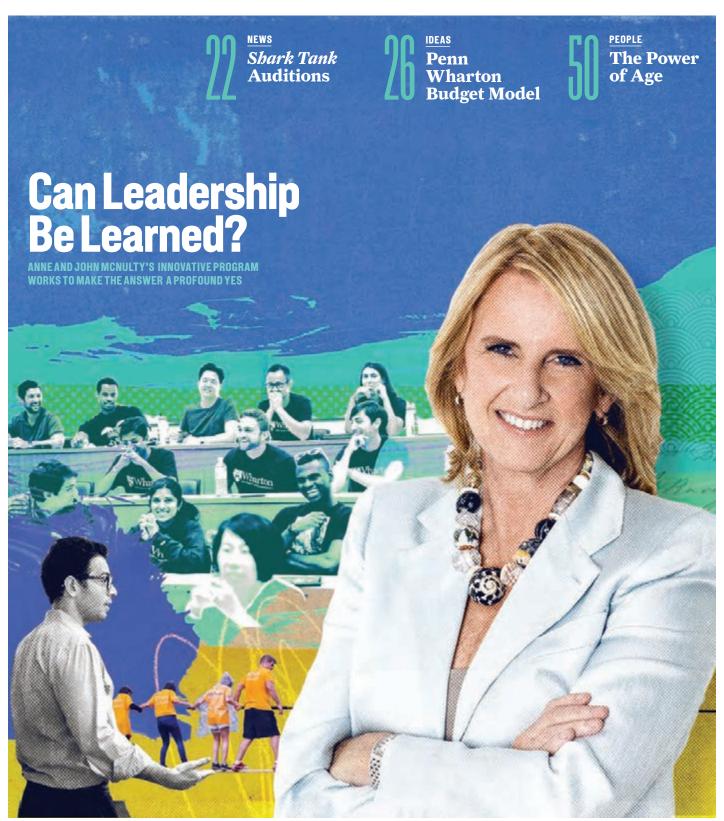
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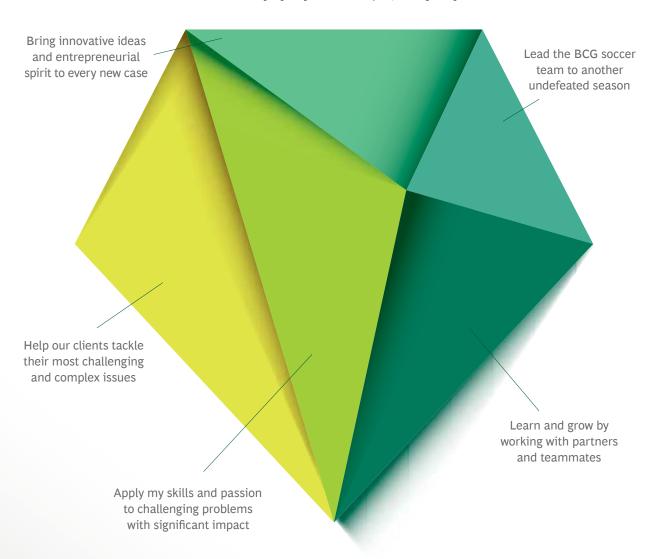
MAGAZINE





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A BCG Story by Taylor / Principal, New Jersey



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Wharton's Essential Role in Turbulent Global Times

HE YEAR 2016 has been a big wake-up call for me, as I suspect it's been for some of you, too. I've always believed globalization and technology are forces for good. But from the supporters of Donald Trump and Bernie Sanders to Brexit and the crackdown in Turkey, lots of people are reacting to the frenetic pace of change and their feelings of loss of control by implicitly saying "Stop the world, I want to get off."

I am not an economic determinist, but I do think much of this political populism has deep structural roots. Put simply, we are living in an era of low economic growth, and the benefits of the growth that is taking place aren't spread very broadly. In an eye-catching headline, McKinsey estimates that about two-thirds of the people in the U.S. and the Western world have suffered from declining real incomes or saw no growth in the past decade. No wonder people are unhappy with their leaders.

But I'm also a realistic optimist. There is a path to stronger and more inclusive economic growth. And I believe business schools like Wharton have a critical role to play.

Job one is to increase growth. Wharton people know better than anyone how important finance is to matching money with opportunity, and that's never been more true than in the burgeoning field of alternative investments. But innovation, entrepreneurship and technology are increasingly important to all we do. The Mack Institute is doing cutting-edge research on how to promote productive innovation in big and mature organizations, while Wharton Entrepreneurship's principal objective is to develop entrepreneurial mind-sets and skills among our students.

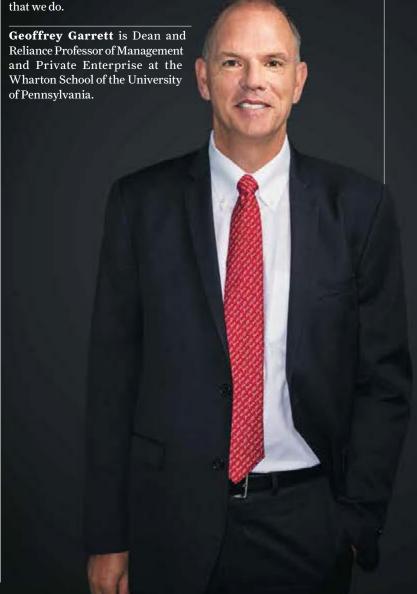
Then comes the equally challenging task of making growth more inclusive. It's no surprise that I believe education has a key role to play. I could not be prouder of the world-class education we provide all our degree students on campus. But the skills needed to thrive in the business world continue to change more rapidly than ever before. Just think of

the skyrocketing demand for the new field of business analytics, which we incorporated into both the undergraduate and the MBA curricula last year.

That's why Wharton's Lifelong Learning initiative is so important, not only for our alumni but for all of those who want to invest in their continuous professional development, training and re-skilling. Wharton Executive Education adds value to nearly 10,000 executives who come to campus for short programs every year. Wharton Online can reach exponentially more people.

It's easy for critics to point to business schools as part of the problem when it comes to the challenges we face. But I believe profoundly that schools like Wharton have a vital role to play in driving productive solutions. That's why I come to work fired up every day, and that's why I couldn't be prouder to have you as such strong supporters of all

Dean Garrett's priorities for wharton Online: access for all to quality non-degree education, "higher touch" courses for smaller learner groups and enhancing the on-campus classroom experience.



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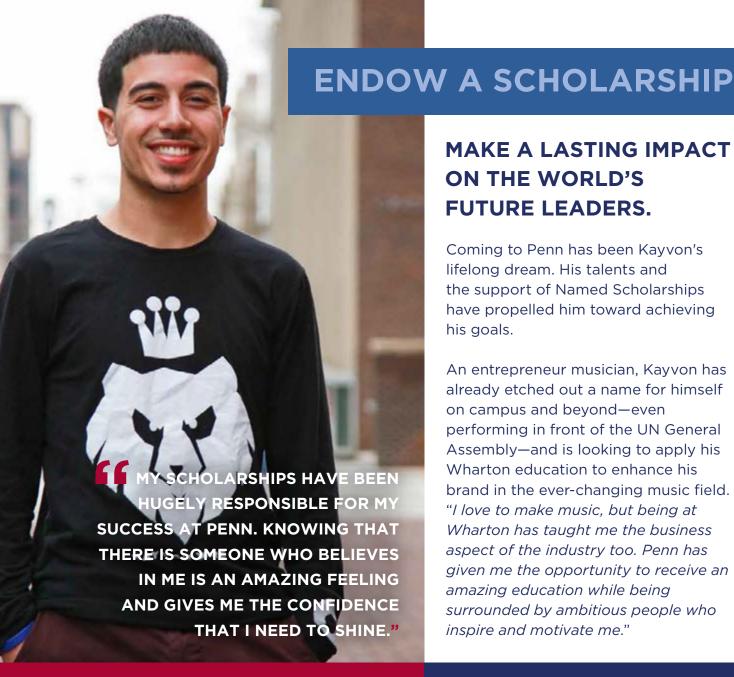
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MAKE A LASTING IMPACT ON THE WORLD'S **FUTURE LEADERS.**

Coming to Penn has been Kayvon's lifelong dream. His talents and the support of Named Scholarships have propelled him toward achieving his goals.

An entrepreneur musician, Kayvon has already etched out a name for himself on campus and beyond—even performing in front of the UN General Assembly—and is looking to apply his Wharton education to enhance his brand in the ever-changing music field. "I love to make music, but being at Wharton has taught me the business aspect of the industry too. Penn has given me the opportunity to receive an amazing education while being surrounded by ambitious people who inspire and motivate me."

- KAYVON ASEMANI, W'18, Recipient of multiple Named Scholarships



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News



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Sofas, Sneakers and Snakebites

From home furnishings to fashion to life-saving documentaries, a roundup of recent Wharton-powered projects

GenHERation

As a junior at Wharton, Katlyn Grasso W15 was already making great strides in providing role models for young women by inviting successful female executives to Penn's campus. A year later, she decided to bring teen girls to the workplace, creating GenHERation. GenHERation's site visits, called Discovery Days, have connected girls with successful women in business from more than 30 companies in San Francisco, Los Angeles, Washington, D.C., New York and Philadelphia. The startup's reach already extends to more than 50,000 young women online, at conferences and on corporate-site visits, providing them with opportunities for career exploration, mentoring, skill-building activities and scholarships.

→ Modern ŌM

Mindfulness is no longer just for monks in robes forgoing the comforts of modern life. With Modern $\bar{O}M$, founder Michael Likhov WGo7 wants to infuse the day-to-day with a reminder of how the ancient practice of mindfulness and its principles can inspire a better life. The lifestyle brand offers clothing and accessories based on colors corresponding to the body's chakras. Modern $\bar{O}M$ is also dedicated to teaching and sharing the actual practice. A meditation studio in Miami, an upcoming mindfulness festival, and a recent Indiegogo campaign to teach meditation to prison inmates are all part of Modern $\bar{O}M$'s effort to reach for a bigger vision, beyond just products. The t-shirts are nice, too.





Airport Sherpa

The hassles of traveling, especially flying, can at times seem overwhelming. But the team at Airport Sherpa is working to make your journey a little less painful. Mayank Gandhi WG15 and Patrick DellaValle WG15 founded the company, whose service app provides a spectrum of concierge services at the airport-from securing lounge access to ordering food and retail items up to a week in advance for delivery to your departure gate. The app's smart technology learns the user's preferences and habits, allowing for quick and easy reordering, personalized suggestions, and special offers for shops close to a terminal. All you need is your flight information, and your new best travel buddy will take care of the rest.

Soom **Foods**

Move over, chia! It's time to celebrate



the humble sesame seed with gourmet spread company Soom. Three years ago, Shelby Zitelman Wo7 teamed up with her foodie sisters, Jackie and Amy, to create nutritious, delicious modern tahini for restaurateurs and healthy home cooks. Certified kosher, GMOfree and USDA organic, Soom's single-origin "Israeli mother sauce" is beloved by awardwinning chefs nationwide—including Michael Solomonov, chef and owner of Philly's acclaimed Middle Eastern restaurant Zahav. Health-nut bonus: The chocolate flavor has less than half the sugar of the top-selling spreads.

Koio Collective

If you think sneakers are only for basketball courts and kids, check out Koio Collective's line of high-end leather kicks for men and women, sold in a Brooklyn showroom and online. German natives Johannes Quodt WG15 and Chris Wichert WG15 built a business plan in their classes at Wharton and found Italian artisans who could deliver the handmade designer styles they envisioned. Since launching last year and earning \$1.3 million in seed funding, the company has recruited Warby Parker co-founder Neil Blumenthal WG10 as an adviser and its Primo Luna was ranked among the best sneakers of 2015 by Esquire.



Verbalizelt

Global brands need to be able to communicate in any language, and that often requires a human touch. Smartling, a translation-services company co-founded and headed by Penn grad Jack Welde ENG91, recently acquired new-kid-on-the-block VerbalizeIt to provide just that. Launched by Ryan Frankel WG12 and Kunal Sarda WG11, Wharton-founded VerbalizeIt taps a community of vetted translators to return content in virtually any language. An appearance on Shark Tank proved just how promising the business is, as three sharks fought each other for a bite of the action. Frankel and Sarda will remain with Smartling in leadership positions and help the company integrate VerbalizeIt's unique offerings into the existing platform.

Selling Vision

The times, they are a-changin'—and in business, keeping up with constantly evolving ways to reach customers, conduct sales and stand out from competitors can be a daunting endeavor. Lou Schachter W86 offers a new strategy—a way to drive change itself. His new book, Selling Vision: The $X \rightarrow XY \rightarrow Y$ Formula for Driving Results by Selling Change, articulates a unique approach to transforming a sales organization and to achieving goals. Since Schachter is a managing director of the global sales practice at BTS, this is right in his wheelhouse and is born out of his longtime experience helping clients execute sales strategies.

Global Snakebite Initiative

Snakebites claim 125,000 lives and seriously injure 2.7 million people every year. Lillian Lincoln Foundation philanthropist Barbara Bissell WG76 joined with Global Snakebite Initiative (GSI) to tackle this hidden epidemic through advocacy, research and prevention. The nonprofit provides education and training for health workers, small grants for young researchers and clinicians, and affordable treatment options in developing countries. This fall sees the release of a powerful as-yet-untitled documentary highlighting the effect of this WHO-identified tropical threat on the rural poor. GSI is a ray of hope for snakebite victims around the world.





Les Chocolateries Askanya

When Corinne Joachim Sanon Symietz WG11 discovered that Haiti was supplying its high-quality cacao to some of the world's leading chocolateproducing countries, she decided to start making high-end chocolate right in Haiti. Les Chocolateries Askanya is the country's first and only premier bean-to-bar chocolate company. It uses certified-organic cacao, grown in Haiti and harvested by 3,000-plus Haitian farmers, to produce a great product in beautiful packaging. Aside from making delicious chocolate, one of Symietz's primary goals is creating jobs and economic growth in Haitia sweet deal for everyone.

The Immigrant Entrepreneur

In 2014, the editor of the Wharton Alumni Club of New York Magazine, Kent Trabing WG01, found inspiration in the story of Due Quach WGo6, whose family fled war-ravaged Vietnam for Philadelphia when she was just a child. Her success as founder of a mindcoaching program, Calm Clarity, made him wonder—who are the other immigrants who create 27 percent of the new businesses in America? Trabing launched The Immigrant Entrepreneur podcast to tell their stories, and many of the interviews he's posted are with Wharton alumni (most recently Sasibai Kimis Woo of Earth Heir, a socially conscious crafts and fashion retailer). With about 200,000 downloads and counting, the episodes are finding an audience— TIE recently made the iTunes "New and Noteworthy" podcast list.

Entery

In 2012, then 19- and 16-year-old sibling entrepreneurs Alston and Brienne Ghafourifar sketched out the future of "people-centric" digital interaction on a napkin. Soon after, <u>Steve Epstein</u>

WG96 was captivated by their vision to democratize access to communications, becoming an

early angel investor—and, later, the Palo Alto tech startup Entefy's first employee. Entefy, now with \$15 million in investment, promises to cut through the chaos created by the 100-trillion-plus messages that circulate each year. The company's inbox-taming artificial intelligence syncs across your favorite devices to help you seamlessly interact with the people, services and smart things in your life, cleverly scaling communications to your fingertips.



torchlight

As a teenager, Adam Goldberg W95 learned firsthand how challenging it is to look after a loved one. His experiences while taking care of an aunt with autism inspired him to create torchlight, a technology platform that helps people provide the best possible care for specialneeds family members. torchlight creates personalized action plans and provides easy-to-use digital tools and expert advice for caregivers as they navigate the complex responsibilities of assisting their loved ones. The service is purchased by companies and offered to employees as part of their benefits plan as a win-win proposition: supporting the employee by providing resources, and benefiting the employer by improving retention and engagement of staff. To date, torchlight covers half a million families across about 50 participating companies, including Dell EMC and TripAdvisor.

Burrow

No one has ever spoken the words "I love couch-shopping." But just as customer-friendly online retailers Casper and Tuft & Needle have simplified mattress-buying, Burrow now aims to make finding your next cushioned Netflix-watching station more convenient. The brainchild of two current Wharton students, Stephen Kuhl WG17 and Kabeer Chopra WG17, Burrow targets millennials and offers two- and three-seat models, delivered in up to four compact boxes with toolfree assembly and a 100-day moneyback guarantee. Bonus: The sofas are stain-resistant and come with a hidden USB/power outlet cradle.

When Millennials Rule

David and Jack Cahn W17 ENG18, twin brothers and current students at Wharton and the School of Engineering, gained the nickname "Twin Titans" as nationally ranked high-school debaters. They've since gained renown as millennial journalists and activists. For their new book, *When Millennials Rule: The Reshaping of America*, the brothers interviewed 10,000 young voters across America to lay out a millennial platform on issues ranging from gun control to the economy, health care and foreign policy. The book, based on their conversations, paints an authentic portrait of millennials and their political identity.





SAVE THE DATES





wharton.upenn.edu/globalforums





Top of the Class

A closer look at the Class of 2015 proves Wharton's undergraduate program is preparing students for success.*

642

Total number of graduates

TWENTY THREE

Accepted job offers from Goldman Sachs (the most of any single employer)

94.8%

Grads who are employed or continuing their education

SIXTEEN

Foreign countries and U.S. territories where graduates found jobs. The most popular destination outside America: China, which outnumbered all but five U.S. states in hires from this class.

38.1%

Grads who accepted full-time jobs with employers for whom they'd previously interned

MORE THAN HALF

57.3 percent of grads found work in consulting or investment banking.

+14.8%

Increase in average annual base salary from the class of 2011 to the class of 2015

\$150,000

Top reported salary

TEN

Accepted job offers from Amazon or Google

\$81,402

Average salary for grads in finance careers, who make up 55.2 percent of all respondents

2.2

Average number of job offers

NINETEEN

States where students found jobs

ZERO

Total number of Harvard and Stanford undergraduate business majors

*All statistics based on 588 graduates who completed a career plan survey from Penn Career Services

Ticker

The Wall
Street Journal,
CNN Money,
Politico—just
a few of the
media outlets
who've written
about the new
Penn Wharton
Budget Model.
See page 26 for
the full story.

Assistant professor of management Ethan Mollick released the first study of Kickstarter's impact. The site has created 8,800 businesses/nonprofits and 29,600 full-time jobs.

wharton dean Geoffrey Garrett was named a LinkedIn influencer, joining an invite-only group of thought leaders that includes Bill Gates, Richard Branson and Deepak Chopra.



Huntsman Hall opened a four-room lactation suite for nursing mothers. Up next: construction of gender-neutral bathrooms in the building.



Wharton's **Global Impact**

Forging Essential Connections

New York City, USA

October marked the first Wharton **Industry Exploration Program course** in New York City, as a group of 40 sophomores and juniors interested in the tech sector visited Shazam and Reelio, attended lectures, and networked with alumni in the industry. Students earn a half credit, and all courses are held during school breaks. Coming in early 2017: a Los Angeles program focused on arts, entertainment and media; a tech-sector session in San Francisco; and public policy in Washington, D.C.

Lifelong Learning, South Beach-Style

NEWS / REGIONS

Sun, sand and an A-list lineup of speakers await at the 49th Wharton Global Forum from March 9 to 11. The program kicks off with a welcome reception hosted by honorary chairman Carlos de la Cruz W62 WG63 and a keynote conversation on the role of art and civic engagement in global business communities with Alberto Ibarguen L74, president/ CEO of Knight Foundation, and Art Basel Americas director Noah Horowitz. Talks and panels 9th to 11th will cover everything from finance and big data to entrepreneurship, public policy, real estate, telecom and more, with insights from favorite faculty (Eric Bradlow, Peter Conti-Brown, Pete Fader, Mauro Guillén, Laura Huang, Dave Reibstein and Tom Robertson).

A Sweet Deal

Nord-Est, Haiti

Read about the Wharton grad behind the first high-end chocolatier in Haiti, page 10.





bacteria to degrade unrecyclable plastics (the first-ever undergrad project to take the top prize).

- 🔾 Jessica Ross WG15 is working to connect students at the San Francisco campus with a local \$10,000 scholarship for women pursuing careers in finance.
- O This fall sees the debut of three highly anticipated additions to campus: the Pennovation Center, the Perry World House and the New College House.
- Retired NFL defensive end and two-time Super Bowl champion Justin Tuck begins his pursuit of an MBA this semester. Here's something ex-Giants don't often hear in Philly: Welcome!



World-Changing Conversations

Davos-Klosters, Switzerland

If you're among the business leaders from around the globe headed to the World Economic Forum's Annual Meeting from January 17th to 20th, join Dean Geoffrey Garrett, members of the Wharton faculty and fellow alumni for conversations throughout the week.

Building the Road to Recovery

Athens, Greece

"Challenges for Recovery" was the title of the third annual Conference of Greek Entrepreneurs (EENE), held this past spring and co-organized by the Wharton Alumni Club of Greece. More than 200 executives, academics and leaders from across the political and economic spectrums gathered for conversation and keynotes from speakers, including club president and EENE vice president Christian Hadjiminas WG83. Next up for a group of brave club members: the Athens Authentic Marathon in November.

Collaboration Across the Globe

Singapore

The Leonard Davis Institute's Center for Health Incentives and Behavioral Economics, led by Penn professor of medicine Kevin Volpp GRW98, has partnered with the National University of Singapore for a series of behavioral economics studies. Scientists from CHIBE and NUS—named the top university in Asia by QS World University Rankings—met in Singapore in August to finalize the project. Among the topics to be examined: diabetes management, via a study led by Wharton professor Maurice Schweitzer GRW93.

Entrepreneurship and Innovation

Lagos, Nigeria

Three Wharton alumni to watch in West Africa: Wole Faroun WGo8 was named a finalist for Entrepreneur of the Year in the All Africa Business Leaders Awards, in partnership with CNBC Africa; FirstBank, the largest bank in Nigeria, named Patrick Iyamabo WGo5 its new chief financial officer; and LEAP Africa founder Ndidi Okonkwo Nwuneli W96 has published Social Innovation in Africa, a guide to scaling impactful social enterprises.

Focusing on the Economic Might of South Asia

Mumbai, India

The annual Wharton India Economic Forums—student-run conferences featuring industry-leading speakers and a startup competition—holds two events in '17 (Mumbai in January, Philadelphia in March).

A study
on "startup
survival"
co-authored by
Wharton assistant
professor Ron
Berman shows
that an
entrepreneur's
level of
experience
usually has

little impact on a startup's success.



The triennial Penn Spectrum Weekend kicked off in September, celebrating cultural diversity with dialogues, networking events, performances and socials.

A \$1 million gift from Vernon Hill W67 and his wife Shirley will establish a scholarship to develop MBA projects focused on livestock industries and global food security.

The Wharton Lunch & Learn program pairs undergrads with a professor for a bite and relaxed conversation outside the classroom.

Students who complete a free Coursera class in Social Impact can apply for a scholarship for a week-long educational stay at the Global Social Impact House in Costa Rica.





LEADERSHIP WITHOUT LIMITS

Fueled by a transformative \$10 million gift, the Anne and John McNulty Leadership Program aims to shatter the theory that trailblazers are only born, not made.

TEAM OF 20 elite women and men meet to review the execution of a remarkably successful strategy, one that enabled them to beat two competing squads. "You guys doubled your targets," a meeting facilitator named Josh tells them. "So you used your strategy sessions efficiently. Can you tell me what you think worked in particular?"

A serious-looking young man speaks first. "We listened to each other in an iterative way," he says. Everyone nods.

"We discussed, then we optimized," a woman says.

A colleague adds, "We managed to maintain a confident environment, even when we dropped the ball."

"How were the decisions made?" Josh asks.

"We all tried to match people to their best abilities," says another.

"Right," a teammate adds. "Some people focused on strategies, while others focused on operations."

Josh leans forward. "What strategy worked in particular?"

"The chicken talks!" several yell at once.

Wait, what?

The teammates-first-year MBA students in Cluster 1, Cohort A-had been at Wharton for less than a week. Their meeting took place on lush green grass beneath a tent on the Deerfield Golf Course in Newark, Delaware. During a sultry mid-morning in August, they played one of those classic team-building games, this one utilizing a set of balls and a rubber chicken. Winning required coordination, delegation, and strategizing on the fly, all of which this "pod"-a third of the cohort-had performed with the cheerful intensity of a Silicon Valley startup. In the middle of a chaotic first round, teammates were all shouting instructions over each other when one woman pulled everything together with a spontaneous announcement: Whoever had possession of the chicken could make the tactical decisions. It was a brilliant poultry-based version of the Native American talking stick common in summer camps and New Age retreats. And it worked.

The follow-up with facilitator Josh McLane WG17, a Leadership Fellow and second-year MBA student, was perhaps the most serious, articulate discussion ever to focus on a bad standup comedy prop.

This being Wharton, the game had an overtly serious side, preparing these students for a rigorous yearlong education in leadership. Thanks to a \$10 million gift from Anne Welsh McNulty WG79, the program under whose auspices these students are learning has been renamed the Anne and John McNulty Leadership Program. Founding partner of JBK Partners and a former managing director at Goldman Sachs, McNulty made the gift in part to honor her late husband, John, who had a keen interest in developing young leaders. The gift endows the program's educational efforts—both curricular and those sponsored by the school without credit-for undergraduates, MBAs and executive MBAs. The money will also enable new programs and workshops to increase what the faculty calls "leadership agility" in a diverse, global and digital world.

All of which raises the obvious question: Can leadership actually be taught? Given how well the first-years handled

that rubber chicken, an observer might reasonably conclude that every one of them was to the leadership manner born.

"Leadership" Is an Active Verb

The philosophy of the McNulty Program relies on the belief, backed by considerable research, that leaders aren't necessarily born—or made, exactly. "Mark Zuckerberg can drop out of college and succeed," concedes Mike Useem, director of Wharton's Center for Leadership and Change Management. "Some people are naturally gifted. For the rest of us, leadership development is an art that can be pursued."

The McNulty Leadership Program began 25 years ago, reflecting a change in attitudes toward management. For one thing, organizational hierarchies were beginning to flatten. "Back then, the standard was seven by seven," Useem says. "Seven leaders each having seven reports. Now, people look at that sort of structure and say, 'Were they crazy?'" Meanwhile, the growing availability of data began to change the way managers made decisions; no



IRA YUDKOFF

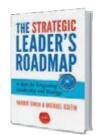
longer did the so-called "Great Man" model of leadership, based on natural ability and instinct, seem to make sense. What's more, the nature of Wharton's student body was changing. Forty-four percent of current students are women; 32% percent are international students representing 71 countries. "When they graduate, they go not just to P&G but to Lenovo," Useem says. The internationalization of Wharton reflects the global nature of business: To succeed in their careers, students must learn to collaborate with professionals from a wide variety of cultural backgrounds.

Add to all these factors the rapid changes in economic and trade forces, markets and technology. The world has become a series of fast-moving balls and chickens, requiring iterative listening, matching teammates to their best abilities, and maintaining a confident environment. Leadership, say the people who lead the McNulty Leadership Program, is "an action, not a destination." Rather than a title to pursue, leading is a matter of stepping up at the right times.

Indeed, Jeff Klein, the program's executive director, seems a bit uncomfortable even using "leadership" as a term to encompass all it entails at Wharton. "Students from different countries bring different values to the word," he says. Klein sees leadership as a sort of catalyst, one that brings positive change and good strategic decisions to a team or organization. In this respect, it's almost not a noun at all. Come up with an active verb for "leadership," and you not only have a great book title. You come close to what the McNulty program is all about.

Learning from General Lee's Mistake

Anne McNulty endowed the program's educational efforts, connecting students undergraduates, MBAs and executive MBAs, along with managers and executives-to a three-pronged approach: intellectual, relational and experiential. First comes the faculty-and-classroom part. Through courses such as Management 100, students learn what Useem and his colleagues at the Leadership Program call a "collective framework" and a "common vocabulary." In other words, they learn the theoretical side of leadership. In Management 610-which the MBA



Plotting a Path to Success

Wharton Digital Press has published several books on leadership, including Michael Useem's The Leader's Checklist, which details 15 guiding principles for making timely decisions. Now Useem has collaborated with Harbir Singh, Mack Professor of Management/ co-director of the Mack Institute and vice dean for global initiatives, on another Wharton Digital Press book, The Strategic Leader's Roadmap. The book distills six

essential keys for designing an effective strategy and executing it. Roadmap relies in part on one-on-one interviews with top CEOs, including ICICI Bank's Chanda Kochhar, Alibaba's Jack Ma and Nissan's Carlos Ghosn.

students take after the retreat-they zero in on the central skills and traits of leadership. Learning teams conduct business simulations, playing leadership roles in an electric car company. The goals of the experience are to learn leadership skills, work in teams, and understand organizational change and culture. "They're learning to become persuasive communicators, strategic thinkers and decisive decision-makers," Useem says. "It doesn't end there, but those are at the core of anybody's effective leadership."

You can see some of the fruits of that research in a checklist Mike Useem created-15 "mission-critical principles" of leadership. A good leader articulates a persuasive, pragmatic vision. She "embraces a bias for action," making timely decisions and stepping up at the right moments. She "honors the room," supporting teammates and employees. She delegates the tactical stuff to people on the front lines, keeps them motivated, and develops leaders among them, making sure she has a diverse set of direct reports. She uses her emotional intelligence, reading the emotions of others, building personal ties, and conveying a trustworthy character of good integrity. She shows she has the organization's best interest at heart, putting its concerns above her own. And she doesn't let success go to the group's head. She looks for lingering problems and sets realistic expectations.

The conceptual part of Wharton's leadership education covers more than theory. The program also teaches through the example of actual leaders, living and dead. William Ford has come to campus, speaking of disruptive innovations in the automobile industry. Arthur Sulzberger shared his efforts to take the New York Times digital-a disruption all its own. Mike Useem, a Civil War buff, likes to use examples from that war to show how leadership works and where it fails. Why did Robert E. Lee order the reluctant General George Pickett to orchestrate a disastrous charge against Union troops at Gettysburg? The reasons behind a brilliant leader's biggest blunder-bad information, interpreted badly-apply perfectly to strategic decisions in business practices today, Useem says, from manufacturing to private equity.

All of which can be taught, he adds. Every Wharton MBA student can choose to have an executive coach to help plan courses and career. "Our working philosophy, especially in leadership and teamwork," Useem says, "is that while the classroom is great, we also need a coach."

"Each student's mentality goes from 'I need to perform well' to 'We need to perform well," says program director Jeff Klein.

Trust Through Story

Teamwork: The program's relational aspect appears right at the start of an MBA's experience at Wharton. A day after the games at Deerfield Golf Course, Cohort A meets in Huntsman Hall at nine in the morning. The group's three Leadership Fellows greet them with doughnut holes and more exercises. They tell students to pair up and describe their favorite thing about the place they came from, switching off after two minutes. The first-years instantly attach to one another, and a healthy cocktail-chatter buzz warms the room. After the group deals with a few logistical matters, the mood suddenly becomes serious. For the rest of the morning, each student will meet the four or five classmates who will compose his or her learning team for the next two years. During those two hours, each team member will tell the personal tale that most reveals what motivates him or her. To set an example, the three Leadership Fellows get up in front of the room and tell their own stories.

Jesse Ge WG17 leads off by saying, "I first met my parents when I was five years old." His parents left China for America when Jesse was an infant; he stayed with doting grandparents until his mother and father earned enough to bring their son to the States. Doctors in China, they both ended up busing tables, delivering Chinese food, and working the late shift in a motel, starting again from scratch in America. He closes his story on a powerful note: "I want to do everything I can to live up to the sacrifices my parents made."

Josh McLane reveals his sense of responsibility and feeling of helplessness for a close relative who can't get his life together. He tells the group, "When you look under the surface of everyone else at Wharton, there's a little more to them than you expect. It's important to know that many people go through Wharton looking confident and making decisions about their lives, but there is more to their story than you can see. A little bit of empathy and awareness goes a long way."

Ras Gill-Boulos WG17, born in Singapore and the daughter of diplomats, speaks last. In Toronto, where she's lived for the past 10 years, she was riding her bicycle when a car hit her. She spent four months in the hospital, and doctors feared she would never have use of her right arm again. For the next vear and a half, she worked four hours a day with a physical therapist, proving the doctors wrong. "Each of you has a story that makes you who you are," Gill-Boulos says. "Don't lose that."

To someone who hasn't gone through the first-year leadership experience at Wharton, the session seems impossibly un-business-school-like. By the end of the Leadership Fellows' stories, five students are crying. Yet these revelations of authenticity, these true tales of motivation, are essential parts of the program. The LFs themselves have been carefully selected. To qualify, a rising second-year student writes four essays, goes through a battery of interviews, and then auditions in a practice session, leading one of the Deerfield exercises. Money clearly is no motive; the pay-about \$2,400 for the year—is unimpressive. "Orientation can be pretty daunting," says Margaret Ewen WG17, a tall, clipboard-wielding LF accompanying Cohort C at Deerfield. "But my orientation made a big impact on me, and I want to be able to give back."

Over the next two days, four LFs independently say almost the exact same thing. Josh McLane is among them, but he adds that the act of serving provides an education: "By helping to teach leadership, you learn about leading."

In Huntsman Hall after the storytelling, Ge tells the first-years to "build a foundation of trust. Be present," he urges them. "Maintain a safe space."

His words reflect the "relational" part of the program: building a support network. At the same time, students pick

"I want to do everything I can to live up to the sacrifices my parents made," says Leadership Fellow Jesse Ge.

up on a skill—the ability to foster trust among a diverse set of people. The program's administrators try to form learning teams with a mix of genders and cultural backgrounds. Over the next two years, each Wharton student will join an average of 15 teams, Jeff Klein notes-counting class study groups, sports and other extracurriculars, volunteer activities and the like. Besides, businesses themselves have turned from top-down management to management through networks. "Leadership means co-creating a vision," Klein says. "It's not just having a vision and persuading others into it."

Bias for Action

It's no accident that students get an introduction to leadership by passing a rubber chicken around under pressure. The program has its own bias for action; along with the intellectual and relational parts, Wharton Leadership Ventures form a crucial third leg through "stretch experiences." Students go on outdoor expeditions lasting up to seven days, venturing through challenging terrain in Antarctica, Alaska, Patagonia and New Zealand, with guides from Vertical and the National Outdoor Leadership School, among others. Participants take turns leading the group, which holds regular after-action reviews.

Closer to home, groups of up to 90 students spend one or two days on "Intensives"-realistic high-stress experiences. Each year, two groups go through Quantico's Officer Candidates School Leadership Reaction Course, with Marine Corps captains acting as drill instructors and barking orders at welcome-to-boot-camp volume. One particularly painful (and, from a leadership standpoint, educational) part of the experience is the evening's bed-making ritual. Students must make up a perfect military-style bed, redoing it as many times as it takes. Poorly made beds result in punishment of the entire group. "The mentality goes from I need to perform well' to 'We need to perform well," Klein says. "I had a vision of the military as hierarchical, but this intensive really teaches you the trust the Marines place in each other, regardless of level." At Quantico, groups move on to time-bound problems, leading a fire team, running a combat course, and working to transfer a barrel from one platform to the next without anyone touching the barrel or the barrel touching the ground. Other Intensives take place at West Point, the Naval Academy, and the University of Pennsylvania Hospital Trauma Center. Another group performs actual fire drills with the Fire Department of New York.

In addition to the expeditions and Intensives, students take workshops to learn specific skills. Mike Useem leads one on Gettysburg. The Pig Iron Theatre Company leads workshops on collaborative creativity. Through other workshops, students can learn mindfulness, influence, and emotional intelligence.

Another opportunity comes through the option of serving on a nonprofit board. Students can apply to become apprentice board members on nonprofits in the greater Philadelphia area. Nonprofit Board Fellows serve for a year, getting on-campus training and support. Some of that support comes from fellow students who have had previous nonprofit board experience.

The service aspect of leadership is a component of Management 100 as well. Students are grouped into teams of 10 that take on a service project in Philadelphia for clients like the Red Cross or the American Cancer Society. They tend to be projects that require individual contributions in the form of creativity, problem-solving and logistics, and they need a quantifiable end result. The teams are self-managing, and it's up to students to determine who should oversee each piece of the project, "Inevitably, the light bulb goes off that the group will get more done if they don't fight about who's in charge," says the program's deputy director Anne Greenhalgh. "I've been watching this since its inception, and I'm well acquainted with the trajectory." Blackstone Group analyst Sam Rappaport W15 was a teaching assistant for Management 100 as a Wharton undergraduate. He remembers working with a children's services organization on a food drive for his first-year project: "You realize that some people are good at creative marketing, others are good at face-to-face meetings, and some are good at organizing events. You have to ask, 'How can I contribute?""

THE ANNE AND JOHN MCNULTY LEADERSHIP PROGRAM AT A GLANCE

EDUCATION

Intellectual: Curricular and co-curricular courses, workshops and activities provide students with a common vocabulary and "collective framework," using research into leadership to teach theory and skills.

Relational: This aspect offers a network for support. Students bond with Learning Teams, Leadership Fellows (MBA), MGMT 100 teaching assistants (undergrad) and other teams at Wharton. In addition, each student can create a development plan with the advice of an executive coach.

Experiential: The program has a "bias for action" learning leadership by doing, a.k.a. "stretch experiences" through the portfolio of the Wharton Leadership Ventures:

Expeditions: Six to 14 day outdoor trips in which students take turns leading under stressful situations in places like Patagonia and New Zealand.

Intensives: One-to-two-day programs with longtime partners, including the United States Marine Corps Officer Candidate School at Quantico, the Fire Department of New York, the Penn Medicine Trauma Center and other high-action units.

Workshops: One-to-three-day programs focus on specific skill development, including leadership presence, influence and emotional intelligence.

EXPANSION

The \$10 million gift by Anne McNulty enables the program to build on 25 years of innovation and impact. New initiatives enabled by the gift include:

◆ Targeted programs designed to increase students' and executives' capacity to lead in a global and diverse world ◆ New courses and programs for undergraduate students ◆ Tools and analytics to support a personalized leadership journey

The program's service aspect challenges one of the oldest definitions of a leader in Western literature. The ancient rhetorician Quintilian defined the leader as "a good man, speaking well." That concept continues to widen at Wharton, and students learn that speaking well is only a part of the active verb of leading. During the retreat at Deerfield, while members of McLane's pod are review-

ing their winning performance, the Leadership Fellow speaks to them in a voice so quiet that they strain to hear him over the background chorus of summer cicadas. "Very often the extroverts are the ones heard," McLane says. "Are they necessarily the best ones to lead? Play with the team dynamic. If you're used to being the first to speak, try following."

In other words: Let the chicken talk.

Shark Attack



F YOU CAST IT, they will come. They arrived on a muggy Saturday morning in June-Wharton School students and alumni, engineering majors, even an enterprising Wharton-bound high-school senior. They came bearing samples, prototypes, gadgets and props-jars of seafood sauce, high-tech fashion, fishing gear, medical devices, wearable technology, pro-sports-fan merchandise and a bathroom mirror (more on that later). Bold and ambitious, they came to make their one-minute pitches to producers of ABC's hit reality series Shark Tank, for a chance to face a panel of celebrity CEOs on the show and vie for their investment capital. "We try to find the best entrepreneurs," said Shark Tank's supervising casting producer, Scott Salyers. "Which means we go where the best entrepreneurs come from, and obviously, Wharton has produced some of the best."

Standing Out From the Crowd

About 100 hopeful contestants comprising some 50 teams paced the floor in Huntsman Hall, clutching laptops and legal waivers, nibbling on complimentary ahi tuna and shark-fin cupcakes. Some wore suits; others opted for business casual. A few wore shorts and flip-flops, or less.

The biggest prop of the day belonged to Ron Shiflett WG82, who needed two assistants to lug a kayak into the audition. The entrepreneur and sportsman came to present his invention, which, like many of the day's innovations, was conceived over beers with friends: Part kayak paddle, part fishing rod, the "Fishing Paddle" makes the growing sport of kayak fishing easier and safer, simplifying time in the water.

About that bathroom mirror: It's not your standard-issue fixture, but a "smart mirror" from Perseus, a Philadelphia-based startup founded by Erik Skantze WG17, Nikhil Srivastava WG17 and Antina Lee WG17-Wharton MBA students in the entrepreneurial management program. The device works like a tablet, with apps for email, news, video and a camera, enabling users to groom themselves

while checking the weather, messages, traffic, or maybe a how-to makeup video. Like most of the VC pitchers, said Skantze, the trio came to talk about their product, their team and their vision. "But for Shark Tank," he added, "we wanted to stand out from the crowd." The trio accomplished that by wearing matching tees with backward, mirror-ready lettering that read THIS IS MY SELFIE SHIRT.

While waiting for his audition, Danish Dhamani gushed about his product, the "BACelet," a wearable Breathalyzer bracelet currently in the beta stage. The wristband, co-developed with Wharton rising junior Anders Larson and Penn rising sophomore Max Reed (neither of whom could make the auditions), uses a next-generation electrochemical fuel cell sensor that delivers accurate measurements of blood-alcohol level as a user imbibes. Put the BACelet on, start your drinking, and watch as the band's color starts to change. "Green means no sign of alcohol," said Dhamani, a teetotaler and Drexel University engineering major, describing how he reverse-engineered a traditional Breathalyzer after watching his friends get drunk. "If you drink too much," he explained, "you black out and don't have a good time. Yellow indicates small traces, or that you're buzzed. Orange is tipsy. And red? No more. Colors have an emotional appeal."

The audition room was off-limits to the press, but joining two Shark Tank producers on the panel inside was Laura Huang, an assistant professor of management and entrepreneurship at Wharton who was enthusiastic about the presentations. Noting that a few contestants were former students of hers, she said the ideas on parade were similar to what she sees in her classes, perhaps turned up a notch: "The producers wanted a sense of personality. Shark Tank is looking for things that are good for TV, but they want an element of authenticity. It's similar to what investors who aren't on Shark Tank are looking for."

Beer, Bras and Beta Testing

The conference hall outside the audition room was alive with nervous energy as presenters rehearsed their pitches and stretched. Adding to the pressure

"The biggest mistake when pitching is relying on the numbers," says a producer for the show. "The sharks invest in the person as much as they do the business."

for Wharton rising freshman Andrew Howard and his high-school classmate, Jason Wei: Immediately after their pitch, the two had to race back to northern Virginia so they wouldn't miss their prom. From relationship recovery advice (Renee Mazer W85) to a startup called "Your Breast Self" (Marissa Hastings W12) that sells intimate apparel for small-chested women, the auditions showcased the Wharton community's range and ingenuity.

Some of the contestants' concepts are in development; some are in beta, while others are on the market and looking to increase their share. Wharton MBA student Shashwata Narain and Engineering and Applied Science graduate student Alexander David presented their company, Fermento, which has developed a microfluidic fabrication technology that speeds up the beer-making process. Major brewers are currently using Fermento, winner of Penn Engineering's 2015–16 Y-Prize.

Romario Wallace heard about the event through a tip from a Wharton insider—his mother, Lucille Wallace WEV98. The Villanova University engineering grad, veteran and married father signed up to pitch his product, Accrue, an app that helps create savings plans. With one venture capitalist secured and the app currently in development, Wallace, who hopes a *Shark Tank* deal will enable him to build a

working model, described the audition as "great fun" and "the elevator pitch of all elevator pitches."

Most contestants walked out of the event feeling good about the process. According to Salyers, their success is about much more than a sound business plan. "The biggest mistake an entrepreneur makes when pitching for *Shark Tank* is relying on numbers and their product and not so much on who they are as an entrepreneur," he said. "The sharks invest in the person just as much as they do the business."

The producers told contestants they'd find out if they were moving on to the next stage of auditions in two weeks. After that, said Salyers, come "numerous steps, including background checks, business checks, video submissions, more paperwork—all of which can last several months." Which of the contestants will move on and which—if any—ultimately wind up on TV is strictly confidential until the show airs. Asked to assess Wharton's Shark Tank auditions overall, Salyers said, "We were very impressed with the pitches we saw and hope to see some of them on the show."

After his pitch, BACelet's Dhamani, sporting a wide-brimmed baseball cap and outsized glasses, was optimistic. "When you get smiles from the judges," he said, "it's the most relieving feeling." -Louis Greenstein





Will you plan to join world leaders, scholars, and artists at the 2017 World Economic Forum?

SAVE THE DATE

January 19, 2017 8:30 P.M.

If your travels bring you to the 2017 Annual Meeting in Davos, please meet Wharton Dean Geoff Garrett, faculty, alumni, and friends for a cocktail reception.

For more information, please contact events@wharton.upenn.edu.



Ideas

Lifelong Learning: Whiteboard—32 Syllabus—35 Excerpt—36 Knowledge@Wharton—39





With the new interactive **Penn Wharton Budget Model,** politicians—and the publiccan cut through partisan noise and predict data-driven results of policy decisions.

BY DANIELLE ROTH



THE NATIONAL BUDGET AFFECTS all aspects of American life-education, housing, retirement and health care, to name a few-yet for most of us, the budget-making process and its impact are a mystery. A new economic modeling tool from the Penn Wharton Public Policy Initiative encourages anyone to play policymaker for a day. The Penn Wharton Budget Model allows users to simulate the economic impact of national budget policies online and for free. This nonpartisan fiscal sandbox doesn't advocate for specific policies; rather, it encourages users to experiment with ideas and tweak the data to produce upwards of 4,000 outcomes.

Led by Wharton Boettner Professor of Business Economics and Public Policy Kent Smetters, a team of 13 technologists and economists unveiled Social Security and immigration modules in June, followed by a tax reform module in September. Seven additional interactive graphs—on health care, retirement policy, housing finance, criminal justice, education, aggregate risk management and retirement—will be released in the coming year.

The PWBM shows 125 policy combinations on immigration and 4,096 combinations related to Social Security. The immigration simulation allows users to adjust policies affecting skilled immigrants, annual legal immigration and number of deportations to test the impact on indicators such as population, employment and gross domestic product—a timely topic, given the debate playing out in this presidential election cycle. For the Social Security module, users can toggle dials to control policies

"Maybe if there had been a model like this to forecast impacts of Brexit, it could have influenced voters."

Kimberly Burham, PWBM managing director of legislation and special projects

such as the payroll tax rate, the retirement age and across-the-board benefits to see the impact on measurements such as trust fund reserves, Social Security taxes and interest income.

This transparent and easily accessible tool brings facts back into conversations about important national issues. Journalists can research politicians' platforms. Voters can learn about issues that affect their daily lives. Professors can demonstrate economic concepts to students. And perhaps most importantly, decision-makers can test ideas before drafting legislation. "We're trying to show policymakers different options to explore before they actually have their bill together," Smetters says. "That's what policymakers have been telling us they're eager for."

Economic analysis is often one of the final steps in turning an idea into law. That process can be frustratingly backward, as policymakers commit to an idea before receiving crucial information about its economic impact from an organization like the Congressional Budget Office, which produces cost estimates for nearly every bill approved by Congressional committees. The PWBM interrupts this process with what those policymakers are hungry for: a way to test predictions.

The PWBM doesn't aim to replace projections made by government agencies, but rather simply to offer more information at an early, critical moment. "It's a great tradition we have in America, to have independent government organizations to aid in the political process," Smetters says. Smetters and his team responded to the needs of policymakers who eagerly sought more analytics than the late-stage data from CBO. "Now it's not just 'I have an idea. Let's try to get some official evidence.' It's really about 'I want to cut across hundreds of ideas in one sitting and look at the different branches of possibilities," Smetters says.

Objective nonpartisan data and economic analysis can help policymakers and the public separate ideology from facts in order to make informed and thoughtful decisions. That intersection of data and its analysis is right in Wharton's wheelhouse. "Wharton has a strong reputation for using rigorous data analysis and applying that to fact-based business decision-making," says Kimberly Burham, PWBM managing director of legislation and special projects.

Wharton alumni representing a broad political spectrum fund this project and sit on the advisory board. The funders-Stewart Bainum, S.A. Ibrahim WG78, Marc Rowan W84 WG85, Marc Spilker W86, Leonard M. Tannenbaum W93 WG94, David Trone WG85 and George Weiss W65sought to create a mechanism to share Wharton's strengths in economic analysis in order to fuel data-driven decisions in Washington, D.C. Scott Wieler WG87, founder and CEO of Signal Hill Capital Group, believes the tool shows how business can be a force for good in the world. "To me, this tries to show policymakers how you could you use the tools and analytics that are available at Wharton's disposal," he says.

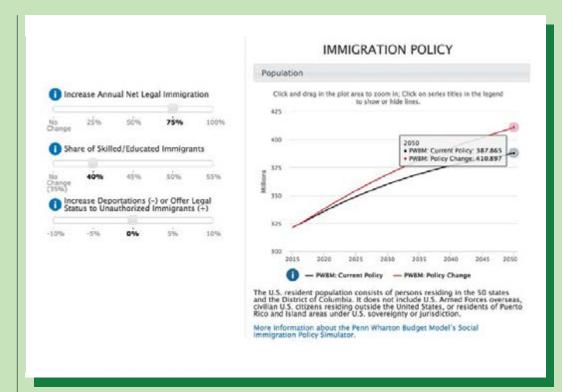
The PWBM aims to cut through the political hyperbole and give all sides a common footing in data. "Republicans and Democrats are far apart on a lot of different things," Wieler says, "but they're probably much closer than they think on a few issues. If you can isolate the policies they're close on, we can really move forward."

Managing all the possible combinations requires tapping into the latest technologies. "The model brings the best of advances in economic modeling, big data and cloud computing together to solve policy problems," Smetters says. The goal is to use big data to show how policy can shift more tangible numbers. For example, increasing deportation reduces both the GDP and employment, while legalizing undocumented workers has little impact.

Such massive data would strain traditional storage methods, and simulating policy combinations using traditional methods could take up to a day. With the help of cloud computing, every combination has been preloaded and stored, so that the model instantly shows thousands of projections.

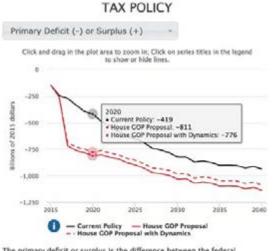
In most cases, the model's projections closely resemble those of the Congressional Budget Office. However, on Social Security, the PWBM projections vary slightly from those made by CBO and the Social Security Administration. The results are alarming—the model shows a faster and larger deterioration of the trust fund reserves. Burham calls the predictions "fairly surprising. When we run the numbers, we don't really know what the outcome is going to be." Burham points to the confusion surrounding Brexit in the U.K. as the perfect example of how the PWBM could be used by both elected officials and voters: "Maybe if there had been a model like this to forecast impacts of the Brexit vote, it could have influenced voters. Many people seem to be a little surprised at the aftereffects of their vote."

Burham hopes the PWBM will eventually expand to show how different issues affect one another-toggle immigration metrics and you'll see how those changes impact Social Security. How powerful could this tool become someday in translating virtual scenarios into real-life societal impact? Burham admits it has its limits: "It would give good information about the future effects of policies," she says. "Even if it's not quite godlike."



Just The Facts Distilled into data through the PWBM, a highly politicized subject like immigration policy is reduced to cold, hard numbers. Adjust each slider and watch as the projections shift across a 45-year span.





The primary deficit or surplus is the difference between the federal government's revenues and its noninterest outlays.

Please check back in the weeks ahead for PWBM's analysis of tax proposals from presidential candidates Hillary Clinton and Donald Trump.

More information about the Penn Wharton Budget Model's Tax Policy Simulator

No Taxation Without **Evaluation** The tax policy model allows for a close look at both the nation's economy (GDP, capital services) and the federal budget (revenues, Social Security/ Medicare, deficit and surplus). As of press time, PWBM planned to post an analysis of the tax proposals of both major-party U.S. presidental candidates.

Leaning Up

Want to improve the economy? Get more women in tech.

N THIS ELECTION SEASON, almost every political conversation includes a discussion of the economy. Whether you stand to the right or the left, there's one thing you should support to improve the nation's financial strength: getting more women in tech jobs. Here are a few reasons why this seemingly niche issue impacts us all:

Women at the Helm Mean a Better Company—and Ultimately Stock-Market— Performance

A study from Catalyst suggests that companies with the most women in leadership positions perform 53 percent better financially (in terms of return on equity). When companies perform better overall, their success translates into job growth, increased profits, investment and progress. These are all factors that directly impact the improvement and success of our economy.

Research from McKinsey Global Institute indicates that five technologies—including mobile internet, automation and cloud—will be worth more than \$1 trillion each to the world economy by 2025. We need more women in leadership, specifically tech leadership, to build on this momentum and spur continued growth.

Women Have the Purchasing Power

Women control \$20 trillion of annual consumer spending in the U.S. Since women are strong tech users—outnumbering men on all major social media sites (except LinkedIn), for example—it's safe to say that women are spending a significant chunk of that money on technology. But tech products are overwhelmingly built and designed by men. Only 17 percent of Google's engineers are women, and the numbers are worse at Facebook (15 percent) and Twitter (10)

The example of automobile airbags always brings this point home to me. When airbags were first introduced, they resulted in a disproportionate number of deaths of women and children. The engineering team that designed the airbags was composed exclusively of men. Had there been at least one woman on the team, it might have considered using crash dummies similar in stature to the average woman. Including women in both design and development leads to a better, more

robust user experience for most products on the market, spurring stronger sales. Successful consumer product innovations lead to increased GDP and economic growth.

More Women in Tech Will Close the Wage Gap Faster

We all know that a wage gap exists: On average, women in the U.S. make 77 cents for every dollar a man makes, and according to the World Economic Forum, that chasm may take a whopping 118 years to close. While women comprise the majority of the general workforce, we only account for 25 percent of technical jobs. If we get more women in tech, we could close the gap faster. Why? Tech jobs pay more. The average yearly wage of a U.S. tech worker is \$104K—102 percent more than the average wage in the private sector. And consider this side effect: Paying women the same rate as men would add half a trillion dollars to the U.S. economy.

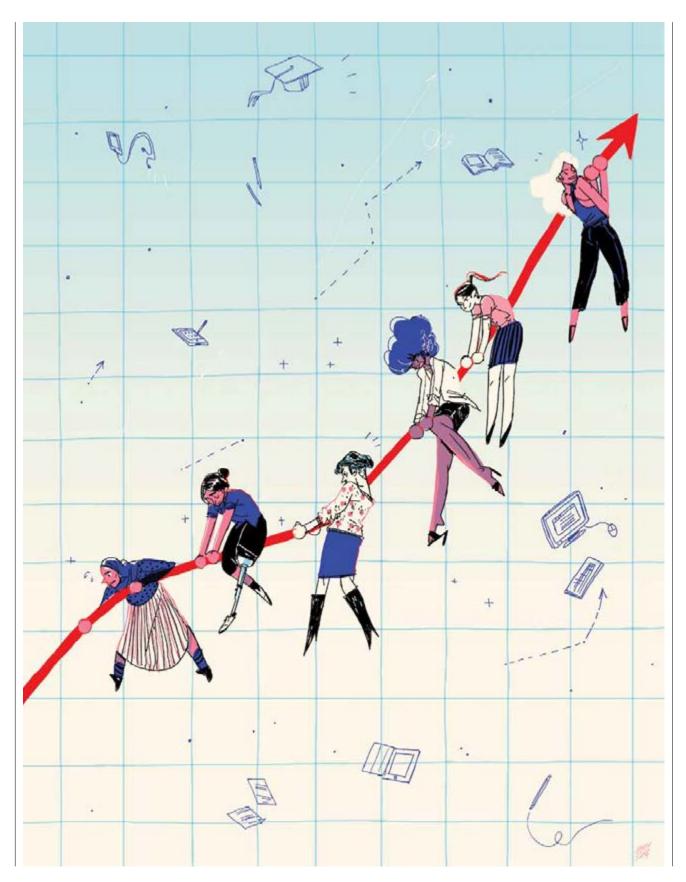
○ A Proposal for the Solution: Fixing the "Pipeline Problem"

Unfortunately, the rate at which young women are dropping out of computer science and STEM-related areas of study is alarming. In 1985, 37 percent of all computer- and information-science graduates were women, but by 2008 that number had dropped to just 18 percent, a ratio that has since remained unchanged. This issue takes root when girls are young. In middle school, 74 percent of girls express interest in science, technology, engineering and math, but when choosing a college major, only four percent of high-school girls select computer science, according to the nonprofit Girls Who Code. These girls need role models and mentors. If we can solve the "pipeline problem" and get more girls interested in STEM, it will go a long way toward solving the lack of gender diversity in tech companies.

So whether you're a dad of the next Grace Hopper, a user of social media, a political junkie or just concerned about the country's financial health, you should want more women in tech and be doing everything you can to help them get there. The economy depends on it.

Heather Zynczak WG98 is CMO at Pluralsight.

By 2008, only 18 percent of all computerand information-science grads were women.



At the Whiteboard With Mauro Guillén

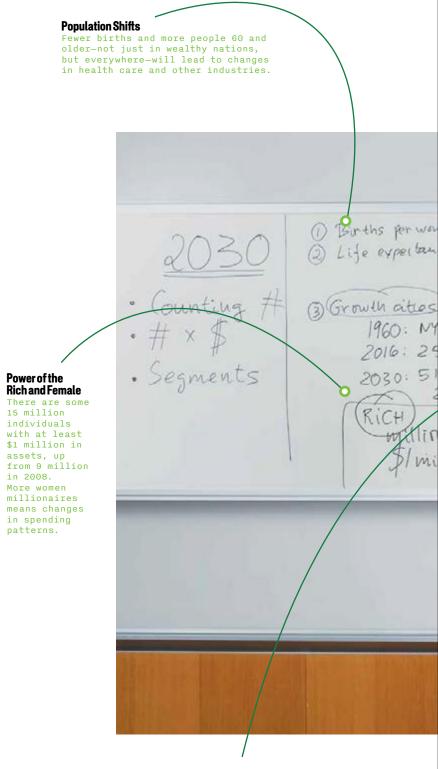
What's in store for global consumer markets? While geography will always matter, consumer segments tell a more insightful story.

WE TYPICALLY THINK ABOUT global consumer markets in terms of geography—of emerging markets in nations such as China, India and Turkey. But according to international management professor Mauro Guillén, the Anthony L. Davis Director of the Lauder Institute at Penn, "From today's standpoint, the nature of global consumer markets will change so much that by the year 2030, you won't be able to recognize them." The markets will continue to grow, he says, but not necessarily by geography.

Several trends will drive this shift. Guillén outlined a few in a condensed lecture from his International Political Economy of Business Environments course. For one thing, the number of births per woman is declining in both emerging markets and wealthy nations. Also, we're living longer: On average, according to Guillén, "Most of us will live seven or eight years longer than our parents and 12 or 13 years longer than our grandparents." Those factors—fewer babies and more elderly people—will change industries such as health care, financial services, pharma, leisure entertainment, and anything offering mobility to the world's growing population of those aged 60 and up.

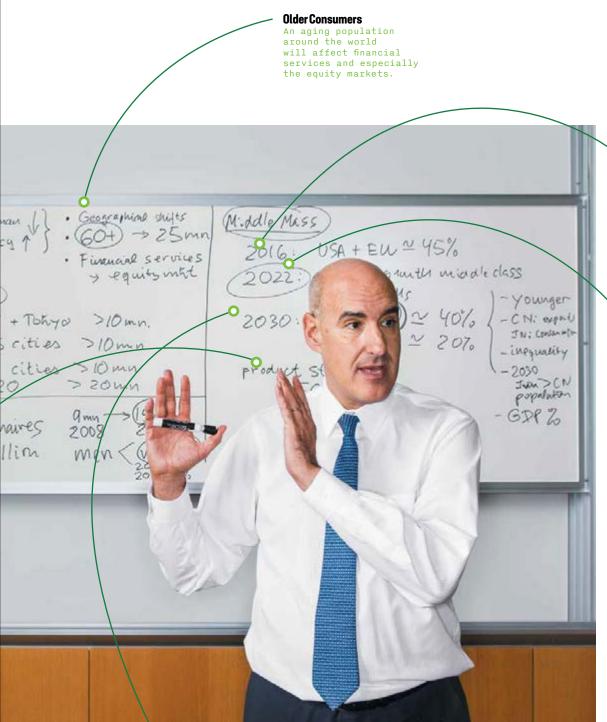
Another key driver of change in consumer markets around the globe: the massive movement toward cities. Every seven days, Guillén says, the number of people living in cities grows by some 1.5 million. Today, worldwide, there are 25 cities with more than 10 million residents. By 2030 there will be 51, according to Guillén, and 20 with more than 20 million people. This will affect a range of businesses, from transportation and real estate to leisure and entertainment. Rapid urbanization around the world will also change the way consumers get their food and water.

"If you're thinking about the future, you can think about geographies," Guillén said. "China and India will be important, but that's just one part of the story. It's more interesting to look at it from the point of view of different consumer segments. That's what will reshape the global consumer markets." —Louis Greenstein



Game-Changing Impact

The largest markets get to write the rules of the game; until 10 years ago, that was the U.S. By 2030, electronic devices will meet Indian and Chinese regulations, too.



Middle Class Today

Today, the U.S. and E.U. comprise about 45% of the world's middle-class purchasing power.

Growth of Emerging Markets

By 2022, there will be massive middleclass growth in emerging markets, including sub-Saharan Africa.

China and India Take Over

By 2030, only 20% of the world's middle-class consumer spending will come from the U.S. and E.U., with 40% in China and India.

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Marketing Through Darwinism

Lessons from a Wharton course designed to inspire new ways of thinking and adaptation to change



AN YOU GUESS how many Fortune 500 firms from 1955 still exist today? That's one of the questions marketing professor Jerry Wind asks in "Marketing Strategy with Added Corporate Projects," a course he first developed 35 years ago and is teaching this fall, his 50th and final year in the classroom at Wharton. Don't let the course's longevity fool vou-the Lauder Professor and director of the SEI Center for Advanced Studies in Management insists that his students adopt a forwardlooking approach to both marketing and the global forces that impact their goals, in business and beyond.

The centerpiece of Wind's class is a group project that matches students with real-world company challenges-strategies for the new Microsoft/LinkedIn alliance; marketing virtualreality tech with an Israeli startup; creating a wealth

management platform with SEI; attracting audiences for the Philadelphia Museum of Art-and gives them an opportunity to present their ideas to those businesses.

That's not exactly a project you can replicate at home. But with a few key books from Wind's extensive reading list (and a TedX talk aimed at kick-starting your creativity), you can apply the essential lessons of the course to almost any business: Stay curious, embrace new technology, and ride the waves of global change. (As for those Fortune 500 firms from the mid-'50s? Only 12 percent have survived.)

Should You and Can You Inspire Curiosity?

In a nearly 20-minute TedX talk posted on YouTube, Wind argues that "curiosity is a necessary condition of creativity" and suggests tools you can use to enhance inquisitiveness. Among his guidelines for sparking curiosity: Encourage

improvisation and challenge the mental models that are holding you back.

Bevond Advertising: Creating Value Through All Customer Touchpoints

The consumer is in control that's the launch point for Wind's latest book, co-authored by Wharton **Future of Advertising** Program executive director Catharine Findiesen Hays. So how can a company reach its customers on their terms? Perspectives from more than 200 thought leaders from industries across the globe are synthesized here, along with a deeper dive into Wind's TedX talk about transforming mental models from roadblocks into highways toward innovation. Example: Before Roger Bannister broke the four-minute mile mark in 1954, the feat was thought to be impossible. Within the next three years, 16 more athletes followed him into the record books, proving that the real barrier was mental. What's your fourminute-mile mark, and how can you break through it?

The Zero Marginal Cost Society: The Internet of Things, the Collaborative Commons, and the Eclipse of Capitalism

Wind calls this book by author and social thinker Jeremy Rifkin W67 a "classic." It examines the rise in anti-capitalism and the many ways in which technology causes chaos in competitive markets (see: Uber's disruption of the taxi industry). Along the way, it reinforces a major theme of the course, which is that as markets and consumer behaviors shift, so must marketing strategies.

The Third Industrial Revolution: How Lateral Power Is Transforming Energy, the Economy, and the World

Everything in the course relates to new realities in business that are driven by our rapidly changing world: If you rely on antiquated ways of thinking, you (and your company) won't be around for long. At its most essential, Rifkin's text—which has been adopted by the EU and China and is the guideline for their economic policies—is critical in reimagining the roles of companies and individuals in a global environment.

The Seventh Sense: Power, Fortune and Survival in the Age of Networks

As a companion piece to Wind's The Network Imperative and his monthly online column for Knowledge@Wharton, this book by Kissinger Associates co-CEO Joshua Cooper Ramo examines the increasing importance of networks from a broader perspective, ranging from new technologies to global power shifts to the rise of the Islamic State.

The Inevitable: Understanding the 12 Technological Forces That Will Shape Our Future

This best-seller from Wired's Kevin Kelly offers something that's all too rare among the futurists of our timeoptimism. In identifying the trends that will define the next three decades. Kelly says understanding and adaptation are both essential for survival and fully possible. Consider this a road map for where your business is headed and a guide to embracing change for maximum success.

The Importance of Being Authentic

In her book *Wired for Authenticity*, Henna Inam WG90 explores the personal and professional benefits of being true to yourself.

T WAS A WEEKDAY morning in December 2009, and I awoke with a general feeling of "blah" hanging over me. I couldn't figure out what was zapping me of my drive. For most of my almost 20-year career, I had been a self-motivated corporate executive, climbing determinedly up the corporate ladder toward nirvana—or so I thought. It seemed that with every rung I reached, the euphoria evaporated a little sooner. I was like a junkie; my drug of choice—achievement—was no longer giving me the high I wanted. To the outside world, everything looked just great. Then why wasn't I jumping for joy? What was missing?

I realized I was in a full-blown midlife crisis (a little early, actually!), and a part of me was missing. I call her my inner Dancing Queen. She's the part of me that stands up for me. I imagine her in disco boots and a bright orange satin jumpsuit with sequins, underneath a spinning disco ball. Dancing Queen urged me to slow down, to look deeper within myself, and to stand up for my own fulfillment. I realized slowing down was a challenge because it forced me to face my discontentment. I had been telling myself a few lies over the years about who I really was—ignoring my emotions. the need to slow down, to take a break and care for myself. There had been too many days since I had used my creativity. Instead, I was reviewing my 10th version of a PowerPoint presentation for an upcoming meeting.

I was burned out. I wasn't being authentic.

There's a great book by Bronnie Ware, a hospice nurse, called *The Top Five Regrets of the Dying*. In it, she asks patients on their deathbeds, at the time where they can perhaps see most clearly the value of life, about their greatest regrets. Their number one regret: "I wish I'd had the courage to live a life true to myself, not the life others expected of me."

Being true to ourselves is about having the courage to define our own version of what it is to live a successful life. For me, it's about making peace between that hard-charging, results-driven

executive who still wants to achieve and the peaceand-love hippie who wants to hang out in an ashram and dreams of a better planet for all. As soon as we limit ourselves, we may achieve success, but not fulfillment, because we aren't living out our important truths.

Consider the polygraph test, which tells the person administering it whether you're lying. How does it know? Lying causes stress in the body. As part of the test, six nodes are attached to the body to measure vital signals. When you lie, the detector shows significant changes in physiological responses: a faster heart rate, higher blood pressure, increased perspiration. Telling a lie creates stress in the body, and research shows that continuous stress can contribute to the development of major illnesses such as heart disease, depression and obesity. I suspect that hiding the truth about ourselves or suppressing parts of who we are creates similar stresses in our bodies.

You might say we're simply wired to tell the truth. Leaders rooted in authenticity create enormous benefits for themselves, those they lead, and their organizations overall.

Authentic Connections Are Good for Our Well-Being

Authenticity also helps us build deeper connections with others. In her book *Love* 2.0: *How Our Supreme Emotion Affects Everything We Feel, Think, Do, and Become*, psychologist Barbara Fredrickson redefines love not as "a stable behemoth" but as micromoments of connection between people: "We each carry an intricate machinery of love, calibrating and attuning our moods and bodies to one another."

Fredrickson's research shows that our capacity for experiencing connection is linked to our health and longevity. Authentic connections with others build the health of our vagus nerve, the main nerve that originates at the stem of the brain and travels through the chest, connecting the brain to the lungs, the digestive tract and, most notably, the heart.

People with high vagal tone are typically happier, less stressed, and less likely to suffer from depression. They also have better memories, are better able to focus their attention, and have

Research shows that our capacity for experiencing connection is linked to our health and longevity. increased brainpower. Studies also show that these people who are able to experience authentic connections are usually healthier, as the vagus nerve is involved in insulin production, cardiovascular health and immune responses.

How do we build these authentic connections? We let our guards down. We step into our authentic selves to seek to see the human beings behind the labels we attach to ourselves and others. Being with others in this way eight to 10 hours a day is good for our health, perhaps even more than the company gym or health-care plan. (Yes, that's the peace-andlove hippie in me talking.)

Creating Trust

In our flattening hierarchies, it's more important than ever to be able to influence others who don't report to us. Studies show that productivity, revenue and profits are linked to the level of trust in the organization. Trust is the key factor in how well people work together, listen to each other, and build effective relationships. Author and leadership guru Ken Blanchard reinforces this point in his study of more than 1,000 leaders. Fifty-nine percent said they left their company due to trust issues, citing lack of communication and dishonesty. Leaders who create trust are honest and transparent and follow through on promises they make. I believe trust can only be built when we are practicing authenticity.

Driving Innovation

Innovation is the lifeblood of all organizations and not just in R&D. Innovation must flow across the spectrum of all our value-creation activities, in every single function and at every single level. What if all employees came to work thinking about how they could best innovate, contribute, and bring their utmost talent to the workplace that day? Richard Branson, founder of Virgin, is a master at this: "Innovation happens when people are given the freedom to ask questions and the resources and power to find the answers." His company has demonstrated disruptive innovation in many industries, from music to mobile phones to an ambitious undertaking in commercial space travel-but not without failure.

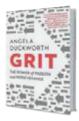
When Virgin Galactic's SpaceShipTwo crashed in its experimental flight, one test pilot died, and another suffered serious injuries. Both had dedicated their careers and lives to working toward what was previously impossible-advancing safe travel into space.

Acknowledging their courage, Branson promised that Virgin Galactic "will not push on blindly. We're going to learn from what went wrong, discover how we can improve safety and performance, and then move forward together." Is he giving up on the dream? No. Branson said the company's goal is

READING



The author shares a few of her favorite guides to achieving one's potential.



Grit

Angela Duckworth

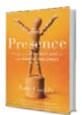
This book is about what ultimately helps us succeed. From scores of interviews with people at the top of their fields to research on peak performance, the author shows how the unique combination of passion and perseverance can help us get to the top of our own game.



2

Positive Intelligence **Shirzad Chamine**

I often recommend this and its companion assessment to my coaching clients. The book offers tools to get out of saboteur mode and instead cultivate wise behaviors. The assessment, available online, helps identify the ways in which we sabotage ourselves.





Presence **Amy Cuddy**

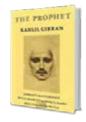
Carefully researched, this book examines the science of how we can bring our most confident selves to the small and big challenges we face every day.





Triggers **Marshall Goldsmith**

In exploring the environmental and psychological factors that can derail us, Goldsmith suggests a series of questions I ask myself every day to be more accountable to myself in becoming the person I want to be.





The Prophet **Kahlil Gibran**

This slim volume has a permanent spot on my bedside table. Its 26 poems on topics such as joy, sorrow, love and the meaning of work are a source of wisdom and inspiration for me.

still putting people safely into space: "I think millions of people in the world would love one day to have the chance to go to space, and this is the start of a long program."

Authenticity allows us to engage with each other in powerful dreams that make the impossible possible. We are called on to persevere despite failure and pursue a purpose beyond the paycheck. This is at the core of innovation.

Building Great Customer Experiences

Professional-services organizations in which talent is a significant source of differentiation and competitive advantage, such as consulting firms or high-touch customer-service-oriented companies, can create significant value through the practice of authenticity.

Studies conducted by Ernst & Young on engagement teams globally show that companies in which employees rate highly their ability "to be fully themselves" in their work environment experience greater client satisfaction ratings and stronger client retention.

Inspiring Engagement in Organizations

According to a 2014 KPMG study, a staggering 93 percent of respondents said their organizations are considering or currently undergoing business transformation. Restructuring is the new normal. It creates fear and stress in organizations, undermining employee engagement. Yet successful restructuring requires high engagement-a tough paradox for leaders. Their authentic behaviors are the key to operating in this paradox.

The spread of social media creates transparency in the organization at a level we've never witnessed before. Now, a single employee having a bad day can create significant risk to a company's reputation through a 140-character tweet or a video gone viral. Reputation impacts consumer and investor decisions. Increasingly, more of those investors are studying the Trust Index Employee Survey to assess the culture in organizations.

The bottom line is that the motivation and engagement of each employee count. Many organizations have put proactive initiatives in place to measure employee engagement. The needle is moving north, but not fast enough. Employee engagement measures the degree to which we're excited about the work we're doing, whether we feel connected with our co-workers, and whether our bosses care for our well-being and success.

The latest Gallup employee engagement research, conducted in 2012, showed that the top quartile of the 192 companies with the highest engagement numbers have 37 percent less absenteeism, 25 percent lower turnover, 21 percent higher productivity and 22 percent higher profitability.

Impacting Talent Retention

All this research into the motivation and engagement of workers shows that leaders who are trustworthy and transparent truly do make a difference —even more so in times of crisis and change. These leaders create organizational cultures not by what they say but by what they practice. Jennifer Hayes, partner at consulting firm Bain & Company, which has been recognized as one of the best companies to work for in multiple surveys, talked with me about the importance of great talent:

"Our number one priority is driving great results for our clients. Our people are the most important driver for that. What we have found is that when people are truly inspired by those they are led by, it makes a huge difference to talent retention and client value creation. We can be working 100 hours a week, and yet these teams that are truly inspired aren't complaining, because they're connected to what's important. The teams that create the greatest value for our clients are also the ones that report the highest ratings in terms of team experience."

In today's business environment, where corporate restructurings are the new normal, it's very easy to live each day stressed-out and worried about job certainty. It's an environment that creates disengagement and undermines loyalty and commitment and trust in leadership. Particularly in this context of constant upheaval and change, the practices of authentic leaders allow them to create trust and connection and lower the collective blood pressure in the organization.

The bottom line is that we really need the evolution of the leader at every level in the organization. Now, more than ever, organizations need authentic leaders who are honest, transparent and trusted. Authentic leaders are at the root of trust, engagement, innovation, great client experiences, talent growth-and, ultimately, results.

Henna Inam is the CEO of Transformational Leadership Inc., a company focused on helping organizations grow their pipeline of female talent.

"When people are truly inspired by those they are led by," says one consulting executive, "it makes a huge difference to talent retention and client value creation."

The Genius of Trying Things Out

How one automaker is preparing for a transportation revolution

N THE FALL OF 2015, San Franciscans began seeing a tiny two-person vehicle glide silently around their streets. Operated by Scoot, a local electric-scooter rideshare network, the new vehicle has four wheels and no windows. Users start it with their phones. When they're done with it, they leave it in a designated spot near their destination. Now Nissan, the carmaker behind the vehicle, is developing a four-passenger version.

Tiny cars, ridesharing and smartphones are hardly new. What's exciting about the Scoot four-wheelers is their intention. They're part of a real-world series of experiments by Nissan Future Lab, a diverse team that develops technologies and business plans to meet consumers' needs for a more electrified, autonomous future.

Megan Neese, the lab's senior manager, notes that most of the discussion around next-gen automotive technology has to do with the vehicles' autonomous abilities: "Can it change lanes? Can it stop? Can it go? What are the technical requirements of this?" Neese's team is thinking more broadly: How will the technology change consumers' need for it? "A lot of the reasons that we get into cars today may be fundamentally different if that technology is autonomous," she notes. "In our work, we're really interested in what kinds of things such cars could do that we still can't imagine."

To help with the imagining, Neese's group uses "living labs," combining market research with "lean process development," creating small-scale launches to see how they work. As few as a dozen Nissan employees try out a new product or service or software program on a modest scale. "So it's not like you're launching something," Neese says. "You're doing a trial, and you're doing it with a small group of people who understand what they're testing and why they're testing it."

With Scoot, the group gets to experiment with a new kind of partnership and a new kind of service

provider. The test has already led to development of a new software-hardware integration. "It's little learnings like that that can help inform new product development and product planning for the future across different regions and brands," Neese says. "That's really what we're after."

The modesty of the experiments allows for some out-there inventions. For instance, Nissan developed a chair that parks itself under a conference table at a clap of the hands, allowing perfect order in any meeting room. The innovation lets Future Labs see how autonomy works around people: "We're trying to understand how autonomous will affect people's everyday lives. Does it change how you get groceries, or when you get groceries?" Neese envisions a future in which autonomous delivery vehicles might drop off packages only at night.

Much of this envisioning gets done outside Nissan facilities, and it goes way beyond technologists. With Scoot, Neese says, "We're working with a software company, a service company, the city and a car company." There should be a name for this kind of innovating: social creation? Iterative invention? Or just a very smart way to develop smart cars? -Knowledge@Wharton



On the Web

You can hear a Knowledge@ Wharton podcast with Neese or read a transcript of the interview at <u>knowledge.</u> wharton.upenn. edu.

Neese recently spoke at the Digital Disruption and Empowered End-Users conference hosted by Wharton's Mack Institute for Innovation Management.



Mission: Unlock Yahoo's "Hidden Value"

Verizon paid \$4.8 billion in cash for the struggling internet pioneer. How can the telecom make its purchase worthwhile?

AHOO, THE ONLINE PIONEER that defined how people searched the web, read digital content and sent email, is being sold to Verizon for \$4.8 billion in cash, closing a chapter on one of Silicon Valley's earliest innovators that nonetheless failed to keep up with tech developments in the very internet it made reachable to millions of people.

The brainchild of two Stanford doctoral students, Yahoo had a two-decade run as an independent internet company that reached a high in 2000, when its market value exceeded \$100 billion during the dot-com boom. Yahoo tried to buy Google in 2002 but was rebuffed. Years later, it would reject a buyout bid of \$45 billion from Microsoft. Today, Yahoo is worth a much-diminished \$36 billion. Compare that to Verizon's market cap of \$228 billion.

In a letter to employees, Yahoo CEO Marissa Mayer said the deal represents a "great outcome" for the company; not only will it unlock shareholder value, but "it is also a great opportunity for Yahoo to build further distribution and accelerate our work in mobile, video, native advertising and social." Yahoo hopes to leverage Verizon's vast base of more than 100 million wireless users and industry-leading cellular, broadband and internet TV networks.

Investors didn't buy it, however, selling off Yahoo shares on the day the deal was announced. Verizon shares were slightly lower. "Yahoo's early story mirrored the story of the early internet," says Kartik Hosanagar, professor of operations, information and decisions at Wharton. "Yahoo got started in 1994 and quickly established itself as the go-to destination to find interesting content on the web. It had a phenomenal IPO and was valued at over \$100 billion at its peak. That valuation epitomized the belief that many shared about the internet's long-term potential. Then the dot-com crash hit Yahoo, as it did most other internet companies. Many went under, but Yahoo weathered that storm."

He adds, "Unfortunately for Yahoo, it couldn't keep up with all the changes in digital media that happened post-2000," citing video (YouTube), social (Facebook) and mobile (WhatsApp, SnapChat).

According to Hosanagar, the issue was partly that Yahoo could never make up its mind whether it was a tech company or a media company.

"While it claimed it was a media company and brought in several media executives, it was technology companies like YouTube and Facebook that were remaking digital media," he notes.

The "Peanut Butter" Problem

Under Mayer, Yahoo significantly spiffed up its content offerings to attract eyeballs. It hired a cadre of prominent journalists, including former CBS News anchor Katie Couric and others from the *New York Times*, Time Inc. and Politico, to report authoritatively on many topics. Yahoo also launched about a dozen digital magazines focused on food, fashion, technology, politics, travel, movies and parenting.

Still, Yahoo didn't change its content business model to fit shifting trends. "Business models separate winners and losers in today's economic landscape," says Barry Libert, senior fellow at Wharton's SEI Center for Advanced Studies in Management and the CEO of OpenMatters, which specializes in business-model science. "Although Yahoo was among the early search firms, it never evolved its business model or board to keep track with either Facebook or Google. It remained tied to its roots, and although it innovated its products and markets, it stuck to its knitting."

Libert notes that in the classic business book *In Search of Excellence*, the authors made a case for why sticking to the tried-and-true was critical to success. "But that thesis was [35] years ago. Today, sticking to existing strategies has as much value as a cotton loom," he adds. "The answer to Yahoo's future lay in inverting its business and mental models. It didn't, and as a result, Yahoo will join the ranks of *Encyclopedia Britannica*, Kodak and Blockbuster."

Yahoo collapsed under its own weight. According to the *Wall Street Journal*, an internal Yahoo memo penned by an executive in 2006, known as the "Peanut Butter Manifesto," pointed to the company's lack of a "focused, cohesive vision." The exec wrote that Yahoo's problem was that "we want to do everything and be everything—to everyone. We've known this for years, talk about it inces-

A Yahoo exec wrote in an internal memo that the company lacked a "focused, cohesive vision." santly, but do nothing to fundamentally address it." He called Yahoo's strategy similar to spreading peanut butter—a thin layer of investment laid across everything the company did while it focused on "nothing in particular."

Meanwhile, investor pressure added to the company's troubles. "Yahoo's recent woes are as much a story about activist investors as about missing the next big thing," Hosanagar says. "Activist investors like Starboard interfered with management and made decisions focused on short-term shareholder gains rather than long-term viability of the business. When investors observed that Yahoo's market cap was lower than the value of its Alibaba holdings, many swooped in, hoping to break up the parts and extract value. This is what ultimately resulted in the sale of Yahoo's core business to Verizon."

Yahoo's Next Chapter

Verizon is planning to combine Yahoo with AOL, which it purchased in 2015 for \$4.4 billion, to build a digital content and advertising juggernaut and compete with the likes of Google and Facebook. AOL and Yahoo together boast more than 25 brands, including Yahoo Sports, News, Finance and mail as well as AOL's Huffington Post, TechCrunch, Engadget and AOL.com. Combined, they count more than one billion monthly active users, including 600 million monthly active mobile users. Verizon also plans to use its programming relationships with the NFL, NBA and others to boost its combined content offerings even more. On programmatic ad platforms, Yahoo's BrightRoll will complement ONE by AOL.

Yahoo will retain its stakes in Alibaba and Yahoo Japan and cash reserves. The company is changing its name once the deal closes in early 2017. Mayer plans to stay with the company at least through this next chapter of its life. The combined AOL and Yahoo will be headed by Marni Walden, president of Verizon's product innovation and new businesses.

"Verizon's acquisition of Yahoo serves two main purposes. One, any telecom platform, like Verizon—and like Comcast a few years earlier—is always looking for synergistic content to distribute across its network," says Eric Bradlow, Wharton marketing professor and department chair. "By acquiring Yahoo, Verizon acquires content that it can widely distribute. In addition, from a pure revenue side, Yahoo owning parts of Alibaba provides Verizon a global opportunity for its network."

In a conference call with analysts in July, Verizon CEO Lowell McAdam said the Yahoo acquisition "will make us an even stronger competitor in digital media." The telecom company's goal is to be a "significant" player in the digital video market-place, which is currently dominated by Google and Facebook. "By acquiring Yahoo's operating busi-



nesses, we are scaling up to be a major competitor in mobile media," McAdam said. Verizon's goal is to grow the global audience of its mobile media business to two billion users and book \$20 billion in revenue by 2020.

To that end, McAdam said, Verizon has been building its video assets so it can deliver content anywhere and on various platforms. This strategy includes offering large and small bundles of linear content through FiOS TV, improved customer experience using IP-based technology, over-the-top delivery of content, the purchase of AOL with its publishing and advertising technology and content, buying Millennial Media and launching its Go90 mobile video service, developing a global video distribution platform for other media companies to deliver digital content, and a Hearst partnership to invest in AwesomenessTV and others.

"For Verizon, the transaction makes the company much more important to the digital advertising industry," wrote Pivotal Research Group analyst Brian Wieser in a recent report. By combining Verizon's legacy digital ad inventory with those of AOL, Yahoo and others, the company would capture \$8 billion to \$9 billion of gross ad revenue and \$4 billion to \$5 billion of net ad revenue, he noted. "This firmly entrenches Verizon as the number three seller of digital advertising behind Google and Facebook, and one of the largest across all media."

A Long Way to Go

Still, the telecom company has a long way to go to catch up. Market research firm eMarketer said Yahoo's share of net digital ad revenue worldwide fell to 1.5 percent in 2016 from 2.1 percent last year. That compares to 30.9 percent for Google and 12 percent for Facebook. Moreover, Verizon will face stiff competition from Google, Facebook and Twitter, which are all moving aggressively into digital video, according to Bloomberg Intelligence. Nevertheless, the global video ad market holds much promise—it's expected to grow by 20 percent a year until 2018, according to ZenithOptimedia.

Verizon's main challenges are to return Yahoo's core business to growth and reduce costs, Wieser said. In July, Yahoo reported lackluster second-quarter 2016 results, with net revenues down 19 percent year-over-year and adjusted earnings per share diving by 43 percent, "suggesting rapidly shrinking fundamentals," Needham analyst Laura Martin wrote in a recent research note.

Why would Verizon want a declining business? "Verizon, like all telecoms, fears that it might end up as a dumb pipe carrying all the content at commoditized rates," Hosanagar says. "So Verizon has been transforming itself from a typical telecom company to one that has genuine business 'on top of the stack.' Through acquisitions like AOL, Verizon has been adding an important content and digital advertising business. Yahoo fits well in that strategy. But can Verizon drive growth in Yahoo when multiple CEOs couldn't? Verizon hopes all its mobile subscriber data will unlock the value hidden in Yahoo."

Verizon's Content and Advertising Play

Gerald Faulhaber, Wharton emeritus professor of business economics and public policy, also questions how likely it is for Verizon to turn Yahoo and AOL into digital ad titans: "Verizon's acquisition of Yahoo marks its second foray, after last year's AOL purchase, into the online-platform industry. Both purchases are of firms that are well past their prime, although each still has a sizeable presence in the online world. It's unclear to me exactly what Verizon brings to these enterprises that will help them reverse their fortunes, nor is it clear exactly what Yahoo brings to Verizon's core businesses."

Faulhaber adds that "simply wanting to get into online advertising really isn't enough; there must be value added to the acquisitions on either or both sides, and Verizon has yet to convince us what that value added is." As for former AOL CEO Tim Armstrong, who Faulhaber said will effectively run the Yahoo/AOL enterprise, "He certainly has financial resources to support him, but again, it's not clear how he'll succeed where Marissa Mayer failed. Perhaps scale will bring new opportunities that neither AOL nor Yahoo could previously sup-

port, but I'm sure investors would like to hear what Verizon has in mind for this new enterprise."

A Eulogy for Yahoo

Hosanagar asks, "So what's the lesson from Yahoo's story? First, an internet year is like a decade in a traditional business. It wasn't too long ago that Yahoo shareholders felt Microsoft's offer of \$44.6 billion for Yahoo undervalued the company. Second, you can afford to have many loss leaders as long as you have one large, growing and highly profitable cash cow, as Google has with search. For Yahoo, all the failed initiatives don't matter as much as its inability to grow a core business."

Hosanagar adds, "Google monetized search better than anyone else. Facebook monetized social better than anyone else. Yahoo couldn't convert all the eyeballs into a growing stream of cash. Along the way, Yahoo acquired GeoCities and Tumblr for content, Inktomi and Overture for search, and BrightRoll and Right Media for advertising. But none of them could be converted into serious growth engines. Contrast that with Google's acquisitions, like YouTube and Android and, I suspect, over time, Nest."

Its inability to focus on and grow a core business has brought Yahoo to this point: a fading internet portal that will join former high-fliers of its generation such as Excite, Lycos and AltaVista, all of which blazed their own trails. "In the end, Yahoo outlasted all of them," Hosanagar says. "But all good things have to come to an end. RIP, Yahoo." ●

THE IMPACT OF YAHOO'S DATA BREACH

In September, two months after Yahoo announced the Verizon deal, it broke the news that what it believes is "a statesponsored actor" stole information relating to at least 500 million user accounts, or half its total monthly active user base of a billion-plus. A "full inquiry" into the massive data breach-which took place in late 2014will decide the fate and revaluation of Verizon's \$4.8 billion bid to buy Yahoo's operating assets. according to experts.

Hemant Bhargava, professor of technology management at University of California-Davis, and Northeastern University law professor Andrea Matwyshyn discussed the implications of the breach on the Verizon deal on the Knowledge@Wharton show on Wharton Business Radio on SiriusXM channel 111.
"With the extra negative reputation of the data breach, many users will defect," said Bhargava. He estimated the liability cost to be between \$25 and \$200 per user. Verizon may insist that the Yahoo entities it is not buying foot that liability bill, he added. (Verizon is reportedly asking for a \$1 billion discount.)

Some experts project a drop of between \$100 million and \$200 million on Verizon's purchase price, Matwyshyn noted. Much of how Verizon will reassess its deal will depend on the breach's impact on its larger strategy in video and digital media. Said Matwyshyn, "This kind of data valuation is partially art as well as science."

Good for Your Health: Behavioral Economics

Most U.S. employers have incentive programs designed to nudge workers toward healthier choices. But according to David Asch WG89, who teaches at both Wharton and Penn's Perelman School of Medicine, most of those programs aren't designed to deal properly with the human element. And perhaps it shouldn't surprise us that given how irrational people are, systems based on the apparent logic of classical economics sometimes miss the mark in getting us to do the right thing.

But those problems can be fixed. Here are results from a recent study Asch did with colleagues Mitesh Patel WG09 and Kevin Volpp GRW98. (Asch's recent paper on this topic: "Behavioral Economics Holds Potential to Deliver Better Results for Patients, Insurers, and Employers.")

THE CHALLENGE

How to get employees to walk at least

More than 80% of U.S. companies use some form of financial incentive to promote employee health. "They've got too rational a perspective," Asch told Knowledge@ Wharton.

THREE GROUPS The first group was just told how far they walked. The second group was paid \$1.40 for each day

The third group was paid \$42 a month, with \$1.40 deducted for each day they failed to walk 7,000 steps.

they walked 7,000 steps.

RESULTS

The first and second groups walked the same number of steps. The third group -who lost money when they failed to reach the 7,000-step goal-walked 50% more.

\$0.00

CONCLUSION

Framing a reward in terms of loss rather than gain can produce better behavior. Unlike traditional economics, behavioral economics acknowledges that people

don't always behave rationally.

Learn more at knowledge. wharton.upenn.edu



DATA INTERPRETED

Loss in contracts in one quarter when a company is boycotted

Wharton management professor Mary-Hunter **McDonnell and University** of Texas at Austin professor Timothy Werner examined the delicate balancing act among corporations, politicians and social activists. "It is an interesting and to some extent frustrating side effect of activism that they are pushing companies into darker channels of political influence," McDonnell says.

Source: "Blacklisted Businesses: Social Activists' Challenges and the Disruption of Corporate Political Activity" in Administrative Science Quarterly.

THOUGHT

"I see the direction for augmented reality going into advertising. The next evolution of the internet will be to immerse yourself into an environment. Augmented reality puts you in tune with the local environment, and context is amplified."

Wharton marketing professor David Bell. He asserts that Pokémon Go and other forms of augmented reality can point the way to more local advertising and immersive marketing.

THOUGHT

Office Comedy: **Smart Move or** Mistake?

Should you crack jokes in the office? According to Wharton research, a sense of humor can enhance workplace status and perception of one's competence. That's one of the findings of the research paper "Risky Business: When Humor Increases and Decreases Status," by Maurice Schweitzer GRW93, Wharton professor of operations, information and decisions; doctoral candidate Brad Bitterly; and Alison Wood Brooks, a Harvard University assistant professor.

"HUMOR IS RISKY," SAYS Schweitzer, when asked about the study's key takeaways. "Humor can signal competence and confidence and increase our status. But sometimes humor can fail because it's inappropriate, because it's just not very funny or because we overdo it. In those cases, we signal low competence and that harms our status. And in some cases we've seen people get fired because of it." But when deftly and appropriately used, says Bitterly, "Humor can be a really effective tool for increasing status."

DATA INTERPRETED

Maximum ideal number of characters in a website domain name

Each additional character reduces traffic by 1-2%. When a numeral is included, a site's search rank rises by 8.19%. A hyphen in the name, on the other hand, reduces a site's rank by 2.9%.

Source: "Empirical Evidence for Domain Name Performance" by Karl Ulrich, vice dean of entrepreneurship and innovation at Wharton. The study ranked 1.28 million unique domains by the amount of traffic they attracted.

DATA INTERPRETED

Addition to U.S. stock values attributed to the fracking boom between 2012 and 2014

This amounted to 10% of the total gain in stock values during that period, according to Wharton finance professors Nikolai Roussanov and Erik Gilje and the Simon School's Robert Ready. They calculated that price declines from larger oil supplies saved businesses and households \$131.4 billion per year. Over the long term, that would be enough to account for the stock market gains identified in the study.

Source: "Fracking, Drilling and Asset Pricing: Estimating the Economic Benefits of the Shale Revolution."



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THOUGHT

Best City for Emerging-Market Startups: Dubai

Muhammed Mekki Wo5 is well equipped for his mission to promote a robust startup culture in the Arab world. The Iraqi-American studied economics at the Wharton School, then became immersed in the Silicon Valley startup community while earning an MBA at Stanford University. In 2011, Mekki co-founded Dubai-based Namshi, an online fashion retailer that raised more than \$20 million in venture capital. Now he is founding partner of Astro-Labs, which has partnered with Google to build a startup hub and training academy in Dubai.

Since its soft launch on April 1, 2015, AstroLabs has had more than 400 technology startups apply, according to Mekki, who recently talked to Knowledge@Wharton in the United Arab Emirates.

ASTROLABS DUBAI IS THE only Google-partnered tech hub in the Middle East/ North Africa region, serving as a launch pad for the most scalable online and mobile startups. Our collaborative co-working space is designed by and for entrepreneurs, featuring a mobile device lab and a training facility housing AstroLabs Academy. Through a partnership with the government-sponsored Dubai Multi Commodities Centre Free Zone, AstroLabs-based entrepreneurs can obtain a company license as part of their membership with no upfront costs, making it easy to set up a bank account and UAE residency for the team. Once accepted, AstroLabs members gain access to a range of practitioner mentors, direct connections to the top venture capital funds, and curated offers from startup service providers.

We believe that Dubai is the best base for startups to access emerging markets, with one-third of the world's population living within a four-hour flight radius. Infrastructure and lifestyle are world-class, individuals as well as companies based in free zones pay no tax, and you can easily obtain local residencies for talent recruits from anywhere globally without the lengthy immigration processes typical in other geographies. The UAE and its neighboring Gulf countries are wealthy, have the highest smartphone penetration levels in the world, and are underserved by tech companies.

We're looking for tech-driven startups that are scalable and have a developed product ready to be launched or live in the market. AstroLabs startups tackle more than 20 industries, from food to finance. Even though we don't take equity, we put an investor hat on when interviewing applicants so that we build the highest-quality community possible. Thus far, we have accepted more than 60 startups whose founders hail from 27 countries.

Several clusters have started to form organically, taking advantage of some of the unique opportunities presented in Dubai, a global hub for travel, finance and retail. We recently ran a travel-and-hospitalityfocused startup exchange program in Dubai, which attracted top companies from all over the world to AstroLabs. With brands like Emirates, Jumeirah and Google backing the initiative, it was a first step in putting Dubai on the map as a hub for travel tech.

Dubai has evolved substantially over the past few years, from an ecosystem with a handful of modest locally minded tech startups to an emerging international player with entrepreneurs thinking at least regionally and oftentimes globally from day one. Whereas new startup concepts used to be dominated by replicas of successful business models in more advanced markets, we are now seeing teams selecting Dubai as the launch pad for inno-

vative businesses across multiple geographies.

FALL 2016 WHARTON MAGAZINE 45

The Problem With Job Performance Appraisals

Many of us have to do them. Most of us get appraised. Do they work the way they should?

fessor Peter Cappelli has spent decades studying the complicated dynamics of employment. In a post-recession world, his research is more timely than ever, as companies large and small struggle to adapt to a new normal that relies on fewer employees handling a larger, shifting workload. One practice that has persisted in this changing business landscape is the performance evaluation, which Cappelli describes as universally despised by both supervisors and subordinates.

In their latest research, Cappelli and Martin Conyon, a professor at Bentley University and a senior fellow at Wharton, question the usefulness and accuracy of performance appraisals and find some surprising answers. Cappelli, who is also director of Wharton's Center for Human Resources, discussed their findings in a recent segment on the Knowledge@Wharton show on Wharton Business Radio on SiriusXM. The following is an edited transcript of the conversation.

Knowledge@Wharton: Is the performance appraisal as important now as it was 20 years ago? **Peter Cappelli:** It's more important in the sense that more people have to do it. If you look around the United States, there haven't been a lot of recent studies. But the last ones show that more than 90 percent of the workforce has a performance appraisal. I think the big change is that it used to be kind of a U.S. thing, but now you see them all around the world.

K@W: Your work with Martin Conyon on this paper is trying to bring together information about performance appraisals from a variety of sources? **Cappelli:** The thing about performance appraisals is, they're ubiquitous. There's probably nothing in management that's more common. And there's also almost no practice in business that people hate more. The evidence on this is pretty overwhelming.

It's also surprising how little we actually know about it. How do job appraisals actually work inside companies? Quite remarkably, almost nobody has looked at this. We got data from a large Fortune 50 company on all their performance appraisals over a 10-year period. There's a view among a lot of executives that employment is like a contract. At the beginning of the year, you set goals; then we assess how well you've done. At the end of the year, we give you a pay increase based on how many of your goals you've met and how well you've done, maybe, compared to everybody else.

But there's another view that it's not like a contract—that it's really kind of a relationship. If you think about employment, you don't really have a contract with your boss. The boss is telling you to do different things all the time. Your circumstances are unpredictable, too. It could be, "We've got this goal." But then business collapses, and we change the goal. Or we have to adjust the target.

One of the questions we looked at was to what extent is a performance appraisal a contract, and to what extent is it a relationship used to encourage you. We also wanted to see if people who perform well always perform well. And people who perform poorly, do they always perform poorly? This matters because there is a very prominent theory in management—something that Jack Welch made famous—about the A-player, B-player, C-player model. The folks at McKinsey & Co. made a similar case that there are really good executives and there are lousy ones. If you believe that, you want to hire the good ones and get rid of the bad ones. If that's the story, then management's kind of simple, right?

As far as we can tell, no one has ever looked at this before, or at least published it. Are the people who do well always doing well, or not? If we know your scores this year for everybody in the company, how much of next year's score could we predict or explain? If the good people are always good and the bad people are always bad, we can explain 100 percent of your scores, because next year's score will be identical to this year's score. If it's random, which would be kind of astonishing, then it would

Job appraisals are more like relationships than contracts, according to Cappelli and Conyon's research.

K@W RADIO

Listen to Wharton's daily two-hour Knowledge@ Wharton show on Sirius XM channel 111. Broadcasting live, host Dan Loney goes behind the headlines with Wharton faculty and expert guests. The show airs from 10 a.m. to noon ET Monday through Friday.

be zero-no relationship between how people on average perform this year and how they perform next year. The good people could be good or bad; the bad people could be good or bad.

K@W: But you'd think they would follow a pattern. If you're good in 2014, unless something has drastically changed, you'll be pretty good in 2015 as well.

Cappelli: Right. It's between zero and 100 percent. If you think this A-player, B-player, C-player model is right, it's going to be closer to 100. If you think it's all just random or people vary a lot, you're closer to zero. So that's the question.

K@W: I'm going to say it would probably be closer to 70 or 75 percent.

Cappelli: That's a very common answer. People in human resources guess 80 percent. The correct answer is 27 percent, so it's way closer to zero than it is to 100 percent.

K@W: Why so much lower? I would think it would be on the higher end.

Cappelli: Many people seem to believe that, especially in human resources. But when I ask them if they've ever actually looked at it, the answer is no. Maybe they assume it's that way because that's what you hear from the A-player, B-player, C-player story, and you could see some of this is a cognitive bias. There's something in psychology known as the fundamental attribution error: When we see somebody behave in a particular way, we're inclined to assume it's because of who they are rather than the circumstances. The classic example is somebody racing by you on the road going home. They're driving on the shoulder and your inclination is to say, "That guy's a jerk," rather than to entertain the idea that maybe it's an emergency. We seem to be wired to think everything is due to the person. If you believe that, then you would be inclined to think the A-player, B-player, C-player model is right and good players this year are going to be good players next year.

The other thing we looked at was whether it actually changed your appraisal scores when you got a new supervisor, because the other view is that once you get comfy with a particular supervisor, your scores are sort of the same. You get a new supervisor, and they can really sort out whether you're good or bad. Well, we didn't see that, either.

It turns out there's a lot of variation in how people perform. This calls into question forced ranking systems-they call them "rank and yank" or "rack and whack." General Electric used to force out the bottom 10 percent because they believed in the A-player, B-player, C-player model. If your company's doing that, you might want to actually look to see whether it's true that your bottom 10 percent this year are the same as your bottom 10 percent next year. The problem is, if you keep firing your bottom 10 percent, you're never going to know, because you'll never know what those guys would have done. But you



could at least look at the

appraisal scores for everybody else and see whether they remain constant over time. If they're bouncing around, it's insane to fire the bottom 10 percent, because there's no reason to think those guys are going to be bad next year.

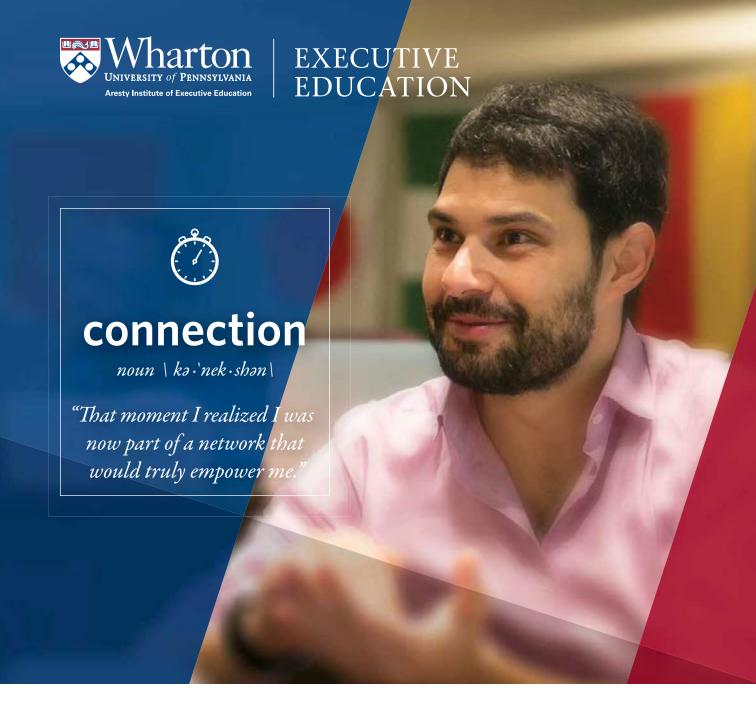
K@W: In certain situations, the boss is asking the employee questions such as, "What kind of job did I do over the course of the year?"

Cappelli: 360-degree feedback is the formal way in which that gets done, where you ask people all the way around you, "How do you think I did as a boss?" That has not had a terrific track record, partly because there's a lot of venting going on. If you're a subordinate, it's hard to be objective about your boss. It's hard, always, to like your boss.

Let me tell you the punch line of what we found on the academic side: Things don't look very much like a contract, and supervisors tend to reward people for improvements as well as the level of performance. Also, counter to the prevailing view, companies over-reward high performers. It's not a linear relationship. If you're a poor performer, they whack your merit pay increases. And if you're a better performer, they load them up.

K@W: That increases the separation between the upper end and the lower end in the course of the job. Cappelli: Within the job, right. And it's true that as you move up the organization, the average scores increase. One explanation is that you're selecting better people if it's promotion from within, so it's not surprising that the scores would go up. And is it bias once you get near the top? They say that CEOs always give their personal assistants the top score.

Management professor Peter Cappelli says that increases in responsibilities for supervisors and the number of employees who report them make job appraisals more challenging.



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Eight distinguished emeritus alumni reflect on shattering Golden Years stereotypes, acting on inspiration, and blazing trails.

As told to Jim Collins

Increasingly, and strikingly, our nation's over-70 professionals belie the notion of retirement. In this digital, 24/7, high-tech, constant-innovation era, they're the fastest-growing segment of the workforce, according to the Bureau of Labor Statistics. No group represents the trend better than Wharton's "emeritus" alumni, who include any graduate who's celebrated a 45th reunion. Here is a gallery of grads whose spiritual and intellectual powers haven't diminished with age—who believe, in fact, that they're doing the best work of their lives. In their voices we hear inspiration and something akin to wisdom.

FAROUQ SULTAN WG73

CEO, Kuwait LBO Management Ltd.

I WAS BORN IN Kuwait City, but my parents moved to India when I was very young, and we lived there for 14 years. I went to New York University to study engineering. Most of my career has been in Kuwait, much of it working with international partners and clients. In all the work I do, I find my colleagues get upset when things aren't done the way they expect them to be done. I tell them to relax. Nobody's wrong-it's just culture. It's different points of view.

I'm fascinated by financial crises. I always wonder how I would have lived through the crash of 1929. I went through 2008 saying, Wow. What a time



With background experience in telecommunications, light industry, import and export trading and emerging technologies, among other sectors, Farouq Sultan now manages a private equity fund with a focus on Kuwait.

to be alive! To be able to see this and figure out how to get through it ... Life doesn't move in a straight line. I tell people to just do it. Make mistakes. Do it again. You'll do it better. Don't give up. So much happens out of our control. What we can control is our effort-and our perspective. I keep a sense of humor and make fun of myself all the time. I'm one of seven billion people on the planet. I just try to do my best and keep learning.

I speak seven languages. For the past four years, I've been taking a lot of online courses on Coursera and edX, in subjects from the making of the atom bomb to the theory of relativity, viruses, game theory, astrobiology, operation management, paleontology, negotiation, English composition, genetics, the origins of the universe ... I try to read five to eight books a month on Kindle. The internet has been a blessing. I wish I was 25 again, knowing what I've learned. I have 400 followers on Instagram. Having so many followers feels something like being in a cult.

I'm working six to seven hours a day and would like to continue working as long as my mind is functioning. I still enjoy the challenge of it. But I know that the older we get, the more we lose the cognitive ability to make sound decisions. So one major thing: You must hire people who are smarter than you. Hire really good people to make decisions. At the meetings, let them talk and then say, "Does everyone agree with that? Okay ..."

If the decision turns out to be wrong, the smart people can fix it.

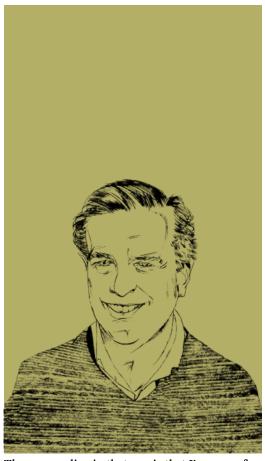
JIM ROWBOTHAM WG69

Business development and marketing research consultant, Fifteen Degrees

I HATE THE TERM emeritus. Even the way it sounds. I'd say I'm one of the "certain agers." Perhaps that term actually might catch on. I bought the domain name certainagers.com just in case.

I have some lineal examples of continuing to work at a certain age. My dad retired near 80. My maternal grandfather was still selling houses in Middletown, New York, at the age of 90. My first boss in advertising "retired" but is writing a book and staying super-involved at age 78. Of course, there are situations that motivate working. My wife Cindy and I got kicked around by the stock market during the 2008 financial crisis. But there's no quit in me, or in her. We've climbed back by working hard. Fortunately, each of us enjoys the process and challenges of professional effort.

Keeping up with the times is somewhat intuitive for me. I recall a movie my grandmother took me to-She Wore a Yellow Ribbon, starring John Wayne.



In a career spanning more than 45 years, Jim Rowbotham bas belped create business and marketing campaigns around some of industry's iconic brands, including Ralston Purina, the Bic pen company, Seagram Distillers, Colgate-Palmolive and American Home Products.

There was a line in that movie that I've never forgotten: "The old days are gone forever." I recently told a 70-year-old buddy of mine who's working on a startup, "When you go into a meeting, always have a new idea or new approach to offer. Never say, 'Back when I was your age ..." That's brutal.

I love the way the digital and information age has unfolded. It makes research so much easier than it ever was. I can work faster and better. I can cast new findings and current research against my knowledge. I have a frame of reference. Young people are still building their own frames.

I work for an ad agency called Fifteen Degrees -that's the angle an airplane's wings need to reach in order to create lift. It's a versatile, crossgenerational advertising and marketing agency based in Manhattan. On the firm's website, I say that my role is discovering new business opportunities. Off-site workspaces, watering holes, college alumni events, marketing seminars-these are my playgrounds and office.

What would I say to a graduating class from Wharton today? Keep a sense of humor. Keep figuring things out. And be nice. When I was younger, I had a bit of an edge, but I eventually figured it out. Stay hungry. Stay creative. Aim high. Be respectfully persistent.

I have two holy grails right now. The first is a tagline I originated that would be ideal for Google, as it summarizes its business beyond search. I'd like to get in the door there to pitch it. And I have a sales promotion campaign concept that Coca-Cola could build out. It's catchy; it's flexible. The possibility for customizing digital signage to its theme would be *exciting*. I just need to find the right person at Coke to talk to in confidence for testing consideration. Keep hope alive... even at the "certain age" stage.

MYRON WEINER WG51

Emeritus professor, University of Connecticut; partner, Weiner Associates

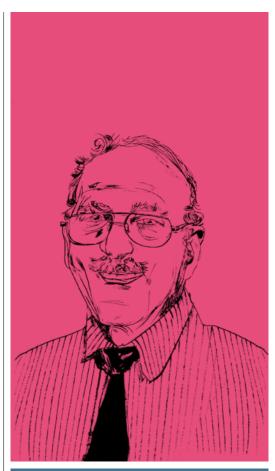
TECHNICALLY I RETIRED IN 1992 from the University of Connecticut, where I taught courses in organizational and human management. But retirement didn't mean slowing down. I consulted for about 15 years and continued teaching part-time. I've become very active in my synagogue's choral singing group. I work with my wife for a nonprofit called My Sister's Place, which provides temporary housing for women and families in transition. I've been the chairman of the board of Federation Homes, an independent-living community here in Bloomfield, Connecticut, that's a much better alternative to traditional nursing homes.

A lot of my generation didn't have computing in our lives. Most of us are technology immigrants, not natives, not like the people who grew up after the 1970s and '80s. But in the Navy, I was a radar technician, and I discovered there wasn't much difference between radar and computers. I wasn't afraid of them. It was an accident that I was at Wharton just when Penn's engineering department was unveiling the ENIAC. I was fascinated by it.

I was an early adopter. As a UConn professor, I was among the first to work with local and state governments and nonprofits to use computers to manage their organizations, communications, inventories, supply chains and delivery systems. I brought computers into the classroom when no one was doing that.

After retiring, I helped with the Wharton Graduate Emeritus Society website and got involved with blogging about technology issues. As a society, we need to think hard about how we design and use technology to reinforce our values.

Thanks to modern medicine, we now have a "third age"—20 or 30 years after what was once considered a full working career—that we can use to continue being productive, to figure out how to contribute our skills and life experiences. As long as you stay healthy and involved, there's no end to what you can offer.



Myron Weiner's book Human Services Management became one of the leading texts in the field. Together with his wife Ruth, he is a partner in Weiner Associates LLC, management consultants with both national and international clients.



Alain Levy bad a successful career as chairman and CEO of Polygram Worldwide and EMI Music. His companies were responsible for the breakout success of such music artists as Elton John, U2, Bon Jovi, the Rolling Stones and Coldplay, among others, and for international film bits including **Four Weddings** and a Funeral, Trainspotting, Fargo, Dead Man Walking and The Big Lebowski. Levy led major deals in the media and entertainment industry, including Polygram's acquisitions of Motown and Def Jam.

ALAIN LEVY WG72

Executive chairman, Algean Group; former music-industry executive

BEING OLD HAS NOTHING to do with age. I never really felt a conflict between generations. There's no tension at all. You simply have to accept that things change. For instance, at the start of the music recording industry, you'd go to pubs to listen to artists, looking for talent. Now you'd use digital search instruments. The approach has changed. But the value, and the values—they're the same.

I don't believe in career paths. Things happen because of what you do. Once you've done things, you can continue doing more of them by delegating and by not trying to do the things you can't do. For example, I was never a big fan of rap. But I oversaw a very large rap department. I didn't know a thing about it. I needed someone there I could trust, someone from a younger generation. Now, when I signed Norah Jones. Anyone could tell she'd have an audience.

Change brings disruption. I spent the last five years of my music career not fighting the change facing the industry, but trying to adapt to it. Ultimately, as a whole, we weren't successful. I basically saw an industry being destroyed. I'm now consulting with a small firm that's growing international businesses in various sectors. We make strategic investments in innovative concepts having to do with digital content and services.

What drives me is intellectual stimulation, whether that's reading a great biography or strategically advising companies. Golf, to me, is a useless pastime. I suppose it's useful from a social point of view. Right now I'm learning to speak Spanish. I suppose that's useless as well, for what it will bring me. But it's intellectually stimulating.

SISTER DOROTHY MCCORMICK **WG66**

Professor, Institute for Development Studies, University of Nairobi; Sisters of Notre Dame de Namur

WHEN I WAS AT Wharton, there were 300 men and only seven women in our MBA class. Being a woman on campus—that alone made me a curiosity, not to mention walking around in a black habit. Our mother superior had asked me to get the degree in order to serve as treasurer and help to professionalize the community's finances. When the class rolls were called, the professors would say, "Mr. McCormick?" And I'd just say, "Here!"

I later became very interested in international studies, especially Africa as a region. I went on a two-month independent study in Nairobi in 1983. I wrote my first papers there about the economics of women's groups and small co-ops. I developed a real interest in microenterprise, and I've never stopped being interested. After completing my PhD, I joined the University of Nairobi as a research fellow in 1988.

It's hard to work in this research institute and feel stuck. The institute is small and needs to be nimble and opportunistic. We're constantly getting drawn into new things. And Kenya is a very young country—the average age of the population is under 18. The Institute for Development Studies began life as a research institute in 1965, but we are relatively new at teaching. We started the master's program here in 2000 and the PhD program in 2003. I supervise post-grads-at the moment, three master's and three PhD students, some of them studying entrepreneurship. Lately I've been getting pulled into innovation studies. I'm currently looking at the business strategies of the public transport system here, which is mostly small- and medium-sized buses called "matatus" run by private companies. Colleagues and I are involved with planning the second annual Eastern Africa Transport Conference.

I really love my work. It helps my community financially. More importantly, I think it gives me a chance to make a difference. Because non-Kenyans can't be permanent workers, I've been working under two-year contracts. No one is pushing me to retire yet.



Co-author of six books and author of dozens of papers, Sister Dorothy McCormick bas academic interests that include theory and practice of entrepreneurship and micro- and small-enterbrise development. From 2001 to 2007 she was director of the University of Nairobi's Institute for Development Studies.

JOHN TEELING WG69

Chairman and founder, Great Northern Distillery; Clontarf Energy; Connemara Mining; Botswana Diamonds: Petrel Resources

I'M ACTIVELY INVOLVED IN five different businesses—a whiskey distillery and some energy and mining exploration companies. But you'll notice I'm the chairman, not the CEO or managing director. I'm working full-time and traveling a lot for business, but my schedule isn't as full as it once was. There's a real upside to that. I can lift my nose up from the grindstone to see the big picture. I think I can see opportunity better.

Working at my age, especially in speculative, volatile markets, gives me a couple of advantages. First, even though I'm a member of the "99 Percent Club"-people who own shares that have lost 99 percent of their value—I have a bigger equity base, which allows more flexibility. Second, I think age makes one *more* comfortable with risk. That's especially important working in some of the unstable parts of the world where we do. The people I associate with in mining and energy exploration tend to be older. I see executives who are married to what made them successful, who are comfortable with risk in their businesses but who seem resistant to adopting new strategies or technologies. I'm open to anything, because I'm most interested in solving problems. I'm interested in the answer. If technology gives me the answer, then I'll trust it.

People ask me why I don't retire. Why would I do that? People my age are paying good money to travel to places I get to visit regularly for my work. And I'm looking for gold, for oil and diamonds. But you know, it's not about the kill. It's about the hunt, the next success. One of the most exciting things in the world to me is getting a call from a driller or a chief geologist and hearing the words, "I think we've found something."

LUCINDA KASPERSON WG53

Computer consultant; entrepreneur

MY LIFE IS QUITE unusual. I worked in the research department of the Federal Reserve Bank. I graded papers for Northwestern and taught economics for eight years at Loyola. I started and ran a computer consulting company that specialized in graphics and digital printing. I served as a delegate at the '72 Republican convention, and on our city council here in Northbrook, Illinois, for 18 years. I bought a bank in Bosnia—a hundred-year-old bank that was the first one ever to be privatized there. I went over in 2001 and ran it for a year, with an interpreter.





In addition to bolding part-time academic positions, John Teeling has bad a long career as a director and an investor in energy and mining businesses, including gold, diamonds, zinc and titanium. In 1987 be founded Cooley Distillery, the first independent wbiskey distillery established in Ireland in 100 years. He sold the company in 2012 to Beam/Suntory for \$95 million. In 2014 be established the Great Northern Distillery, which is now the second largest Irish wbiskey distillery complex. In 2016 be was elected to the Whiskey Hall of Fame.

Lucinda Kasperson bas a varied career involving finance, economics, politics and technology consulting. She operated MBA Computer Consulting for 25 years.

I ended up adopting two of the interpreter's children, as well as raising two handicapped children of my own. I helped set up a residence for young women in northern Thailand so they could attend high school. I still have a small interest in the Bosnia bank.

Right now, I'm busy setting up the local Republican office in advance of the November elections and helping to raise money for local charities. The flexibility to accept new challenges came from my Wharton training. The principles I learned about finance have worked for my entire life. The work habits and problem-solving techniques are lifelong; what changes are the contexts and the technology. In my computer business, it feels like I have to relearn everything every six months. Innovation is the key. For all of us.

TOM HADLOCK WG66

Senior executive, SMA NYC Advertising

IT IS IMPORTANT TO keep up in a fast-changing environment. One key is to spend time thinking about the current state of affairs-and then the future; in each case, leaning from the past. Right now our focus at the ad agency where I work is almost all digital-banner ads, keywords, search and the analytics that go with that.

In order to be an effective leader, one needs to know how to strategize and implement. I stay up-to-date. I go to conferences. The learning curves have become steeper, but human relationships with your clients are still essential. Put yourself in their shoes. Convert what you wish to convey into language, concepts and terms that they can understand. Building the chemistry of which relationships are made does take time. Working with millennials can be critical, and challenging, too. They can sometimes be disrespectful of what they perceive as a slow culture. Their goals are different.



Personally, I'm a long-hours guy. I like to use the day fully. I'm always moving forward. There are trade-offs when you do that. It's important to spend time on reflection and thought—that's a part of the work/life process. But I don't spend a lot of time reflecting on things. I don't read as many books as I should. I'm not sure my wife would say the trade-off is such a good thing. But bringing something to bear on the process, getting things done, giving back to other people and to organizations—to me, that's all incredibly rewarding. I could have retired several years ago, but being in leadership positions at work and outside of work has never been more exciting. I don't want to stop.

Tom Hadlock has worked on the account management side in major ad agencies including BBDO, Grey and DDB. His clients bave included GE, Pfizer, the U.S. government, Canon and Sharb Electronics. He's currently senior director at Seiter & Miller Advertising in New York City.

A CALL TO ACTION

In 2003, recognizing the depth of knowledge and experience accumulated by alumni over the age of 65-and the fact that many of them remain actively engaged in their careers and their communities-Wharton established the Wharton Graduate Emeritus Society. Designed to increase engagement and strengthen the bonds between the business school and a vital segment of its alumni body, the society offers opportunities for continuing education, regional networking events and mentoring-particularly for career-changers and young entrepreneurs looking to launch new

businesses. Some 6,500 graduates have become members of the society.

Former American Airlines CEO Bob Crandall WG60 has challenged this older generation to continue putting its energies toward supporting community causes—to join, in his words, "the Geezer Crusade." The emeritus society has picked up the charge with the "Crandall Challenge," a recognition of society members who contribute to their professions while technically retired. The first Crandall Challenge winners will be announced this spring.

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The Call of the Classroom

An impactful professor and a personal revelation sent Amit Bhattacharjee CO4 WO4 GRW12 from business back to academia.



FLOWER DISTRIBUtion company near Hoboken. A real estate startup in Manhattan. Another small business where I didn't stick. Three years into my post-baccalaureate

life, my career path was meandering. Like a lot of people in their early 20s, I felt underutilized and under-stimulated doing daily tasks that obscured deeper questions. Why were we doing what we were doing, and why did it feel disconnected from the economic principles I'd learned as an undergrad at Wharton?

In retrospect, the pull back to academia was inevitable. At the time, it felt like a lifeline. So I began taking the bus to Philadelphia for consumer-behavior seminars taught by one of my favorite professors, Americus Reed II. Less than two years later, in 2007, I was back at Wharton as a PhD candidate in the marketing department.

Something clicked when I realized that asking those questions could be a contribution in itself. As I explored how the psychology of decision-making compared to the tenets of economic theory, I began to wonder how the perspectives of psychologists, economists, businesspeople and consumers might benefit from each other. Everyone has a piece of the truth, and we can all help better understand our market society and the roles we play in it.

This approach has guided most of my ongoing research. My work examines how our moral beliefs and cultural assumptions shape our judgments and behaviors in the marketplace. For example: Why do many people perceive profit as fundamentally harmful to society, even as their consumption choices determine who benefits? And when do people view personal moral beliefs as more or less relevant to professional performance?

These sorts of questions lack easy answers but underlie much of our behavior. I'm confident that business practice can contribute to solutions for many of our thorniest social problems, but unlocking its potential is up to all of us. -Amit Bhattacharjee, assistant professor, Rotterdam **School of Management**

A Sister's **Crusade**

Vivian Nabeta WGO8 turned tragedy into a mission to bring health care and hope to children in Africa.

S THE BABY OF a large Ugandan family, my sister Sonia was the apple of everyone's eye. She was affectionately called Sunny Sunshine; her ever-present smile and enormous heart made her a favorite sibling and best friend to each of us, and my four-year-old nephew's dream of the perfect mom. Witty and with a wicked sense of humor, she could waft away somber moments with gales of laughter. She entertained us with her humor as much as she educated us on the history of popular culture and music, such as why Nick Jonas's song "Levels" has its roots in the Baroque era. Then, on August 5, 2015, Sonia died. God is ineffable, and one cannot begin to understand why He decides the way He does, but there it was—at age 24, our Sunny Sunshine was gone. A sudden hypoglycemic attack had barreled through her defenses, and Type 1 diabetes-T1D, also known as juvenile diabetes-had won.

Sixteen years earlier, when my sister was diagnosed with T1D, it seemed as though she was the only child in Uganda with the condition. Our parents looked in vain for support groups or medical personnel who understood the condition. Schools had no idea how to handle Sonia, and the requisite

In Uganda, there are only four pediatric endocrinologists in a country of 39 million people.

support and awareness didn't exist. We felt alone, and even more critically, my sister felt alone. Our parents diverted all their modest resources to supporting her-she had a doctor, a nurse, a psychologist, a dietician, a personal trainer, and a fully equipped clinic only a few yards from our home. Always conscious of the huge sacrifice our parents had to make for her, Sonia wondered how the notso-lucky children in Uganda could possibly cope.

In Uganda, T1D is a financially backbreaking disease, requiring at least \$700 a year for basic tests and supplies. In a country with an average per capita income of around \$600, one where 19.5 percent of the population lives below the poverty line, this cost is prohibitive. The struggles of those with T1D in Africa are vastly different from the challenges in developed countries such as the United States. Africa's T1D mortality rate remains high for several reasons, including lack of awareness, insulin insecurity and the hefty cost of treatment. In Uganda, for instance, there are only four pediatric endocrinologists in a country of 39 million people, roughly 60 percent of whom are under 18 years of age. Many children remain undiagnosed, and some die without ever seeing a medical professional.

The fortunate kids who do see health professionals often find that T1D isn't on the health index of the diagnosing physician. The story of 12-year-old Manuela Nyende Wakabi, for example, begins with several weeks of erroneous diagnoses from numerous hospitals and healers. By the time her T1D was diagnosed, her body had gone into a state of severe stiffness that didn't subside for months. Other common stories tell of children shunned by schools and communities, ousted from homes, and even considered by some to be possessed by demons. While some children with T1D do make it into adulthood, many are burdened with complications because of poorly managed blood sugar levels.

Sonia journaled her dream of one day changing this state of affairs for children with T1D in Africa. So the day Sonia joined the angels, it became incumbent on us, her family, to carry out her wish through the Sonia Nabeta Foundation. Because the scourge of infectious diseases makes it difficult for African nations to prioritize T₁D, the Sonia Nabeta Foundation will work with governments and other partners to alleviate the hefty cost of treatment and provide holistic mind, body and spirit health care for low-income children in Africa with T1D-or, as we affectionately call them, T1D Warriors.

In this inaugural year, our focus has primarily been on advocacy, raising awareness and shining a spotlight on this issue, starting in Uganda. To mark the one-year anniversary of our honoree's welcome into the next life, the foundation hosted a four-day camp for T1D Warriors, as well as health-careworker training. Camp Tuyinza (which translates

SONIA NABETA **FOUNDATION**

The foundation takes a fourpronged approach to combating Type 1 diabetes in Africa:

- 1 Providing essential tests and supplies
- 2 Hostina wellness camps
- 3 Sponsoring awareness campaigns and health-careworker training
- 4 Advocating for T1D protocols at all general hospitals



For more information and a guide to getting involved, go to Sonianabetafoundation.org

to Camp "We Can Do This") was opened by the queen of Buganda, Nnabagereka Sylvia Nagginda, and brought together 54 children from Uganda and Ghana for education, play and activities. (The talent show and a zoo trip were big hits.) The healthcare-worker training, led by a volunteer team of doctors and medical experts from the University of Minnesota, educated 20 health workers and gave them an opportunity to use their newfound skills with the Camp Tuvinza kids.

As our nascent organization slowly begins to gain its footing, year two will continue advocacy and awareness, as we work with the Ugandan Ministries of Health and Education and other partners and stakeholders to communicate the scope and depth of this issue. In time, together, we

will find solutions to improve diagnosis and deliver affordable resources to the underserved and overwhelmed families struggling with T1D.

While securing sustainable financing for littleknown nonprofits is incredibly difficult, we're hopeful that the need will speak for itself and our mission will resonate with a wider community. African children with T1D should and can have hope. So until my sister does her impeccable Sheldon Cooper impersonation and pipes out a Bazinga! from on high, we'll carry on, in memoriam, through the Sonia Nabeta Foundation.

Vivian Nabeta is president of the board of directors of the New York-based Sonia Nabeta Foundation.

Joyful learning A group of T1D Warriors play a circle game before an educational lesson at Camp Tuyinza.



KRISTIAN PARTINGTON

This Unmessable Life

Finding my Zen—on and off the mat—through yoga

N A COLD TUESDAY night in December, I rode the 40 bus to Anjali Power Yoga on South Street in Philadelphia, where I had applied to take my yoga teacher training. I circled the block to kill the 15 nervous minutes I was early, and when I finally met with the studio owner, I learned I'd been accepted to the program. It was then that the weight of the physically and emotionally demanding 200-hour teacher training program really hit me. The kicker? I'd complete it during my junior year at Wharton.

I had no idea what I was getting into that night. I'd started practicing yoga a year and a half earlier, in an effort to become more flexible. I struggled physically at the beginning, but eventually yoga became a regular part of my weekly routine. Slowly, it permeated my life: I started to practice every day, read about yogic philosophy, and wore athletic clothes to class so I could go straight to the studio afterward. I even got into the habit of breaking out in yoga poses as a study break. Given my developing love for yoga, teacher training seemed like the natural next step.

I'll spare the sweaty details; I found training exciting, rewarding and exhausting. I was prepared for the travel to and from the training site in New Jersey, the long weekends of back-to-back classes, and the pit in my stomach before I taught on my own for the first time. What I never expected was that my deepened yoga practice would make that semester at Wharton my most rewarding and enjoyable yet.

On the first night of training, we took a 90-minute Power Yoga class. As the teacher asked us to hold a plank for what seemed like an eternity, she implored us to be "unmessable," or unfazed by any external circumstance. She suggested that we can think and behave the same way when facing a challenge as we do on the best days of our lives. In that moment, something clicked. I realized that what I experienced while practicing yoga could translate to the rest of my life. I decided to bring an unmessable attitude to my time at Wharton.



It was just about then that I failed an exam for the first time in my life. My immediate reaction was deep disappointment in myself. One evening I confided in my classmate and friend, also a yoga instructor, and she gave me advice that has stuck with me ever since: If I could stop worrying about the grade itself and instead put that energy into

My yoga teacher implored us to be unfazed by external circumstances. In that moment, something clicked.



learning the content, I would be more productive and happier.

Her wisdom confirmed that I can choose to be unmessable every day. When I get assigned a last-minute project, when I spend 30 minutes waiting for the bus instead of studying, when my calendar has no white space left—I try not to let any of it rattle me.

My spring semester was chaotic in the truest sense of the word. I spent my days in class and at work, juggled club meetings and countless hours at the yoga studio in the evenings, and went for training on weekends. I saw less of my friends and more of the studio's clients. Reading my stochastic processes textbook on the bus became my regular weeknight routine. But despite the busyness of my external life, I was as inwardly happy as I've ever been. All areas of my life came to balance in a new equilibrium. I found my rhythm with a steady undercurrent of yoga.

Now I apply yoga in countless ways. I learn to overcome fear through working on my handstand, and I find that same calm before important presentations. I apply the discipline from working on difficult postures to being efficient in my studying. Most importantly, I continue to learn from yoga as I come back to my mat each day.

As I look into the vast unknown of my post-graduation life, I feel a sense of comfort and excitement. Although I don't know where I'll live or work, I do know that as long as I have my yoga practice, I'll be just fine. In fact, I'll be happy.

Makena Finger is a senior from Souderton, PA, concentrating in statistics at Wharton with a minor in math in the College. Aside from teaching yoga on- and off-campus, Makena is co-president of Wharton Ambassadors and a tour guide with the Kite and Key Society.

Illustration by Martina Paukova FALL 2016 WHARTON MAGAZINE 63



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Change Agents

A cohort of doctoral students is helping women in business academia find greater success.

LACK OF MENTORSHIP, weak professional and social networks—these are just a few of the unique challenges facing women building research careers in business-related fields. To confront those obstacles and work to overcome them, our group of Wharton doctoral students founded the Wharton Society for the Advancement of Women in Business Academia (WSAWBA) in 2013.

One of the highlights of WSAWBA's first year was a star-studded panel of female Wharton faculty members who discussed their personal experiences and offered advice on navigating the academic job market. Professors Katy Milkman, Ann Harrison, Ashley Swanson, Jessie Handbury and Natalya Vinokurova balanced levity with candidness, earning raves from a crowd of more than 70 students.

Last year, WSAWBA opened this conversation to a wider audience of faculty and students across business schools, establishing the first Women in Business Academia Conference here on campus. The event featured a wide array of keynote speakers from the Cornell School of Industrial and Labor Relations, Harvard Business School, Wharton and Yale School of Management, as well as PhD student research presentations and a job-market panel. This past April, the second annual conference was even larger, with representation from 11 business schools and seminars throughout the day on topics that ranged from successfully navigating the academic job market to seeking mentors in academia to managing work/life boundaries to understanding the day-to-day life of a young professor.

Through these successful first few years, the Women in Business Academia Conference has cemented its place as an important opportunity for female faculty and doctoral students to engage in a dialogue over their identities. We look forward to fostering this conversation and providing a network for female academics for our next conference in the spring of 2017 and for many years to come. -Lesley Meng

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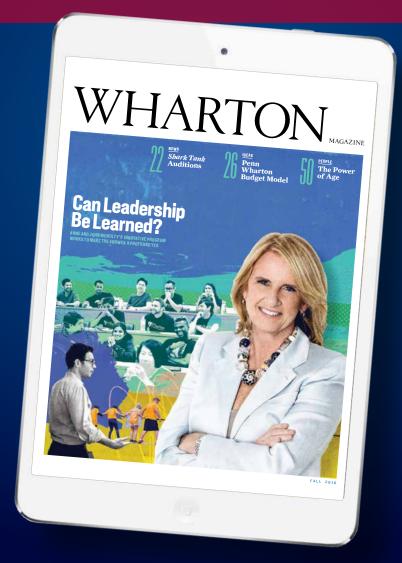
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