Windows/Xbox/Phone platforms were brought together. It felt like an older generation stepping aside as a new breed stepped up.

Jeremy Korst was one of the new breed. From the working-class town of Hoquiam out on the Olympic Peninsula, Korst had gotten his undergraduate degree at the University of Puget Sound in Tacoma before his MBA at Wharton. He was down to earth, not impressed by reputation or pedigree, a good listener, comfortable yielding in the face of a better idea. He was in his second stint with Microsoft. Initially frustrated by the company's insular approach to getting products to market, he had left to work for T-Mobile. He had been lured back by Myerson's fresh, customer-centric approach working on Windows Phone. Now, with the Woodinville plan blessed by Nadella and approved by the board and set into motion, it fell mainly to Korst to sell the new brand vision to the engineers. He not only represented marketing and the go-to-market strategy in the big regular engineer meetings called “Director Reviews,” he and his team kicked off the meetings.

Korst brought in senior product manager **Karen Wong-Duncan WGo6** to help him pivot the entire culture toward the consumer. Like Korst, “KWD” was a Wharton alum who had come out of the Phone division. They shared the same “challenger” mindset that Myerson and many managers in that division had—they'd been attracted to the phone business because it was a new frontier, a huge and challenging market with powerful brands already controlling the space. It wasn't just a set of skills that

[[THEY COMPETED AGAINST EACH OTHER IN CHILI COOK-OFFS AND HOLIDAY DRINK CONTESTS.]]

the Phone managers brought to the Windows project, it was an orientation.

They immediately engaged the engineers. They worked up mock ads “to show them the North Star,” said KWD, “to show them where we wanted to go.” They put a storyboard together, and shared it with groups of 50 and 100 at a time, brought it around the company and on the road, and got feedback. They did market research, ran focus groups, came up with new ads and tweaked the storyboards, and kept bringing them back in front of the developers. “Keep these in mind as you build out the software,” KWD told them. They found the engineers surprisingly responsive, happy to be engaged in the wider conversation and excited to see how their work would be pitched to customers.

TIME AND AGAIN, Wong-Duncan returned to things she remembered from the marketing class she’d taken at Wharton with Adjunct Associate Professor of Marketing Keith Niedermeier. She had internalized the importance of things like quantifying consumer trends and market segmentation—but she kept coming back to Niedermeier’s focus on consumer behavior, on how brands shape perception, on how the most successful brands create an emotional connection with their customers. “At the end of the day,” she said, “data are just data. You have to use them and then find something bigger. Consumer feedback can take you only so far—every focus group hears



Karen Wong-Duncan

Director of Consumer Innovation Strategy, “KWD” headed up the early research around customer needs.

the same things.” She gave herself a playful, unofficial job description. “I do Consumer Strategy and Seismology,” she’d tell people. She listened for faint and loud signals. She put her ear to the market and tried to hear what was going on beneath it. She talked with users and studied the evolving operating system, listening for a beating heart.

Over time, Korst and Wong-Duncan refined the storyboard and narrowed on a message that had been part of the Windows operating system all along. The Windows legacy had been the democratization of technology—the software made for anyone, anywhere. It was difficult to market that idea, though,

to any individual customer, to make the product feel special. What was needed was new language. The right language—aspirational, emotional, identity-forming—would help create the process and then drive decisions.

The unspoken purpose of Windows, they finally determined, had always been to enable people to build, to create, to explore, to discover. To do. Do Great Things. They tested *Do Great Things* against other tag lines, against messages from outside agencies, and it kept winning. The message felt authentic and aspirational. It inspired the engineers. The timing felt right. The millennial culture was a start-up culture, the makers movement well underway. Someone noticed that DO was part of the word WINDOWS, and some graphic storytelling was born. The message resonated. Korst and Wong-Duncan and the rest of their team set about articulating it and then ensuring the product was built to bring it to life.

“We had more than a billion customers already using our product,” said Korst, “probably by default more than choice. We wanted them to choose it. We wanted to put a choice in front of them, and give permission for other brands to offer a competing choice as well. For example, to Apple customers: Do you want to consume beautiful things, be artistic, be a part of the “in” crowd? Or do you want to make a difference, to do great things?”

Myerson and Korst brought in another Wharton grad, **Stella Chernyak WG99**, to lead product strategy for Microsoft’s business and education customers. Chernyak had a master’s in solid state physics from the Moscow Institute of Physics and Technology, a comfort with data, and a history with Microsoft dating back to when Bill Gates was still CEO. She was responsible for reaching out to the Gartner and Forrester’s, the banks, the health care systems, the defense industry, the airlines, the manufacturers of PCs and consumer electronics, the largest and most important of Microsoft’s customers, and persuading them that the Microsoft that she and they both knew was truly in the process of reinventing itself. She invited them—many of whom were miffed at Microsoft’s history of arrogance and secrecy, especially during the Windows 8 period—to be not just customers, but partners. She let them know what was in development and asked for their feedback and ideas.

She created a process for communicating—asking thousands of customers about their wants and needs, their thoughts on the emerging operating system, then tabulating and analyzing the responses to see which were unique, which formed patterns across categories. She met with customers across the country and abroad, and invited the most important of them to meet on site in Redmond, to be an ongoing part of the dialogue. She knew that Microsoft couldn’t possibly



Stella Chernyak

A technical background helped Chernyak direct outreach to Microsoft’s largest commercial customers and analyze their response.

satisfy every request, but she looked for pieces that were useful, for ideas and concerns that were consistently brought up. She discovered that simply asking for feedback changed the dynamic with customers.

She told customers to think about their end games, and that Microsoft would creatively try and help them get there. Perceptions shifted. “It was not about a single aha! moment,” she recalled. “But with the outreach, we gradually got to the outcome we were working toward. And we were developing long-term relationships in the process.”

On the Redmond campus, the culture was shifting, too. Satya Nadella reinforced a kinder and gentler atmosphere—collaborative more than combative, integrated rather than insulated. He still encouraged vigorous debate, but trusted the most reasoned and thoughtful voices in the room, not the loudest. He encouraged team building.

On the new Windows team, collaboration went beyond the meeting rooms. Korst, KWD, Chernyak, Caldas, and **Jeremiah Marble G11 WG11**—yet another Wharton grad on Korst’s team, in charge of designing the beta-testing program—worked from the second floor of Building 37 on Redmond’s east campus. Knowing that team culture would be critical during the intense period ahead, they instituted a Thursday end-of-the-day snacks and drinks ritual, right there in the office. They worked out at the same fitness club. On weekends, they often hiked together, Tiger Mountain, Mount Si. They ran together in a St. Paddy’s Day fun run. Someone put up a sheet of butcher paper in the hallway and people scrawled—by hand, skipping the synced electronic calendars—what they had going on outside of work and invited others to join. They took cooking classes, competed against each other in chili cook-offs and holiday drink contests. (“We’re a competitive group,” said Korst.) And they traveled together, spreading the

“ THE TEAM BET ON A THIRD WAY. IT WAS BOLD TO THE POINT OF BEING VISIONARY. ”

new Microsoft gospel, to Vegas and Barcelona and Tokyo and Australia, feeling more like a rock band on tour than techies on a business trip.

JEREMIAH MARBLE'S beta-testing program turned out to be even more transformative than expected. He brought a world view to his work that was broader than most. He had been consulting for an investment bank on Floor 62 of the World Trade Center's

south tower on September 11, 2001, survived the attacks, and reconsidered his career. He quit and joined the Peace Corps, did service work in the Dominican Republic, lived in Cambodia, Laos, and Vietnam. He focused on climate change issues. He developed educational software for UNESCO. Along the way, he grew to believe in pragmatic idealism and in the power of tools—and that the smart phone, in the developing world, was the center of a better future. At Wharton he got his MBA/MA from the Lauder Institute and joined Microsoft's Windows Phone division.

He launched the new operating system's brand new “flighting program,” which provided beta versions to select customers to see what was working and what was crashing. Early on, he realized how much more the program could do beyond fixing bugs. The beta-users who were willing to take a chance on minimally tested software, knowing full well it could blow up their devices,

Jeremiah Marble

Marble, a Senior Manager, brought millions of passionate beta-testers in on the project early in the product cycle.

turned out to be super technical and super big fans of Microsoft. For a company struggling with the monumental challenge of building out the new operating system for such a colossal number of platforms and configurations, the crowd-sourced feedback was a godsend. Maybe a savior. Marble formalized and re-imagined the flighting program as the Windows Insider Program, and openly invited the company's most passionate users to become co-creators of the new operating system. The engagement and interest spread like grass roots. By the time of the launch, more than seven million users would be part of the Insider Program, from every country in the world,

including Antarctica and the Vatican City. Marble analyzed the massive data—collecting, formatting, and passing along the feedback from millions of users so it could be useful to the engineers. He managed the Insiders' expectations and responded positively to negative feedback.

The initial concerns that the tastemakers might object or that frustrated users would complain never materialized. The positive spirit of the Insider Program was overwhelming and infectious. Nobody seemed to notice or care if engineers in Cupertino were taking part. The pre-release program designed to help the engineers turned into a public relations and marketing coup. Bloggers and journalists began writing about the new culture brewing at Microsoft, about the monolithic ship starting to turn. Before the new brand was even launched, it had a real live community behind it.

Bernardo Caldas ran the pricing models and analytics.



He managed a team of 25 or 30 people, who marveled at how cool and rational Caldas remained when the conversations around him grew heated and tense. They were talking huge numbers and high stakes, but Caldas trusted what his numbers told him. The adoption models he developed with his Finance counterparts were based on concepts he learned from Professor Jehoshua Eliashberg. (He could still recall the class number and name, MKTG 771: Models for Marketing Strategy.) From that course, he took the case studies relating to the motion picture industry and applied the concepts to Microsoft customers. He based his pricing and licensing recommendations on the discrete choice modeling research, statistical models, and other techniques he'd gleaned from Wharton's Pricing Policy course and the school's highly regarded quantitative marketing curriculum. He determined that the free upgrade was a good risk. The fundamental pillars of the plan were holding.

At the lightly produced, almost casual, announcement of the new operating system, in San Francisco in October of 2014, nine months before the free upgrade would become available to the general public, one symbolic moment stood out.

Following months of internal debate, the name announced in San Francisco was a surprise: familiar but not routine. Windows 10 was bigger than a standard upgrade (skipping straight over 9.0), and it promised to do great things—even as it remained a familiar brand to its existing customers around the world. There would be no major upgrade again. From here on, the operating system was a service, not a product. It would be continually updated and supported for the lifetime of the device, at no cost. Windows 10 was the end game, and would keep getting better over time.

The Wharton pieces in all of this were unplanned, but they fit. Doug Smith, himself a graduate



Adi Hariharan

The newest Wharton member of the team, Hariharan WG10 works, post-launch, at the interface of marketing and engineering.

Some understand the experience of going fast and free. It's rare to find those two kinds of understanding in the same person. But every one in the Wharton group has it.”

Wharton's Saikat Chaudhuri confessed that he enjoyed watching the Windows 10 project unfold. “Satya wanted to play in all the key markets, but do it on Microsoft's terms, using Microsoft's strengths,” he said. “In a way, that's exactly what Wharton does. It teaches its students, for instance, that innovation is important not just for start-ups, but for established businesses.”

The Windows 10 upgrade was officially released at the end of July 2015. Reviews were instant, and raving. Within 24 hours, the new Windows was already helping people create and make and do things on 14 million computers—the fastest-ever adoption of an operating system. The incumbent tech giant announced that within two years, that number would be an almost mind-boggling one billion. For the first time in recent memory, nobody doubted that Microsoft could do it.

Jim Collins is a freelance writer from New Hampshire and Seattle. He's the author of *The Last Best League*, an exploration of the most competitive amateur baseball league in the country.

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Submarine to FinTech

MBA student Steve Weiner helps fellow vets navigate the opaque waters of civilian life.



Photograph by Colin Lenton

FOR THREE YEARS, I lived intermittently on a U.S. Navy submarine that dove beneath the surface of the Pacific for two or three months at a time. Underwater camaraderie, as you might imagine, is strong. I had a chance to hear about my fellow crew members’ backgrounds and what they imagined themselves doing after service. But the more I heard, the clearer it became to me that the military’s mission-oriented nature fails to encourage forward-thinking about interests, talents, or career paths. I watched colleagues transition into the civilian world unsure about the future, making career decisions with no counsel from anyone outside the military.

I had always known I wouldn’t be a military “lifer,” and Wharton, I thought, would give me a chance to explore new opportunities, meet people with different (read: non-military) backgrounds, and reflect on the type of work I wanted to do.

One of the first projects I undertook when I got to Philadelphia was Wharton FinTech, which I launched with a few classmates. I encouraged my best friend, Mike, who had recently finished his Navy deployment, to tag along on a FinTech club “industry trek” to San Francisco. After two whirlwind days visiting a dozen companies, Mike was starry-eyed. He told me we had to organize the same trips for veterans.

Just like that, we launched VetTechTrek. We connect veterans and their spouses with the tech industry, startups, accelerators and venture capital firms by bringing them to companies with opportunities. We’ve made five treks with 150 veterans and their spouses to more than 50 companies in three cities. To me, whether or not these veterans work in technology is less important than them knowing they can.

We continue to look for ways to scale these events. (A recent “virtual trek” to 13 companies in three hours currently has more than 10,000 viewers on YouTube.) My hope is that as we continue to grow, more veterans will have the chance to find the mentorship and information they need to forge their best path. —Steve Weiner, second-year MBA student

Good at Grades, Better at Google Calendar

Was a packed schedule hurting her education? Or was it an education all on its own?

AS MY ADVANCED Corporate Finance professor reviewed the syllabus, it seemed as if the topics, such as “valuation using multiples” and “discounting flows to equity,” were in a foreign language. As someone who fares better in qualitative classes, I find quantitative classes to be anxiety-inducing, even before work gets assigned. As I flipped through the syllabus on this day, however, I didn’t feel as nervous as in previous quant classes, such as Introductory Finance and Accounting. Yes, numbers were involved, and, yes, I would have to work hard to master the concepts, but simply put, I knew I was not going to end up with a bad grade.

Don’t be fooled: I wasn’t used to this feeling of academic assuredness. It was new, only coming to me at the start of junior year. Throughout freshman and sophomore year, I would lose sleep from calculating the potential decrease in my GPA if I didn’t receive an A as my final course grade. This was largely the result of going from easily receiving straight A’s my whole life to studying for days for exams at Penn and still not getting the grade I hoped for.

The night before my first day of junior year, however, I reviewed my transcript, and I forced myself to see that I am a good student and more than

“The lack of white space (free time) in my schedule amazed me—even though I was the one managing it!”

Olivia Nelson, W17

capable of getting decent grades. So even though I don’t always get an A, I am certainly intelligent, competent and hardworking enough to fare well in Wharton classes.

So I gained a calm in regards to academics, sure, but to be honest, I still felt harried about everything else—namely, my involvement in student organizations and jobs. I was setting the bar high for myself in junior year, adding on extra time commitments such as being a resident advisor in Harrison College House and co-president of the John Marshall Pre-Law Honor Society. This was all on top of the time commitments I had managed since my first two years. Additionally, I was determined to secure a marketing internship for the summer before the semester ended.

My Advanced Corporate Finance class ended, I opened my Google Calendar to see what was next on my schedule, and as usual, I had several hours of meetings and events lined up. The lack of white space (free time) in my schedule amazed me—even though I was the one managing this calendar!

Since high school, I have always dedicated my time to several clubs and organizations because they align with who I am. For example, Wharton Ambassadors allows me to share my Wharton passion with prospective students, and by being involved with the Social Planning and Events Committee (SPEC), I get to channel my love for music through planning concerts on campus. But while I can’t envision being anything but super involved, I do not like having to choose between having time to eat dinner and going to a meeting. Nor do I enjoy the stress that comes with not being able to start my homework until 10 p.m. on Mondays after classes and all my meetings are over.

I wrestled with the idea of committing to so many things as I made my way to Huntsman Hall on that day my junior year. *Can I make this happen? Can I really be this involved, get good grades AND find an internship for the summer?*

I passed the Sweeten Alumni House on Locust Walk. Upon seeing the Penn pennant and “Proud Donor” stickers on the window, I thought about life post-Wharton. Presumably when I became an alumna, most of my time would be occupied by my profession, but I would also be managing the various responsibilities that come with being an adult, right? With each day, I was closer to entering the “real world.” I knew that I wanted to be ready for whatever adulthood would bring about. *How can I make that happen? Will I actually be prepared for life after college?*

Suddenly, my phone vibrated with a pre-event reminder, signaling that my next meeting—and a four-hour block of running from that meeting to the next meeting to the next—would start in 10 minutes. There was no worry in me though. It suddenly all made sense. I was organized. I was prioritized. I was capable.

A DAY IN THE LIFE OF OLIVIA NELSON

8am
Alarm rings
Breakfast

9am-10:30am
Marketing class

10:30am-noon
Legal studies
class

12-12:30pm
Lunch with
friends

12:30-3pm
Emails,
homework
planning,
homework

3-4:30pm
Business
Spanish class

4:30-5pm
Emails

5-6pm
Wharton
Ambassadors
meeting

6-7pm
Homework

7-8pm
Resident Advisor
office hours

8-9pm
SPEC-TRUM
club meeting
(Social Planning
and Events
Committee-
To Represent
Undergraduate
Minorities)

9pm-1am
Homework

1am
Shower

1:30am
Bed!



I realized that it was *how* I managed grades and *everything else* that would prepare me for adulthood. As a well-rounded Wharton student juggling countless responsibilities, I would be equipped with the skills I develop during my time here, especially those gained from being involved with extracurriculars.

As cliché as it sounds, upon realizing this, I felt that weight lift off my shoulders. My obligations were the same, but how I felt about them was completely different.

With this mindset, I went on to achieve my best semester academically, secured that summer internship and gained a new outlook on the rest of my time

here at Penn. While there is still barely any white space on my Google Calendar, there are plenty of opportunities in my future to demonstrate how being so involved has prepared me for life after college.

Olivia Nelson is a junior from Scotch Plains, N.J., concentrating in Marketing at Wharton and Spanish in the College. Aside from Wharton Ambassadors, SPEC, the John Marshall Pre-Law Honor Society and Harrison House, she is a member of the Penn Colleges Against Cancer/Relay for Life and the Joseph Wharton and Benjamin Franklin Scholars Programs.

1 **Aria Florant WG17**, President of the African American MBA Association (AAMBAA).

2 **Brian Vo W06 WG16**, member, Dean's Graduate Student Advisory Committee (DGSAC) and Wharton Graduate Association (WGA).

3 **Elizabeth Tan L17 WG17**, JD/MBA, Senate Judiciary Fellow, and Treasurer of Rise.

4 **Lucas Hussey W16**, Leadership Fellow and Board Member of the 22s.

5 **Saba Shafi WG17**, Small Business Development Center consultant and a DGSAC member.

6 **Eric Macias WG16**, President of the Wharton Hispanic MBA Association and a Lipman Fellow.

Return on Equality co-founders not pictured: **Stephanie Blount WG16**, board member of the African American MBA Association and the WGA; **Marlin Bottex Co7 WG16**, Co-president of Wharton Women in Business and member of the Ethics Committee; **Maribeth Crane WG16**, Co-president of Wharton Women in Business; **Nam Huynh WG16**, Co-President of Wharton Asian American Association of MBAs; **Jen Redmond WG16**, Co-president of Out4Business; **Edisa Rodriguez WG16**, Co-president of Out4Business and a board member of AAMBAA; **Tola Sunmonu WG16**, President of Wharton African Students Association and member of the WGA; **Ashley Wells WG16**, Co-president of Wharton Women in Business and a Leadership Fellow; **Allan Yang W10 W16**, Co-president of Wharton Asian American Association of MBAs.



Investing in Diversity

A new student group, Return on Equality, brings conversation to the art of empathetic leadership.

BUSINESS SCHOOL IS A BUBBLE. It can be a magical bubble, where skills can be cultivated and friendships formed. It can also be a dangerous bubble, shielding us from the realities of the world, and even the communities in which we live. From the looming U.S. presidential election to the events of Ferguson, Baltimore, and Flint, to the immigration crisis in war-torn regions, this is the reality we will be graduating into. The conversations about this reality are difficult. But as students of business and leadership, our two years at Wharton offer the opportunity to establish a foundation of empathy towards others—empathy deeper than superficial understanding and discourse.

To help foster this dialogue, we formed the Return on Equality (ROE) Coalition out of seven student groups. Our purpose is to nurture appreciation of, and advocacy for, inclusive practices across lines of difference. Substantial research has pointed to empathy and emotional intelligence as prerequisites for effective leadership. Through ROE, we hope to bring that conversation to life and dive into the richness of the diversity at Wharton.

As part of our efforts, ROE launched the Humans of Wharton campaign to share personal stories with our peers. The initiative has been a big success, with thousands of interactions on social media. In addition, ROE has hosted workshops with leading faculty such as like Management Professor Sigal Barsade, to learn the subtleties and implications of unconscious bias. And, with the support Dean Garrett and Vice Dean Kaufold, we created the ROE Fund to sponsor and support student grass-root events.

The reception has been overwhelmingly positive. ROE has grown from the original 15 founders to almost 50 student leaders. We hope to continue that positive momentum as we engage administrators, faculty members and students to provide programming and safe spaces for conversations on race, gender, sexual orientation, socioeconomics, and even politics. We envision a Wharton community that doesn't shy away from these difficult conversations, with empathy as the cornerstone. The academic value is there. The business case has been made. Now, we must lead the change. —Aria Florant and Brian Vo



KEYNOTE SPEAKER

Adam Grant *Professor of Management, Professor of Psychology*

FRIDAY, 10:30 AM

Adam Grant is the youngest tenured professor in Wharton's history and a researcher on success, work motivation, and helping and giving behaviors. He is the author of two *New York Times* bestselling books, *Originals* and *Give and Take: Why Helping Others Drives Our Success*.

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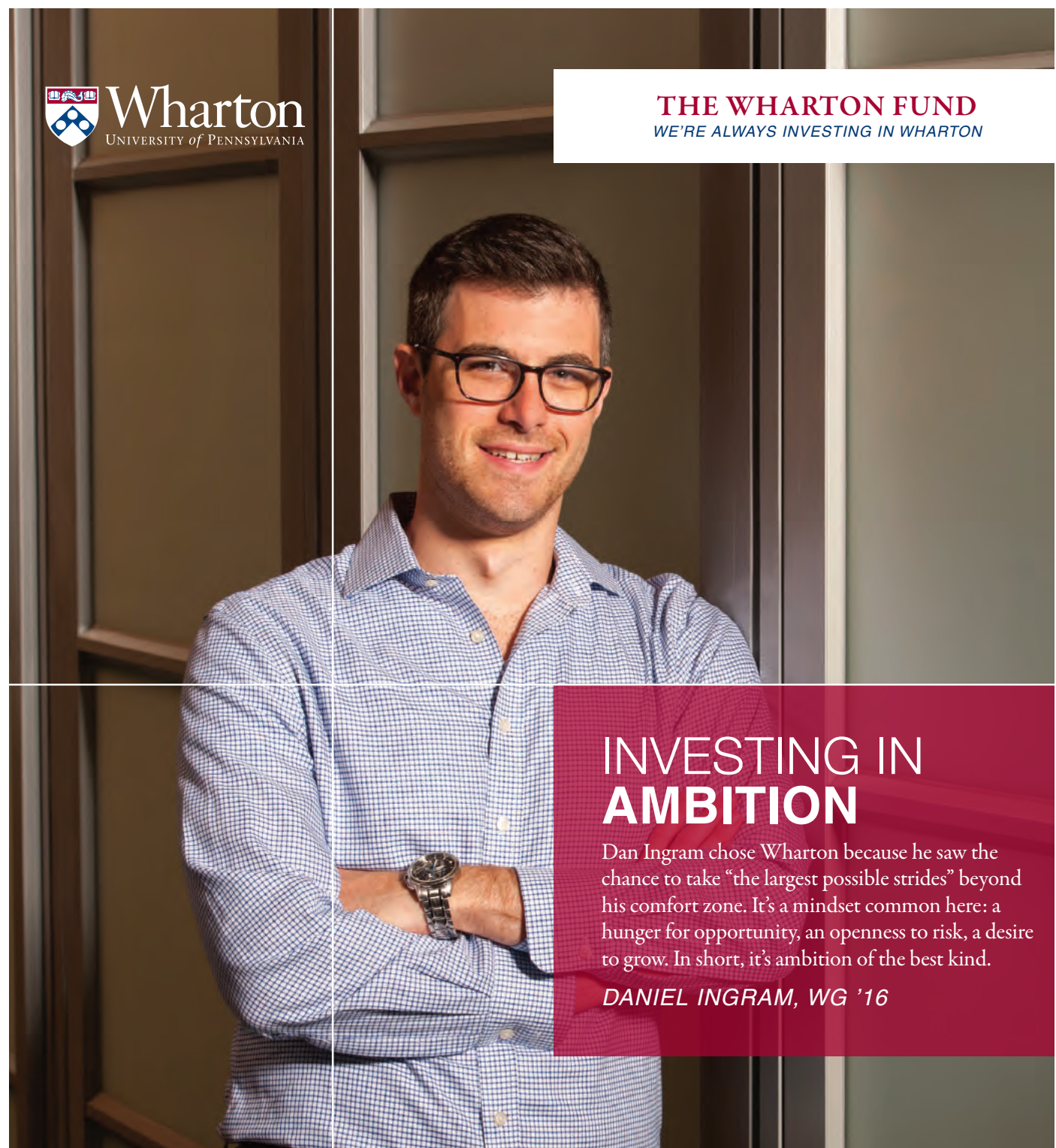


Number out of every 10 MBA students who change career plans while at Wharton, according to Wharton MBA Career Management. The office reports that 88% of full-time MBA students in the class of 2015 pivoted careers. To learn more about the class, see "Indicators" on page 13. And read the "Pivot" essay on page 65.

10



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