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STRATEGY BEYOND MARKETS: BUILDING COMPETITIVE ADVANTAGE THROUGH GOVERNMENT RELATIONS AND PUBLIC AFFAIRS

August 20 – 25, 2017


STANFORD BUSINESS

Executive Education

Change lives. Change organizations. Change the world.
A typical student entering our MBA program today is four or five years out of college. When they graduate, they can look forward to careers that span a half a century. Today, around a third of college-educated men in the United States between the ages of 70 and 74 are working. The number is about 20% for women, but more women are working longer than in the past and the gender gap in career length is narrowing. As human lifespans continue to increase, it is easy to imagine professional careers that last 60 years or more.

Many of the industries our students choose will also undergo dramatic transformations. Forty years ago, there was no internet, no smartphones; manufacturing represented more than 25% of world GDP compared with around 15% today, and the total dollar value of U.S. trade with China was under $500 million. What will technology look like in 40 more years? Financial services?

The patterns of trade and globalization?

Stanford GSB students also are likely to pursue multiple careers, something many of our alumni have already experienced. Beth Cobert, MBA ’84, spent almost 30 years at McKinsey & Company before going into government service. She recently stepped down as acting director of the U.S. Office of Personnel Management. Dave Power, who earned his MBA in 1980, worked in finance and in technology. After his son was born blind, he was inspired to become president and CEO of the Perkins School for the Blind in Massachusetts. (See page 20.)

As more men and women work into their 70s and beyond, it is imperative that we prepare students to work and live longer — to be ready for periods of disruption and transformation, and to have the skills to shift careers as they age, should they so desire.

What are the implications for management education? First, there is the need to focus on skills and knowledge that are not too specific to time and place: the ability to think critically and conceptually, to make compelling arguments, as well as personal leadership, team-building, and communication skills. Of course, students have to balance this “long-term” skill acquisition with immediate concerns, such as landing a job or launching a company.

Indeed at a time when careers are growing longer, students may paradoxically feel greater pressure to get off to a fast start. This force can be seen in the increasingly competitive college and MBA admissions process. At the GSB, students talk about a pervasive “fear of missing out” when they hear about what their peers are doing. Why is this? There is of course the natural regret of missing a social or learning opportunity, but arguably it runs deeper, to a feeling that others are getting ahead — having richer experiences, building a stronger network.

It is crucial that we as educators acknowledge the importance of strong career starts, but nonetheless try to keep the focus on developing skills that will last a lifetime.

A second implication is the potentially rising demand for continuing or ongoing education. A Stanford d.school project a few years ago envisioned a future “open loop” university, where students would receive six years of education, but spread over their lifetimes. While this model would be a radical departure from the current practice in higher education, it captures the concept that with longer lifespans, people will naturally look toward universities to help them refresh their knowledge and skills.

At Stanford GSB, we have invested considerably in recent years in providing such lifelong learning opportunities. We’ve more than doubled the size of our executive education program and our one-year MSx program. Our Career Management Center offers virtual and in-person career coaching opportunities to alumni, including one-on-one sessions at spring reunions. In May 2015, we launched our LEAD program, a yearlong online certificate program for managers. We also offer individual online classes, and we experimented recently with our first course specifically for Stanford GSB alumni. Online classes are a particularly promising way to offer continuing education because they can be interwoven with people’s regular jobs and lives.

We have always thought of the GSB as a place for our students to begin meaningful and fulfilling careers, and to learn to be adaptable and creative in the face of change. As the careers of our alumni lengthen, we continue to evolve too. We are committed to offering them more new beginnings at every stage of their careers.

Jonathan Levin is the dean of Stanford GSB and the Philip H. Knight Professor.
"When firms innovate, they are expanding the pie, and we see increased aggregate growth."
—Amit Seru
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A LETTER FROM THE DEAN

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Cover illustration by Josh Cochran

DELAY’S DOWNSIDE The longer asylum seekers are kept waiting, the harder it is for them to assimilate. PAGE 60
Does your first job matter, and does it inform you as your career progresses? The answer to both questions is a resounding yes, according to the readers who responded to our informal survey about first jobs. A total of 96% of the dozens of alumni, current Stanford GSB students, and other readers who filled out the survey said their first job — whether it lasted a day or a lifetime — provided skills that they would use later in their work lives.

Before becoming a CEO in the corporate world, Philip C. Kantz was a ship’s officer in the U.S. Merchant Marine. “Managing a ship’s bridge for eight hours a day helps to develop and refine leadership command skills, which leads to team management and project management skills,” says Kantz, who attended a Stanford GSB executive education program in 1989.

For Nuh Sedat Kurtaran, who attended a 2016 GSB executive education program, working for a summer at a bar in 1987 in Antalya, Turkey, in a small hotel by the Mediterranean Sea exposed him to foreign people and cultures for the first time, helping him as he later founded various companies. Sometimes, working your first job is a way to find out what work you do not like, writes Arturo Cazares, who as a child moved to the U.S. from Mexico with his parents. He worked picking crops in California before he turned 16. “I developed a strong work ethic and I learned discipline,” he says. “The menial work also motivated me to get more education. Stanford transformed my life trajectory.” Cazares earned his undergraduate degree from Stanford in 1984 and his MBA in 1989. He has served as vice president of several Silicon Valley tech companies and is currently chief operating officer of ChipherCloud.

Even getting fired can provide long-term lessons, adds Harold Eastman, who lasted just one day hoeing weeds at a nursery in Renton, Washington, before he went on to run multimillion-dollar companies. “I learned not to be discouraged by failure and to keep trying,” says Eastman, who earned his MBA in 1962. His father immediately drove him back to the nursery to find out why he’d been fired. At age 13, he was too small to keep up, the boss told him. “This was very comforting and helped me understand it was not just because I was a bad worker.” His father saved the $5 his son earned that day and gave it to him at his high school graduation. Eastman, a professional photographer who lives in Boise, Idaho, still has that $5 bill.

Another alum who was
fired from a job putting prices on cans in a supermarket in North Carolina notes, “Just because you’re smart doesn’t mean you can do a simple job.” The survey also illustrated why networks matter. Almost half of the respondents — 45% — learned of the job through a friend, relative, teacher, or mentor, with only 15% answering a want ad. A total of 61% stayed in the job longer than a year, while 26% stayed one summer or several months. Many respondents started their careers in the military service. How did the jobs end? A total of 26% quit, 11% were fired, and another 10% were promoted. While most of the survey respondents went on to jobs unrelated to their first position, at least one is still at his first company — 70 years later. Thank you to everyone who participated. Later in this issue, we share more first job stories from our readers.

— Deborah Petersen, Editorial Director
ENGAGE

HERE’S A SELECTION OF PROFILES CHOSEN FROM AMONG THE MANY READERS WHO RESPONDED TO OUR SURVEY ASKING THEM ABOUT THEIR FIRST JOBS.
EDITED BY DEBORAH PETERSEN

John W. Boyd, Sloan 1966
- **First job:** Aeronautical engineer, Ames Aeronautical Laboratory. “I was promoted from the 1x3-foot wind tunnel to the 6-foot tunnel after 18 months.”
- **Lessons learned:** “The single most important lesson I learned is that you have to depend on other people to be successful.”
- **Now:** “I am still there,” says Boyd, now 70 years later. He is a legend at the lab near Mountain View, California, which became NASA Ames Research Center. He made an early career of conducting research in NASA’s wind tunnels. Boyd now serves as the special assistant to the director. He has published more than 20 professional research papers, and his studies involving aerodynamics were instrumental in the development of supersonic aircraft, including the F-102 and B-58. He also helped pioneer the design of space probes.

Jim Griffith, MBA 1984
- **First job:** Driving an underground train at depths of 2,000 to 7,500 feet to supply silver miners at the Hecla Mining Co. near Wallace, Idaho, in the early 1970s.
- **Lessons learned:** “Everyone I work with can teach me something if I am willing to listen. The workers in a company really do know what is going on and desire to do a good job.”
- **Now:** “My motivation in going to the GSB was to move out of smokestack industries and shift into what I perceived as the growing and more stable tech field,” Griffith says. However, in the end, he decided he was more comfortable in a blue-collar environment. After graduating, he moved to Canton, Ohio, and joined the Timken Co., a manufacturer of bearings and specialty steel, beginning on the shop floor. He went on to become president and CEO, leading a transformation that put the company in the Fortune 500. He retired from there in 2014 and lives in Nashville, Tennessee, where he continues to work with several other companies.

Yan Gao, MSx 2017
- **First job:** Event marketing assistant at a Hilton hotel.
- **Lessons learned:** How to build relationships and create marketing materials.
- **Now:** Gao went on to work at Lancôme headquarters in Paris, and then she moved back to China and joined L’Oréal China as a brand general manager. She led sales teams in more than 10 Asian countries for multiple L’Oréal brands, including Giorgio Armani,
Ralph Lauren, and Shu Uemura. She is currently an MSx student at Stanford GSB.

**Denis Lowry, Sloan 1977**
- **First job:** Lifeguard at the Boiling Springs Country Club in Lexington, Kentucky.
- **Lessons learned:** Job descriptions can be woefully inadequate (he also had to drain the pool weekly and scrub it down). “Do your best even if you could get by with less. Find fun in the job.”
- **Now:** Lowry worked at IBM for three decades and then became a certified financial planner. He is retired and lives in Florida.

**Andrew Rich, MBA 1985**
- **First job:** Unit manager, NBC Studios, Burbank, California. “My job was to budget and then administer the production expenses for entertainment shows taped on the NBC lot such as Days of Our Lives and various game shows.”
- **Lessons learned:** “TV production is a heavily unionized environment, which was an eye-opener for a fresh Stanford grad. I learned that not everyone is driven to be efficient and that it takes extraordinary people skills to be effective in such an environment.”
- **Now:** Rich later worked for CBS in the music sector. “Music merchandising led to a more broad entertainment licensing position at Sony, which led finally to overseeing global merchandising for the World Cup in France in 1998, which led to a group of us leaving Sony to start our own brand merchandising service company, ProMost.” He lives in San Francisco.

**Danica Jacinto, MBA 2017**
- **First job:** Investment banking analyst at Credit Suisse in Philippines and Singapore.
- **Lessons learned:** “I developed skills in financial modeling, negotiations, and project management. I was also fortunate enough to have invested mentors who helped me advance my career.”
- **Now:** Jacinto is an MBA student at Stanford GSB.
“Hire the very best people you can hire. Have them hire the best people they can hire. That’s Management 101.”

Golden State Warriors owner Joe Lacob.

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Do Boards Pick the Best CEOs?
Research follows succession winners and losers to see who fared better.
Read more: http://stanford.io/BoardPicks

What Matters Most to Leaders
We asked Meg Whitman, Mitt Romney, and others to divulge their life’s priorities.

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Myth Buster: Opposites Don’t Attract
Our “digital footprints” show we are drawn to similar personalities.
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“You want to distinguish yourself from the pack without making anyone in the pack uncomfortable.”
—Amir Goldberg PAGE 14
MOTIVATION

How Can You Stay Ahead in the Race?

A study shows why being in the front of the pack does not always end in a win.

BY LOUISE LEE
Picture yourself in a competition — a triathlon, say, or a contest to sell the most widgets. Early on, you’re in the lead and feeling confident, which seems to make you try even harder. You hold your frontrunner status into the late stages, but then your motivation flags, you begin to underperform, and you run the risk of losing.

That’s a common mental sequence for competitors of all sorts, according to new research by Szu-chi Huang, an assistant professor of marketing at Stanford Graduate School of Business, and her collaborators Jordan Etkin of Duke University and Liyin Jin of Fudan University. The work, forthcoming in the *Journal of Personality and Social Psychology*, shows that in the early phase of competition, being in the lead boosts motivation by convincing the participant that winning is possible, while leading later in the contest actually decreases motivation by reducing the perceived amount of additional effort required to achieve victory.

Szu-chi Huang is an assistant professor of marketing at Stanford GSB.
“Sometimes being ahead boosts our motivation and performance and sometimes it actually hurts,” says Huang. However, late-phase leaders can sustain their motivation if they focus not on their position as leaders but on some other high standard, such as their own strong performance in prior contests. That additional point of comparison often induces more effort.

The research is relevant to organizations that use competition as a way to motivate employees to work toward a goal, such as selling more products, reducing internal waste, or raising money for charity. Knowing when participants might become demotivated and how to reinvigorate them at that stage can help maximize their participation and output.

Early in a competition, Huang says, the novelty of the event and uncertainty about your opponents’ and your own abilities make you wonder if winning is even possible. So if you jump ahead early, it gives you a sense that winning is attainable and feeds motivation. But once participants stop fretting about attainability, they begin to calculate how much additional effort is needed to win.

“People who are leading underestimate the effort they need to invest, hence they relax prematurely,” Huang says.

In one of several studies, 136 participants each competed against one other opponent for a cash prize in a five-round competition. In each round, participants were asked to memorize lists of five colors and recall if they appeared in a subsequent list of colors. To measure whether winning appeared attainable and how much effort winning would require, participants in both early and late stages of the contest answered the questions “how difficult will it be for you to win?” on a 1 to 10 scale and “how many more points do you think you need to earn in order to win?” in an open-ended text box.

The researchers measured motivation by tracking how much time participants spent memorizing the lists of colors. They found that in the early phase of the competition, participants who led their opponents and felt they could win spent more time memorizing colors. Later in the competition, those who believed they were ahead spent less time memorizing because they’d determined that winning would require less effort.

In an attempt to find ways to counteract such drops in late-stage motivation, the researchers performed a separate study in which they invited more than 2,500 students from two campuses of a public university to participate in a book-donation drive for the school library. Students at each location were told they were competing against the other campus. The one that donated the most used books would receive $500 to purchase new books.

To measure motivation during the six-day competition, the researchers tracked how many of the 2,500 students signed up to contribute and how many books they actually donated. On the fourth day of the contest, all of the students learned whether their campus was leading or trailing the other. Some students on the leading (and trailing) campus also received an extra notice informing them that “signups at our campus are still 10% lower than our best year.” The rest of the students didn’t receive the extra notice.

Motivation among the students at the leading campus who didn’t receive the late notice fell; their participation rate declined to 3.9% and they gave an average of 1.52 books per person. But those who did receive the notice contributed on average 2.8 books per person and had a participation rate of 8%.

“By focusing on another standard that’s higher than where you are, you’re able to sustain motivation,” says Huang.
If you’re a senior executive with a passion to support leaders and help them scale their businesses, Stanford Seed is for you. We’re looking for experienced business professionals to join the Seed Coach Program and help end the cycle of poverty.

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Is it better to fit in or stand out? The question has vexed all of us at one time or another, from teenagers to aspiring executives to sociologists. The answer, says Stanford Graduate School of Business professor Amir Goldberg: It depends.

If you’re the kind of person who stands out culturally — you wear sweater vests and bowties to the office — then to succeed you will need to fit into your organization structurally, by being part of a tight-knit group of colleagues. And if you stand out structurally — you aren’t a member of any one clique at work, but have friends across departments — then you better fit in culturally (so ditch the bowties).

Goldberg and his coauthor Sameer Srivastava at the University of California, Berkeley, explain the reasoning behind that answer in their new paper, “Fitting In or Standing Out? The Tradeoffs of Structural and Cultural Embeddedness,” published last fall in the American Sociological Review. The paper, written in collaboration with Christopher Potts, an associate professor of linguistics at Stanford, and graduate researchers Govind Manian and Will Monroe, explores the relationship between fitting in, standing out, and success within an organization.

Amir Goldberg is an associate professor of organizational behavior at Stanford GSB.
correlate professional success with fitting in and standing out. “Involuntary exits are a sharp sign of negative attainment, because employees are at greatest risk of experiencing that when their performance is weak,” Goldberg says.

The researchers concluded that employees in the firm can be characterized by their levels of cultural and structural “embeddedness,” after measuring their general cultural assimilation as well as the strength of their attachment to various network cliques. This led the researchers to identify four organizational archetypes: “doubly embedded actors,” “disembedded actors,” “assimilated brokers” and “integrated nonconformists.” Those most likely to get ahead are what they call “assimilated brokers,” meaning people who are high on cultural fit and low on network cliquishness, and their mirror images, the “integrated nonconformists,” meaning people who are part of a tight-knit group but still stand out culturally. “The assimilated broker is the ultimate networker, the person with friends in marketing, customer service, engineering,” Goldberg says. “She is well-connected across the firm but not really a part of any one group.” Yet she blends in culturally, speaking and dressing the same as everyone else. The integrated nonconformist, on the other hand, has the security and mutual commitment that comes from being part of a clique but has not fully assimilated into the corporate culture. “He doesn’t repeat the same old Star Wars references, but does inject the occasional hip-hop reference into conversation. He wears an ironic, vintage

The modern corporate world generally celebrates those who stand out from the pack, rewarding them with promotions and salary increases. “No one wants to be perceived as average or replaceable, especially in tech companies that value innovation, diversity, and creativity,” says Goldberg. Yet fitting into a company is also important. It creates a larger, motivating sense of identity for employees and enables them to be productive members of the organization, which by definition depends on cooperation. The result is a conflicting pressure on workers to fit into an organization and, at the same time, stand out. Goldberg and his colleagues wanted to learn more about that tension and find ways to resolve it.

They took a novel approach, examining the language used in corporate emails. The researchers were given access to a mid-sized technology company’s complete archive of email messages exchanged among 601 full-time employees between 2009 and 2014. As a way to protect privacy and confidentiality, only emails exchanged among employees were analyzed. Those sent to or received from people outside the company were excluded, as were messages exchanged among the seven members of the executive team and with the firm’s attorneys. The raw data was stored on secure research servers installed at the company. Goldberg, Srivastava, Monroe, and Potts created an algorithm that could analyze the natural language in emails; the most difficult part of the analysis was figuring out what categories to use to organize language and filter out what wasn’t meaningful.

“We wanted to look at language that reflected cultural style and the level of cultural alignment, not language that referred only to a job’s function or the industry,” says Goldberg. Using an established language-analysis program, the researchers looked for specific words such as “I” or “we,” as well as “should” or “would.” They also looked for expletives. In some companies, says Goldberg, swearing is a way to assert authority. “In that culture, imagine if a new person comes in and uses very polite language,” he says. “That would reflect a low level of cultural assimilation in a company where cursing is acceptable.”

They closely examined the structure and pattern of email interactions to learn more about small, tight-knit cliques within the organization. Previous research has shown that bridging the gaps between these cliques benefits employees because of the information that flows to them from different groups. “They are able to connect networks that are usually disconnected, so they serve an important role,” says Goldberg. “They have their tentacles stretched into different worlds and stand out because of that.”

To learn how this relates to an employee’s success, Goldberg, Srivastava, and their collaborators relied on human resource data supplied by the company. In addition to employee age, gender, and tenure, it identified all employees who had left the company and whether their departure was voluntary or involuntary. That data enabled the researchers to correlate professional success with fitting in and standing out. “Involuntary exits are a sharp sign of negative attainment, because employees are at greatest risk of experiencing that when their performance is weak,” Goldberg says.

The researchers concluded that employees in the firm can be characterized by their levels of cultural and structural “embeddedness,” after measuring their general cultural assimilation as well as the strength of their attachment to various network cliques. This led the researchers to identify four organizational archetypes: “doubly embedded actors,” “disembedded actors,” “assimilated brokers” and “integrated nonconformists.” Those most likely to get ahead are what they call “assimilated brokers,” meaning people who are high on cultural fit and low on network cliquishness, and their mirror images, the “integrated nonconformists,” meaning people who are part of a tight-knit group but still stand out culturally. “The assimilated broker is the ultimate networker, the person with friends in marketing, customer service, engineering,” Goldberg says. “She is well-connected across the firm but not really a part of any one group.” Yet she blends in culturally, speaking and dressing the same as everyone else. The integrated nonconformist, on the other hand, has the security and mutual commitment that comes from being part of a clique but has not fully assimilated into the corporate culture. “He doesn’t repeat the same old Star Wars references, but does inject the occasional hip-hop reference into conversation. He wears an ironic, vintage
actor, and being a bad networker is far worse than not trying to network at all.”

Comparing their email analysis with the company’s personnel records, the researchers found that workers identified as doubly embedded actors were over three times more likely to be involuntarily terminated (i.e., fired) than those identified as integrated nonconformists.

Clearly, both fitting in and standing out are important for career success, but the lesson, says Goldberg, is that if you blend in structurally and culturally — especially in tech firms, which put a premium on creativity and innovation — you will be seen as bland and unremarkable.

At the same time, if you dress and speak differently than your peers but you also aren’t part of any one group, you will wind up being perceived as odd and threatening.

The goal is to find a balance between the two. “Either maintain your place as part of a tight-knit group but stand out by behaving a little weirdly, or be the smooth networker who knows what’s going on across the organization but also knows how to blend in culturally,” says Goldberg. “You want to distinguish yourself from the pack without making anyone in the pack uncomfortable.”

“Think of a cocktail party where this guy tries to network with you but the conversation is really painful. That’s the disembedded actor.”
Does your head spin when choosing between 10 kinds of Frappuccino at Starbucks? How about selecting milk at the supermarket — regular, 2%, skim, soy, almond, lactose-free?

For well over a decade, researchers in consumer behavior have debated whether the ever-expanding array of goods creates “choice overload” that can actually discourage people from buying. Barry Schwartz, a psychologist, wrote a famous 2004 book on what he called the “paradox of choice.”

But many other scholars — not to mention marketing executives — have been doubtful. Customers may groan at the bewildering choices they face when ordering something as simple as coffee, but they still seem to want them. And companies keep offering them.

In fact, a 2010 survey of more than 50 separate experiments on choice overload found that the results of bigger selections were essentially a wash. Big assortments discouraged consumers in some studies but encouraged them in others. On average across the studies, the impact of a big selection was about zero.

Now, a new study by Stanford GSB marketing professor Itamar Simonson may help untangle the riddle. It finds that people do in fact like bigger selections — but a lot depends on where they are in the decision-making timeline.

If a person begins the process by weighing whether to buy at all, a large selection is likely to be attractive and make him or her more likely to decide in favor of buying. If, however, a person begins by picking a favorite from an assortment of options, and only then deciding whether to buy, a large selection makes the task harder and lowers the likelihood of buying.

The new study, which entailed experiments in how people reacted to selections of jelly beans and chocolates, was carried out by Simonson, who is the Sebastian S. Kresge Professor of Marketing at Stanford GSB, and Leilei Gao, who received a PhD from Stanford GSB and is now an associate professor at the Chinese University of Hong Kong.

Simonson and Gao divided consumers’ deliberations into two separate decisions. The first decision was whether to buy, and the second was which particular product to choose.

The pivotal factor was which decision came first.

“Every decision is really two decisions,” Simonson says. “If your first decision is about whether you want to buy, then having more options is conducive to buying. But if your first decision is on which specific product to select, then having a big assortment can make it more difficult to identify the best option.”

In the first experiment, the researchers showed 149 study participants either...
Itamar Simonson is the Sebastian S. Kresge Professor of Marketing at Stanford GSB.

Every decision is really two decisions. In general, Simonson says, the study shows that people prefer more choices over fewer choices. In short, don’t expect your local coffee shop to stop conjuring up new varieties of hot and cold drinks anytime soon.

Participants in the “select first” group were asked to first choose their favorite flavor and then to choose between jelly beans and cash. Those in the “buy first” group had the reverse order of decisions.

The result: Participants who decided first on whether to buy were far more likely (49% versus 26%) to take jelly beans over cash after they were shown the big selection of flavors. By contrast, people who had to decide first about their favorite flavor were slightly less likely to buy when confronted by a bigger selection.

The researchers obtained similar results from an experiment involving chocolate. In that experiment, 195 college students were asked to browse chocolate assortments—one with 6 choices or one with 54 choices. People in the buy-first group were twice as likely to buy the chocolates if they were shown the big assortment rather than the small one. By contrast, people who first had to pick their favorite chocolate didn’t seem to be affected by whether they had seen the large or small assortment.

In general, Simonson says, the study shows that people prefer more choices over fewer choices.

In short, don’t expect your local coffee shop to stop conjuring up new varieties of hot and cold drinks anytime soon.
A Blind Son Inspires His Father to Switch Careers

The CEO of the country’s oldest school for the visually impaired brings an entrepreneurial mindset to teaching.

BY ERIKA BROWN EKIEL

Like most new fathers, when Dave Power welcomed his first child, David, into the world, it was one of the happiest days of his life. It was also one of the most stressful. “His eyes never fully developed,” says Power. “It was apparent from the beginning that he was blind.” This was 1988, long before smartphones. Power rushed to a pay phone and tore through the Yellow Pages in search of information. He found Perkins School for the Blind in Watertown, Massachusetts, the oldest school for visually impaired people in the United States. Helen Keller was taught there.

Today, Power is president and CEO of the 187-year-old school, a role that he took on in 2014. Power spent nearly a decade as a venture capitalist with Fidelity Ventures and Charles River Ventures, evaluating high-tech startups. Prior to that, he held several executive roles in enterprise technology companies, including Sun Microsystems and RSA Security, and co-founded a consultancy that advised technology companies. He was a trustee at Perkins for nine years. When the board began a CEO search, Power raised his hand.

According to the National Federation for the Blind, 7.3 million Americans 18 and older are visually impaired. Power would love to see all of them live rich, independent lives, and he believes innovation is a big part of the solution. Power earned an MBA from Stanford GSB, where he was an Arjay Miller Scholar, in 1980.

You had an impressive career in technology before moving over to education. What does your role at Perkins have in common with your previous leadership roles?

The strategic questions are the same: Whom do we serve? Why are we doing this? What is sustainable? You need to make sure the organization is growing and servicing its constituents well. It has to be financially sound.

What lessons from your previous career are you applying? Innovation is the process of uncovering unsolved problems that are worth solving. I teach design thinking at Harvard. The first thing I did when I came to Perkins was ask the leaders of our five operating groups to identify their customers, how their needs are changing, and how we can be more relevant.

In the U.S., hiring managers talk a lot about diversity but not about disability. We are partnering with Uber, Harvard, Dunkin’ Donuts, State Street Corporation, and more than 35 other companies to help them hire more people who are blind. We created an online course to teach companies how to hire people with visual impairments.

What current technology has the greatest potential to change the lives of the visually impaired? Autonomous vehicles. A car company is testing its first autonomous car here on our campus. Transportation is a barrier to employment for people who are blind.

What was the hardest disconnect for you as you transitioned from leading a business to leading a school? Teachers aren’t as philosophically tied to the notion of incentive compensation as, say, MBAs are. Also, we are below capacity at the school. Financially that is not ideal. When I got here and said we needed to do enrollment marketing, people were like, “Oh, this is the business guy.”

In addition to blindness, you mention other special needs. What’s the typical profile of a Perkins student? The students are legally blind, ranging from low vision to blindness. Many blind children also have cerebral palsy or hearing loss. Half of all visually impaired students have a second impairment.

How did you learn to care for and teach your son, David? Did he attend Perkins? It took five or six years for us to figure out what he was capable of doing. I was unable to think more than one year ahead. We attended an outreach program at Perkins. You see that you are not the first family who has gone through this. You find hope.

What are your biggest challenges right now at the school? Spreading the word about the work we’re doing — which allows us to raise more money and grow our impact. A lot of people don’t know the extent of our international mission.

In the U.S., three of every four adults who are blind do not participate in the workforce, 60% of visually impaired students who enter college never finish, and only 10% of students who are blind learn braille — a critical skill for employment. We provide specialized knowledge around what these kids need to do to be successful as adults. Braille is only a piece of that — social skills are 10 times more important.
I have an information technology advisory group that meets once a quarter to talk about technology that can help blind and disabled people. We talk about robotics, autonomous vehicles, mobile apps, navigation, access to information.

Audio is a big part of information access for the blind. They can listen to audio recordings from newspapers and audio books at very high speed — faster than you would recognize — three to five times faster than normal speech. In reverse, there are technologies that convert from voice to braille and online text. An app called TapTapSee lets you point the phone at something and take a picture, and then the app tells you what that object is.

**What does the future look like for people who are blind?** Technology will close the gap so that people who are blind have fewer disadvantages. We will come up with even better ways to access information using mobile devices. The best technologies will be those that work for everybody and happen to benefit people who are blind.

**How has this new career affected you personally?** We have many people who are blind on our staff, and 200 students on campus. You begin to look through the disability. You become more aware of basic etiquette. It’s OK to say, “Nice to see you,” but you shouldn’t pet the guide dog. And if you want to guide someone who is blind, don’t grab their arms or hands, just offer your elbow. You offer to help without making someone feel helpless.

**What is the biggest misconception or misunderstanding about people who are blind?** Most people are shocked to learn how many people who are blind are not employed. Yet people who are blind can do everything you could imagine. They are software developers and chefs; they climb mountains. People who are blind don’t think of themselves as blind or impaired but as people who happen to have lost their sight.
While many students experience difficulty acclimating to college, first-generation, low-income, and minority students are the hardest hit and most at risk of dropping out. Research suggests that this achievement gap can be attributed, at least in part, to persistent doubts from members of underrepresented groups about whether they belong socially and intellectually.

In a series of experiments involving nearly 10,000 incoming college freshmen, a group of researchers that included Rob Urstein, managing director of Global Innovation Programs and lecturer in management at Stanford Graduate School of Business, found a powerful way to help students from disadvantaged backgrounds weather the transition to college life.

The experiment targeted negative stereotypes before students even arrived on campus. While completing summer online orientation materials, incoming freshmen read short narratives from upperclassmen detailing how they felt out of place at first but gained a sense of belonging over time. The incoming students were also exposed to the idea that intelligence, rather than being a fixed trait, is something that grows over time and can be developed with effort.

Robert Urstein is a lecturer in management at Stanford GSB and managing director of the school’s Global Innovation Programs.

Illustration by Harriet Lee-Merrion

**EDUCATION**

**Easy Interventions Help Students Navigate That Rocky Freshman Year**

Those from disadvantaged backgrounds do better when they learn they are not alone.

BY IAN CHIPMAN
Think about starting a new job. You’re trying to figure out the landscape. What happens if you stumble?

The effects of those simple online interventions were profound. The paper, recently published in *Proceedings of the National Academy of Sciences*, shows that students from socially and economically disadvantaged backgrounds receiving the interventions were much more likely to maintain full-time enrollment through the first year and have higher grade point averages. Overall, the researchers calculated that these gains closed the achievement gap by roughly a third — a remarkable finding considering how easily and inexpensively such interventions can be applied at scale.

Aside from the natural educational applications, the evidence from this study hints at some other tantalizing possibilities. Might similar preparatory interventions help people starting new jobs? Or smooth the transition from military to civilian life? We recently spoke with Urstein about some of those possibilities.

One of the more notable findings in this study is that such a short, easily administered intervention can have a long-term influence on students’ mindsets. What is it about these interventions that makes them so effective? It’s important to acknowledge that these interventions alone aren’t silver bullets. They have to be done in conjunction with other efforts to ensure that students can be successful. It would be great to be able to say, “Wow, one small intervention and everyone will do well,” but, of course, it’s really complex. Figuring out the best setting and timing to deliver these interventions is also really important.

But we’ve now done this with many students across several institutions. We’ve found it helps students understand that it’s normal to struggle at first in college — it’s hard — but for most people, those initial struggles are short-lived, and there are lots of resources to help you. It’s more like an inoculation than a vaccine. It’s not magic, but it’s going to potentially put you in a better frame of mind as you’re going through that transition.

So while these interventions are not cure-alls, they can change the way students perceive that transition from high school to college so that when they have those initial setbacks, they see them as normal bumps in the road rather than the start of a downward spiral or a confirmation that they don’t belong.

What potential do you see for applying these sorts of psychological interventions outside of academics? There are many junctures in life where people face major transitions, and this work could help better frame the experience of what it’s like to make the leap into a new environment.

Think about starting a new job. You’re trying to figure out the landscape. It was a really competitive search. You feel fortunate to have gotten the job, but then you’re really worried about whether you’re going to fit in. What happens if you stumble? We all make mistakes on the job, and most of us learn from them and do better the next time. But if you’re not approaching that as being normal, you may start to question whether you’re qualified for the job instead of seeing it as a normal part of how we learn and grow.

Or, imagine members of the service branches when they become veterans and transition to an industry job in the private sector. Things are going to be different — how can we better prepare veterans for those transitions?

I think that there are potentially a lot of implications for this work in other settings.

Have you been a part of any other efforts to put these ideas into practice in different settings? We kicked off a project about two years ago when I was associate vice provost for undergraduate education and dean of freshmen here at Stanford and responsible for monitoring the academic progress of all undergraduates. In a typical quarter, about 100 undergraduates go on academic probation for the first time. About one-third of those students successfully completed probation and we never heard from them again. But the other two-thirds basically spent the rest of their time at Stanford managing some kind of academic difficulty. I wondered how we could get better at understanding why some students succeed in getting off probation and at identifying the barriers for those who found it more difficult. What improvements could we make at that first institutional signal that they were not making satisfactory progress?

What did you discover? We interviewed hundreds of students who had been placed on academic probation. They reported feeling ashamed and embarrassed when they were notified. They didn’t know whom they could talk to and felt alone in this situation.
We then looked at the letter we used to inform students that they were on academic probation, which had probably been unchanged for many years. The letter had a very harsh tone — it used the term Academic Probation, with a capital A and capital P. It may have signaled to them that they were being put into a different class of students now. This is a status.

We changed the letter and tested it out with some of the students landing on academic probation for the first time. The new letter kept the same information about what it means and what students need to do to successfully complete probation. But rather than a status, we reframed it as a process. We wanted to normalize for students that this wasn’t an indictment of them as individuals, and that it’s not unusual for students to struggle and have academic performance problems. It has happened to many other students, and it’s possible to work through this process. We also included short narratives from former students saying, basically, “I struggled. I got on academic probation. It wasn’t easy for me, but these are some of the things I did, these are some of the resources I used to make progress, and it ended up being OK.”

Did you see any changes as a result of the new letter? We found that students who received the revised letter and the narratives reached out to advisors more quickly, which is one of the things that can help connect them to resources and support. They also reported significantly lower feelings of shame and embarrassment than students who received the old letter. So even though we had small numbers, we decided the evidence was clear — we’re going to start doing this. And while this probation project is in its infancy, and we are now expanding the study to other institutions, it offers a way to think about, “Are there other contexts and specific times where these kinds of interventions can be successful?”

What other future directions do you see this work taking? What I’m interested in, and what a lot of our students at Stanford GSB are interested in, is how can we combine these psychological interventions and insights with entrepreneurial instincts to make improvements to higher education or meaningful settings at a fairly low cost. Figuring out how to scale this stuff or implement it across different kinds of institutions — those are management challenges and that’s something we can contribute to.

Also, as a result of this work, some of the researchers and other colleagues formed the College Transition Collaborative, which is centered here at Stanford. The idea is to convene both researchers and administrators from partner institutions all around the country to disseminate the knowledge we’ve gained, but also to learn and refine these interventions as we scale. It’s an opportunity to take this research and figure out how to put it to applied use. I think we can have a really meaningful impact not only on student learners, but also on organizations and institutions through this work. A

Overall, the researchers calculated that the gains made through interventions closed the achievement gap by roughly a third.
As an expert in strategic philanthropy, Laura Arrillaga-Andreessen has helped to steer the charitable works of scores of millionaires and billionaires, including Facebook founder Mark Zuckerberg and his partner in giving, his wife Dr. Priscilla Chan; Salesforce cofounder Marc Benioff; Twitter cofounder Jack Dorsey; and Laurene Powell Jobs, who was married to the late Steve Jobs.

Arrillaga-Andreessen avoids telling people exactly where they should focus their charitable efforts; instead she teaches them how to figure that out for themselves, and then shows them how to give in the most effective manner possible — and not just by donating money. “My role,” she says, “is to empower people to make the best decisions they can.”

Arrillaga-Andreessen received an MBA in 1997 from Stanford Graduate School of Business, where she created and has taught a course on strategic philanthropy since 2000. She is also the author of the 2011 New York Times bestselling book Giving 2.0: Transform Your Giving and Our World.
Laura Arrillaga-Andreessen is a lecturer in business strategy at Stanford GSB. She received an MBA from the school in 1997.

"The best philanthropy happens when your individual beliefs, values, and passions are married to core public needs."

She recently shared her philanthropic advice with Stanford Business magazine.

Let’s imagine that I’ve just come into a large sum of money and want to give some of it away—say, $10,000. It’s December 15, and I need to write some checks before the year ends. I come to you and say, “Laura, what should I do?”

First, let me say that you don’t need to have a particular amount of money to be a serious philanthropist. A philanthropist is anyone who gives anything from their portfolio of resources, be it financial capital, intellectual capital, network capital—whatever form those resources take.

The best philanthropy happens when your individual beliefs, values, and passions are married to core public needs. It’s not about what you give; it’s about how you give.

Yet most of the people I know end up writing checks to the same organizations that they’ve always written checks to. Maybe it’s Habitat for Humanity or maybe it’s their local public radio station. Is that a mistake? It’s every philanthropist’s responsibility to make sure that the investment they make to an organization, whatever form that takes, is actually creating measurable impact.

Think of it as moving from transactional to transformational. Or, as I like to call it in my book, Giving 1.0 to Giving 2.0. It’s about evolving your giving from being reactive to proactive, sympathetic to strategic, and isolated to collaborative.

Going back to my example, would you say that’s lazy? It is not strategic nor is it likely designed for the highest possible impact. You should ask yourself instead, “What is the change I want to create with my gift, and how will I know that that change has been created?” Every decision that we make to invest in one nonprofit is a decision not to invest in countless others, and in philanthropy, accountability is self-imposed.

Compare it to the time we spend thinking about our personal financial portfolios. We invest enormous amounts of time and energy figuring out how to maximize our investment income, because profits are at stake. But with philanthropy, lives are at stake. We have a moral imperative to express our generosity in a way that matters more than just signing our name or clicking on “donate now.”

Forgive me for playing devil’s advocate, but—says who? Who says there’s a moral imperative? There is a moral imperative. We see it in the news every day—the discrimination and social injustices that pervade society. How can we not seize the opportunity to express our generosity in a way that can actually touch and transform lives, communities, our country, and beyond?

Hard to argue with that. So, imagine it’s December 15. There are hundreds of thousands of Americans sitting at their kitchen tables, presented with the scenario you just posed. The vast majority of them are making decisions based on limited exposure. It might be a brochure that came in the mail, or it might be an email they received, or it might be an organization that has touched them personally. They’re making decisions in isolation based on one perspective, one set of experiences, or one portfolio of knowledge.

Part of that is because philanthropists have historically not been good at sharing what they’ve learned. That’s one of the biggest failures of philanthropy—the incessant reinvention of the social-change wheel. That’s why part of what I teach is that as philanthropists we all need to share our knowledge. What did we learn from the success or the failure of a particular gift, and how can we share that in an expansive or viral fashion? That question is overlooked by the vast majority of social investors, and if we aren’t sharing that knowledge, philanthropy will never actualize its potential to change society.

You often distinguish between charity and philanthropy. Can you elaborate on that distinction? Charity, as I see it, provides immediate relief from suffering. Charity would be providing meals for homeless people at a transitional housing facility or medical support for victims of a natural disaster. It’s a social palliative, dealing with the repercussions of a larger problem.

What would be the philanthropic counterpart? Philanthropy is a proactive attempt to change systems and solve social problems by addressing their root causes. Philanthropy empowers individuals to become self-sufficient—it is a social...
So in my second year at the GSB, when all of my classmates were writing their business plans for internet companies, I was writing a business plan for a philanthropy-education organization. My goal was to create a community of like-minded individuals who wanted to become effective philanthropists by actually doing it. That plan became the Silicon Valley Social Venture Fund (SV2), which is now the second largest venture philanthropy partnership globally.

So from the beginning of your work in this field, someone’s net worth was not a central issue. Net worth has nothing to do with being a philanthropist. The only thing you need to have to be a philanthropist is generosity. And the only thing you need to have to be a strategic philanthropist is a willingness to marry your heart with your mind and to give a modicum of time in the service of other human beings.

In your book, you provide a lot of examples of philanthropists doing great work in the developing world, but overall your advice is fairly agnostic — you don’t show your political preferences. Which leads me to wonder, are you worried that someone might use your tools for causes that run counter to your own personal beliefs? You’re correct. I am agnostic when it comes to issues. So my answer to your question is, Godspeed. My role is not to impose my beliefs on people — it’s to empower them to actualize their philanthropic potential in the most meaningful way.

I’ve worked with donors who are fervently pro-choice and donors who are fervently pro-life. I’ve worked with donors who are fervently in favor of gun control and donors who are fervently in favor of an individual’s right to carry firearms. It’s not my place to make judgments on other people’s values. My role is to help them amplify their philanthropy so it can be as deeply impactful as possible.

Do you think philanthropy is going to change, or needs to change, with Donald Trump as president? Philanthropy will change with this administration, just as it changes with every administration. With every political shift, individuals are inherently activated to want to take social action that expresses their own beliefs, which often includes being philanthropic.

And that perhaps counterbalances the dominant political party. One of the realities of philanthropy is that there will always be opposing forces or ideas that run counter to your own. Pluralism is part of what makes it beautiful. We all have the ability to express our values through how we invest our resources.

Have you ever tried to steer someone away from making a donation that you considered frivolous or ineffective? My objective is to give people the intellectual resources they need to make meaningful, high-leverage giving decisions. So, if an individual wants to send money to an organization, and I happen to know of other organizations that are doing the same thing, I will encourage them to ask three basic questions. One, what specific change do you want to create and how will you measure if your generosity has translated into social good? Two, is this gift the best bang for your philanthropic buck? And three, what will you learn from the success or failure of this gift that you can share with others?

Was there a moment of epiphany for you when you realized that philanthropists weren’t adequately sharing information with each other about strategic giving? It hit me when I was in business school at Stanford. I knew I wanted to be a social-change leader, but I had no idea how to go about doing that. I believe there were three classes offered here at the time, but they focused only on nonprofits, not philanthropy. There were no university classes at Stanford that prepared students to be philanthropists — personally or professionally.

“I’m agnostic when it comes to issues. My role is not to impose my beliefs, but to empower people to actualize their philanthropic potential.”

So in the example I just provided, the social palliative is providing meals or temporary housing. But it’s just as important to provide job training and education so people can lift themselves up on a more permanent basis. The most strategic philanthropists recognize that we can’t ignore the immediate in service of the future — they practice both simultaneously.

Do you think philanthropy is going to change, or needs to change, with Donald Trump as president? Philanthropy will change with this administration, just as it changes with every administration. With every political shift, individuals are inherently activated to want to take social action that expresses their own beliefs, which often includes being philanthropic.
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A Better Way to Tackle Racial Discrimination

Understanding people’s perceptions can help improve race relations.

BY EDMUND L. ANDREWS

If the United States is a melting pot for racial and ethnic diversity, the pot seemed to boil over in last year’s presidential election. Whether racism is on the rise, there is no question that attitudes toward racial and ethnic prejudice are front and center in the U.S. political debate and activism movements.

Now, a new study offers a fresh way to analyze and perhaps defuse racial hostility. The key: Find out whether people believe that discrimination is mainly intentional or unintentional.

If people believe that discrimination reflects intentional racism, the study finds, they are more likely to favor a “colorblind” approach that urges people to “look beyond differences” and focus on common purposes. Such an approach is akin to dressing everyone in the same uniform and having them march to the same drumbeat as a means to promote unity.

Nir Halevy is an associate professor of organizational behavior at Stanford GSB.

Illustration by Keith Negley
On the other hand, if people believe that discrimination stems mainly from ignorance, they are more likely to favor a “multicultural” approach that highlights the distinct qualities and experiences of individuals of different cultures. This approach is akin to organizing a music festival where classical, jazz, and hip-hop musicians share their passions with the world.

“Many people have a strong belief that one size fits all when it comes to improving race relations in the U.S.,” says Nir Halevy, associate professor of organizational behavior at Stanford Graduate School of Business and a coauthor of the study with Evan Apfelbaum and Rebecca Grunberg of MIT and Sonia Kang of the University of Toronto.

“We know that racial interactions are often charged, stressful, and taxing,” says Halevy. “Understanding people’s perceptions — whether they view discrimination as intentional or unintentional — allows us to help people by recommending an approach that’s more likely to be effective for improving race relations.”

The researchers focused on measuring the “perceived intentionality of racial discrimination,” or PIRD for short. In a series of surveys and experiments with hundreds of participants, they found that people’s level of PIRD shapes how they react to racial interactions and transgressions. The study shows that people’s tendencies to view racial discrimination as intentional is fairly persistent over time, but not as immutable as a personality trait or an ideological worldview. Rather, perceptions of intentionality are malleable enough that they can change following personal experiences.

In one of the studies reported in the paper, people were asked about three hypothetical societies that had the same amount of discrimination but differed on how intentional it was. When discrimination was described as intentional, participants preferred colorblindness as a means of improving race relations. However, when discrimination was described as unintentional, preferences shifted in favor of multiculturalism.

In another study reported in the paper, the researchers asked more than 1,000 people about their comfort in talking about race in the wake of the police shooting of Michael Brown, an unarmed black teenager, in Ferguson, Missouri. For individuals who perceived racial discrimination to be intentional, colorblindness increased comfort with discussing race more than multiculturalism did. According to the authors, the preference for colorblindness over multiculturalism when racial discrimination is perceived to be intentional makes sense because making racial group membership salient when PIRD is high may equate to “pouring gasoline on the fire.”

In yet another study reported in the paper, participants were asked to imagine themselves as jurors in an employment discrimination case. The participants were told that the company had already been found guilty of discrimination and were asked to weigh how much money to award the plaintiff. When the participants were asked to weigh a list of factors that might be important in making their decision, such as whether the employee had a good work record or whether other forms of discrimination had taken place at the company, the most important factor by far was whether the discrimination had been intentional. Those who were told that the judge had found intentional discrimination wanted to award the plaintiff much more than those who were told it was unintentional: $294,000 versus $178,000.

When it comes to improving relations, the researchers stress the importance of taking into consideration whether people attribute racial discrimination to intentional malice or to ignorance.

“Rather than prescribing multiculturalism or colorblindness as the best approach indiscriminately, we should tailor the approach to people’s perceptions,” they write. “The more that leaders understand what people see as the root of the problem — malice or ignorance — the more likely they are to come up with effective solutions.”

“Many people have a belief that one size fits all when it comes to improving race relations.”
Organizations

“Hire slow, fire fast.
That one rule alone could save a lot of startups.”
—Lindred Leura Greer PAGE 46
In the world of entrepreneurial incubation, design thinking, a user-centered way to conceive and create a successful product, is often compared and contrasted with the lean startup approach, which is more engineering-based and quantitative. The two methods are far from mutually exclusive, however, as both seek to effectively serve customers’ needs through a systematic, low-risk path to innovating in the face of uncertainty.

To explore the places where design thinking and lean startup intersect, we organized a conversation between two faculty members who help run the Stanford Graduate School of Business Startup Garage, where students design and test new ventures. Stefanos Zenios, the Stanford GSB Investment Group of Santa Barbara Professor of Entrepreneurship, joined lecturer Matthew Glickman, founder of BabyCenter and Merced Systems, to discuss the science of startups.

Stefanos Zenios is the Investment Group of Santa Barbara Professor of Entrepreneurship and a professor of operations, information and technology at Stanford GSB. Matthew Glickman is a lecturer in management at Stanford GSB.
Stefanos Zenios: Every startup is a series of hypotheses — about who’s a customer, what makes your product or service attractive to these customers, and so on. Lean startup provides a rigorous framework that you use to prove or disprove as many of these hypotheses as possible at as low a cost as possible. An interesting question is: How do you generate the hypothesis? If you have not already identified the user need through your own pain point — having experienced the need firsthand — how would you discover that need?

Design thinking gives you a methodology to do that. There’s an interplay. For example, in design thinking you develop a prototype that you use to get feedback — that’s very qualitative — and lean startup makes it more rigorous, so you don’t end up convincing yourself that the feedback is positive feedback.

Matthew Glickman: I echo that. We start the class with design thinking, which is more inquiry-based and open-ended. It forces you to put yourself in the customer’s shoes. BabyCenter, which is still the leading site for pregnant women and new parents, was started by two guys without kids — so we needed to go out and try to understand what it’s like to be a pregnant woman. We talked to lots of people and started to intuit that the real problem was that they don’t know what’s coming up next in their pregnancy and their needs change frequently. There was no target customer who said, “Boy, wouldn’t it be great if I could get highly personalized week-by-week information!” But by developing intimacy with the customers, we were able to come up with the insight that with the internet you can personalize down to the week of pregnancy and give people exactly what they need to know. That ended up being the core insight that we built a whole business around. We developed a set of features, and it turned out that baby-naming and personalized information — two of the 20 things we tried — were the ones that really moved the needle. You want to build a “minimal viable product,” see what’s working, and double down on those.

Zenios: Matt makes a couple great points. Defining the customer problem comes from patient, sustained interactions with the customer over time, because you don’t know when that insight is going to come. When DoorDash started, the innovators didn’t know what problem they wanted to address, only that they wanted to help small business owners. [DoorDash, a Startup Garage success, is an online service that delivers meals directly from restaurants to customers. It was launched in 2013 by four Stanford students.] The first weekend of the class they spoke to 60 business owners of many kinds. One was a lady who had a small shop that was making macaroons. Her macaroons were extremely popular, and by talking to her and her customers, the team found out that the customers wanted to be able to place the order and have it delivered to their offices. That became the DoorDash idea — except in the end, they focused not on macaroons but restaurants.

Glickman: A lot of people come to the class with anxiety that they don’t have an idea yet. But we show that you have to go down a lot of alleys to see what underlying
“All entrepreneurs say they’re customer-friendly, but most businesses don’t get to know the customer that well.”

Zenios: For many students, the mindset is “I want to make this hypothesis work,” whereas we want to teach the mindset, “I want to discover if this hypothesis is not valid — and if it’s not valid, why it’s not valid.” And again, this is where the interplay between lean startup and design thinking is valuable. We had a class team whose original hypothesis was to put educational materials on the web that would teach people how to cook diabetic-healthy meals. The team’s first experiment was what we call a “concierge” version of that business — walking the customer through a planned service in person, before developing what will ultimately be a software implementation of that service. So the students ran an ad on Craigslist announcing that they were offering a class to diabetic patients on how to cook healthy meals, and at the end they’d give them a package of supplies for cooking for the next week. They did the training and gave them the package, and they asked, “Would you be willing to sign up a week from today to get another box of supplies?” “No.” “Why not?” “I like the social aspect of this, so I want to come back for additional recipes and meeting with these people.”

So the hypothesis changed because they had delivered the product manually — and through that personal connection with the diabetic patients, they heard, “No, I prefer something else.” The concept of the “concierge minimal viable product” — a product with enough features to gather meaningful feedback — was developed as a way to discover a solution that’s less expensive than writing all the code for an actual software product. And from a design-thinking perspective, you’re the concierge, and when you deliver the service, you get to know your customer.

Glickman: All entrepreneurs say they’re customer-friendly, but businesses don’t usually get to know the customer that well. One idea that’s counterintuitive is to put in the minimum amount of effort to get the maximum learning. If you want to test delivering food to homes, how can you do that without spending three weeks actually delivering food to homes? One way is to build a web page to see if people will click on it. An even simpler way is to place keyword ads around “delivery.” As an entrepreneur, you repeat that process again and again, so doing it more cheaply allows you to do more iterations.

Zenios: This goes back to another element of lean startup: the notion of the pivot. If the data invalidates your hypothesis, you keep some elements fixed and change other elements. But how do you know what to pivot to? The guiding principle is deeper customer understanding, as in the example with the diabetes team. So that’s how design thinking and lean startup interact: The empathy you gain through design thinking helps you identify possible pivots.

Glickman: A common pivot we see is around health care: Students want to do something for patients, and as they develop their idea, they realize that it’s

the insurance companies that pay for this service, so they need to pivot one part of the business by thinking about the needs of who’s paying. Sometimes they’ll end up deciding that they’re not interested in selling to health plans or that they don’t even want to be entrepreneurs, and those are important discoveries. They’ve still learned a systematic innovation process that they can apply elsewhere. We do see a lot of nonprofit teams, which is great, and I think there are applications in government, too. As an example, I would love for a team to look at ride-sharing — like what Lyft and Uber have done — and see how you use that to help solve public transportation problems in San Francisco. Perhaps you can integrate ride-sharing with bus systems.

Zenios: This process for gaining deep customer understanding helps large companies as well, because they thrive on processes. For example, Intuit has identified a small team of innovation catalysts — they go on “innovation safaris” with customers to do observation and prototyping and testing. The team then uses the feedback from these safaris to decide which features and which products to design and launch. Since starting to do this, the company has increased the number of new features added to products 100-fold per year. Citrix does something similar, integrating lean startup with design thinking. When I give these examples to executives, they say, “Thanks, you gave me a template.” It’s not creating an R&D lab — it’s a small group of people with day jobs who have the freedom to go on these innovation safaris.
Ever since the economist Joseph Schumpeter immortalized the phrase “creative destruction,” most economists have argued that technology innovation creates both winners and losers, but that the economy as a whole benefits.

In practice, however, it’s been very hard to isolate the specific link between a company’s pace of innovation and its future growth, and even harder to confirm how much tech innovation is just disruption — shifting money from “losers” to “winners” — versus how much it increases total wealth.

Now a sweeping new study of millions of patents issued over the past century offers a concrete answer to both questions.

Coauthored by Amit Seru, a professor of finance at Stanford Graduate School of Business, the study confirms that the pace of innovation is indeed a disruptive force between competitors, perhaps more than previously thought.

But it also finds that periods of rapid tech innovation, such as the 1920s, the 1960s, and the 1990s, lead to a measurable increase in overall productivity and economic growth.

“If innovation were only about McDonald’s getting ahead of Burger King, we wouldn’t really care,” Seru says.

“But our study shows that something more important is happening. When firms innovate, they are expanding the pie, and we see increased aggregate growth.”

Seru and his colleagues — Leonid Kogan at Massachusetts Institute of Technology, Dimitris Papanikolaou at Northwestern University, and Noah Stoffman of Indiana University — reached that conclusion by coming up with a new way to measure the economic impact of millions of patents that companies received between 1926 and 2011.

Thus far, many of the studies of patents and innovation have been based on measuring the apparent scientific importance of patents, usually by counting the number of times a patent is cited as “prior art” in later patents.

As the researchers note, however, some patents have considerable scientific value but very little economic value. IBM patented a system, for example, to reserve bathrooms aboard airplanes. The patent went on to be cited in many other patents, but IBM let the patent lapse without ever doing anything with it.

Seru and his colleagues took a different approach, looking at how much the news of a patent’s issuance had on the stock price of the company that received it. The researchers looked at nearly 1.8 million patents that were granted and assigned to publicly traded companies from 1926 to 2011.

After using statistical techniques to filter out random fluctuations and market noise, they found that news of a patent being granted had a measurable impact on the stock price of a company on the day or two after the news was announced.

The researchers then looked at what happened to companies that were faster or slower at getting market-moving patents. Sure enough, they found a strong correlation between the pace of that activity and a company’s future growth and competitive edge.

Specifically, Seru says, companies in the top 10% on innovation experienced annual growth rates during the subsequent five years that were between 1 and 3 percentage points faster than those of companies with only a median pace of innovation. Given that 10% is a fast rate of growth for most companies, that amounts to a significant edge.

By contrast, companies that lagged behind their industry’s innovative pace saw their annual growth over the next five years slow by as much as 2.5 percentage points.

Those results are similar to those of earlier studies that looked only at the scientific value of patents, but the new results show more evidence of creative destruction. Earlier studies didn’t find as much damage to the less-innovative competitors.

The bigger question, of course, is whether innovation increases the overall size of the economy. Do the rewards of innovation go only to the winners, at the expense of rivals or of workers whose jobs become unnecessary?

To answer that, Seru and his colleagues used their data on market-moving patents to create an aggregate “innovation index” and then looked at how the index tracked with increases in overall economic growth and productivity.

Again, the results confirmed the basic theory of creative destruction. A significant jump in overall innovative output (in statistical jargon, an increase of “one standard deviation”) correlated to an increase in annual economic output of between 0.6 and 6.5 percentage points. That’s a major boost, given that the U.S. economy usually expands by less than 4% a year.

If the study’s estimated range of that economic impact seems wide, Seru says, that’s because the researchers plugged their results into a wide range of models for how the economy works. Using the simplest and most popular economic models, he says, indicates that an innovative surge increases total economic growth by at least 4.5 percentage points. That’s a huge impact.

“What our work shows,” says Seru, “is that Schumpeter was right after all.”

Amit Seru is a professor of finance at Stanford GSB.

Illustration by Giacomo Bagnara
Can Robots Take a Slice Out of the Pizza Market?

An entrepreneur challenges a $40 billion industry with out-of-the-box pizza deliveries.

By Erika Brown Ekiel

Julia Collins is a co-owner of four restaurants in New York City and has worked with Danny Meyer, one of the most celebrated restaurateurs in the country. Yet she will tell you that some of the most delicious food she’s ever tasted was on a water buffalo farm in Southern Italy, where she lived for six months in 2009. There, she learned traditional ways of la cucina povera — peasant cooking. The farm’s staff served fresh, local, affordable food. Collins returned to the U.S. with a newfound mission to address the food crisis in America. “People at the top of the pyramid in the U.S. have access to quality, healthy food,” she says, “but people in the middle and at the base are struggling.”

Collins, who received her MBA from Stanford Graduate School of Business in 2009, partnered with Alex Garden, former president of online game producer Zynga. Like Collins, Garden is an engineer and foodie, and together they decided to merge modern technology and old-world cooking methods to make and deliver healthier pizza.

Today, Collins and Garden are cofounders and co-CEOs of Zume Pizza, which uses a combination of robots, humans, and what they call “food delivery vehicles,” which are outfitted with computer-activated ovens so pizza can be baked along the way. Their mission is to make and deliver fresh pizza with locally sourced ingredients.

“Pizza is a $40 billion industry and 40% of the market is controlled by four companies who use chemicals and additives to trick the palate,” says Collins. “We knew that there was a better way to give people healthy, affordable food — and do it fast.”

As a co-CEO, how do you maintain balance in the company, and how do you decide who does what? Zume is a food company, a robotics company, a logistics company, a software company, and a packaging company. It’s a complex business. Given the pace of development and the breadth of what we want to conquer, it makes sense to have two strong, vocal people leading the company. It starts with trust and continues with frequent and active communication. We’re lucky that we have a natural affinity for each other, a natural camaraderie and friendship. You can’t engineer that. You also have to be disciplined about how decisions get made and what to do when you disagree.

What is the deciding factor when you disagree? One of our values is that the best idea wins, period. We’ve divided the company across functions. I handle everything related to food, finance, and operations. Alex focuses on technology, product, design, and marketing. The human resources piece is roughly divided between the two of us.

You’re both engineers, so when there’s an engineering argument, how do you choose who wins? You keep the discussion going until both parties agree that you’ve reached the right outcome.

Can you give an example? In order to design the world’s first baked-on-the-way food delivery vehicle, we had to start from scratch. In addition to the engineering, we had to get approval at the federal, state, and county levels. One of our design imperatives was to simplify as much as possible. It was very important to me that we have refrigeration in the truck. We went back and forth and ultimately decided to get the first truck licensed, then add refrigeration at the first possible opportunity.

What about your pizza is healthy? Most delivery pizza is designed to survive “dwell time,” which means the time between when it is cooked and when it is delivered. A delivered pizza will often spend 45 minutes or more in a cardboard box. Larger companies compensate for the loss of flavor during dwell time with chemical stabilizers, and they often add sugar to mask the low quality of their ingredients.

Zume’s approach to making healthy food begins with our sourcing. One hundred percent of our produce comes from local farms. All of our meat is naturally and ethically raised. Our menu is seasonal and flexible. Great pizza begins on a farm, not in a laboratory.

We do not add sugar to any of our products. We make the dough in a traditional way: You use a mother dough and let it ferment for at least 24 hours. The flavor comes from the long fermenting, as opposed to using smoke and mirrors and chemistry.

What do your robots do? Right now we have four robots on our production line and a fifth is being installed soon. Our most well-known robot is Bruno, a six-axis robot that takes pizza off a conveyor belt and puts it into the oven. Our cooks often tell us that it’s the best kitchen job they’ve ever had because their backs don’t hurt, they aren’t doing repetitive motions, and they can focus on the things people love to do in the kitchen, like quality control, tasting, and developing recipes.

What jobs will be taken over by robots in the next few years? And what probably never will? We are automating tasks, not automating an occupation. The idea that robots will take away the entire occupation of being a chef is really misleading. Zume has created more than 70 jobs in our community. All of our employees have fully subsidized health, vision, and dental insurance. They are shareholders in the company. It’s my responsibility to be at the leading edge of advocating for human beings. I take this responsibility very seriously.

How does AI play into your service? People tend to order the same pizzas on the same days of the week and the same times of day. We leverage the habitual nature of pizza...
ordering to predict what people will order. Our AI tells us hour by hour what pizzas need to be made. Our delivery vehicles are optimized to enable forward deployment and field reloading. AI allows us to pre-load inventory and then station our vehicles near the locations where we expect to receive orders. This means that every pizza arrives hot out of the oven, just a few minutes after it finishes cooking.

I imagine the equipment must be costly. Is it really more profitable to use robots to make pizza rather than people? The robots look super cool but they are not tremendously expensive. It costs between $20,000 and $50,000 per robot cell. These have a useful life of up to a decade or more. By investing in automation, we save money on labor and reinvest the dollars we save into higher-quality ingredients.

Why is now the right time for this business? Rising rents are so insurmountable that it makes the traditional restaurant model nearly impossible to sustain over a long period. Owning a restaurant is one of the most difficult ways to make a buck. Most operators are going out of business after three years. I realized that I could either watch my industry be disrupted or I could choose to be at the leading edge of the disruption and show others how they can change and adapt.

What was your first paying job? I used to pick my neighbor’s flowers and make them into bouquets and resell them. After that, I ran a cookie and lemonade stand, then a car-washing business. I also had a babysitting business where I charged double the market rate because I offered homework help.

What’s the best business book you’ve read? Setting the Table by Danny Meyer. It really matters how you treat the people who are running your business. In order to serve your customers, you have to invest in and love your team first.
When longtime Kleiner Perkins venture capitalist Joe Lacob and his fellow investors bought the Golden State Warriors in 2010 for a record $450 million, there were plenty of doubters on the sidelines. The Oakland-based NBA team had reached the playoffs only once in the previous decade and a half. It hadn’t won a league title since 1975. Just 7,000 die-hard season ticket holders warmed the seats. Lacob was one of them.

“We were so bad!” the 1983 Stanford MBA graduate candidly told a Stanford audience gathered in Maples Pavilion last summer. “We weren’t a very good basketball team, and we weren’t very good as a business organization. In our first year we lost $25 million.”

Six years later, the Warriors are worth about $2 billion, and their 14,500 season ticket holders rank among the happiest fans in the nation. Besides clinching the NBA Championship in 2015 under new head coach Steve Kerr and coming achingly close to repeating the feat in 2016, the team has posted a record-setting 238 wins over the past four regular seasons. Golden State television ratings were through the roof last year, two-time NBA MVP Stephen Curry’s jersey is the hottest-selling piece of merchandise in the NBA, and soon the team will be playing in a new 18,000-seat arena on the shores of Mission Bay in San Francisco.

Lacob reflected on the Warriors’ stunning turnaround at an awards ceremony hosted by the Stanford Graduate School of Business Alumni Association. Previous winners of its Entrepreneurial Company of the Year (ENCORE) Award have been well-known Silicon Valley companies, but this year selection committee members took the unusual step of recognizing a sports franchise. The Warriors, they said, were to be commended for “redefining sports management, pioneering the use of sports analytics in the NBA, and adopting new technologies that have transformed the fan experience.”

Lacob, a former biology major who made his initial fortune investing in medical technology, internet, and energy companies, was joined onstage by Warriors general manager Bob Myers, who was named 2014-15 NBA Executive of the Year, plus two of the organization’s best-known players: 2015 NBA Finals MVP Andre Iguodala and seven-time NBA All-Star Kevin Durant, who joined the team in July. Together with award selection committee chairman Geoff Yang, MBA ’85, they discussed what it takes to be a winning professional sports organization in America today, as well as a winning business venture.

YEAR-ROUND DEDICATION
Lacob frequently is asked how he turned the Warriors around in such a short time. The answer “isn’t one big thing; it’s a lot of little things,” he says. “There’s a relentless — and I capitalize that word — pursuit of excellence every single day in this organization.” Every person associated with the Warriors has a common purpose and common goals and buys into a culture of working hard. Those who resist the idea of being on task 24/7/365 are not asked to come aboard, he says.

TEAMWORK
What It Takes to Build a Winning Sports Franchise
Joe Lacob embraced a Silicon Valley mindset in transforming the Warriors into champions.

BY THERESA JOHNSTON
Joe Lacob received an MBA from Stanford GSB in 1983. (See more at http://stanford.io/sports)

HIRE PEOPLE WHO LOVE WHAT THEY DO

Myers, the team’s general manager, told the audience that he loves basketball so much that he’ll frequently pull over to the side of the road to watch kids’ pickup games. He looks for the same passion in players and coworkers. “You want to find people who love the game and are thrilled to go to work every day,” regardless of whether there’s money involved, he explains. A good way to learn about potential hires is to shoot some hoops with them: “You can learn so much more in half an hour playing basketball than you can [in an interview] asking them about their hobbies and where they went to school. You can learn whether they’re selfish, whether they cheat, or if they are smart, hard-working, and competitive.”

CULTURES ARE COMPOSED OF PEOPLE

Team culture “is not about some guy who scores 20 points in a game,” Myers told the audience. Rather, “it’s the story of people sacrificing and doing it all the right way.” A perfect example of this ethos, he says, is Warrior forward Andre Iguodala. Despite the fact that he was a highly respected player who’d been named to the NBA All-Defensive First Team, Iguodala abided by coach Steve Kerr’s decision to remove him from the starting rotation in 2014–15. When he finally did get a chance to start, with Golden State down 2-1 in the 2015 NBA Finals, “he was ready,” Myers says, smiling at Iguodala, on his left. The result was a national championship — and a finals MVP award for the patient player.

IT’S NOT MOM-AND-POP ANYMORE

Years ago, sports franchises often were family-owned or run by investors as a side business. Today that limited approach is unworkable. “These teams are worth too much, and there are too many people watching,” Lacob says. “It’s big business, and the truth is these teams cannot be run like small organizations.” He says sports franchises would do well to emulate successful Silicon Valley companies like Apple and Google, which tend to invest in diverse areas, including technology, entertainment, media, and real estate.

EMOTIONAL STAMINA

“It’s hard to build a company,” Lacob says. “It’s hard to turn around an organization like this. It’s hard to be in the limelight all the time, and it’s hard to absorb losing sometimes.” Yet even when the Warriors experienced their most heartbreaking recent loss, in Game 7 of the 2016 NBA Finals, he recovered quickly and put it out of his mind for the rest of the summer. “All I think about is getting better,” he says. “That’s what our job is.” Fortunately, he adds, sports teams “get results every day,” and they can use that data to improve continuously.

The ENCORE Award was created in the late 1970s by the Bay Area Chapter of the Stanford GSB Alumni Association to recognize the entrepreneurial spirit of companies springing up in Silicon Valley. Previous winners have included Apple, Genentech, Cisco, eBay, Google, Tesla, Netflix, and LinkedIn.

Joe Lacob received an MBA from Stanford GSB in 1983. (See more at http://stanford.io/sports)
FUNDING

Ten Tips for Improving Your Startup Pitch

When courting potential funders, think Tinder and show why you’re hot.

BY IAN CHIPMAN

Pitching a startup to venture capitalists is like online dating, says Guy Kawasaki, who has pitched and been pitched to more times than he can count. But not like eHarmony, where soulmates are matched through a complex lattice of interests and compatibility. It’s more like Tinder, where only one thing matters: Are you hot or not?

“People are going to make an instant decision about your pitch,” says Kawasaki, a Silicon Valley investor, author, and marketing expert. “They’re not going to want to see your entire background, they’re not going to want to get to know you, they don’t want to be your friend,” he says. “You are either hot or not, interesting or not. It’s that quick.”

In a talk to the Center for Entrepreneurial Studies at Stanford Graduate School of Business, Kawasaki shared 10 key insights that can help you perfect your pitch in the speed-dating world of raising startup money.

1. Do Your Homework

“To do a pitch well, you have to understand your audience,” Kawasaki says. “Thank god there’s this thing called LinkedIn.” Look up everyone in the room and research their background to find points of common interest, such as the fact that you’re both amateur hockey players or got rejected from Stanford. But you also want to find where you’re not relevant. “If you go into a firm and you meet with a partner who’s in charge of semiconductor investing and you are a Snapchat killer, it’s just not going to work.”

2. Set the Stage

Build a strong foundation for your presentation by asking three simple questions in advance, Kawasaki says:

A. How long do I have?

“If you built your whole assumption upon being there for an hour and you only have half an hour, you’re really going to be stuck,” Kawasaki says.

B. What are the three most important things that I can explain?

For starters, this helps you home in on what the investors want to hear. “Maybe they only care about the market and the technology. Meanwhile, you’re thinking they want to know about the team, and then you will be skewing your presentation completely wrong.” But this question also creates a verbal commitment from your audience. “If they say, ‘We’re only interested in technology and market and competition,’ and then you address those three, they can’t complain,” Kawasaki says. “You’ve done your job.”

C. Can they hold their questions until the end?

This is an important rule to establish, Kawasaki says, because “you want to fly through your presentation as fast as possible. You don’t want to take questions because they’re going to send you down rat holes.”

3. Tell a Story

Fight the temptation to talk about your “patent-pending, curve-jumping, paradigm-shifting, enterprise-class, scalable product or service,” Kawasaki says. You’ll sound just like every other company the VC is meeting that day. CEO after CEO will try to “throw everything in there because you want to use shock and awe to convince these investors to write you a check at the end of 60 minutes. Wake up — that’s not how it works. What you want to do is tell stories about why you created the company.”
Guy Kawasaki is an author, speaker, entrepreneur, and investor who once held the title of “chief evangelist” at Apple.

present everything about the 10 slides you’re going to see — the market, the technology, the marketing, the product introduction, the financials — if your CEO cannot cover those topics, you need a new CEO.”

6. GET TO 1,000 FEET AND STAY THERE

To calibrate the right level of detail in your talk, Kawasaki advises you keep a military analogy in mind. Don’t be a B-1 bomber flying at 50,000 feet with banalities like “Security is a concern for large companies,” or “Millenials want to communicate socially.” On the other hand, don’t be a Navy SEAL crawling through the mud explaining the ins and outs of your relational database. You want to be an A-10 Warthog, says Kawasaki, “the plane that flies 1,000 to 5,000 feet and supports the ground troops. This is not the plane that is way up; it’s also not the person on the ground with a knife in his or her teeth. Stay at 1,000 feet.”

9. SHUT UP, TAKE NOTES, AND FOLLOW UP

When you’ve gotten to the end of your presentation and you’re fielding questions, take notes. “Or at least fake taking notes,” Kawasaki says. “Because what that communicates is that you’re taking me seriously. If I see you taking notes when I talk, my conclusion is what? You’re smart. If I don’t see you taking notes, my only conclusion is not that I’m not smart. It’s that you’re not smart. You’re so freaking stupid you don’t even take notes when I’m giving you all this wisdom.”

And, you’d better follow up on those questions. “You’d be amazed at how many people do not follow up. When they say, ‘We’ll get back to you,’” Kawasaki says, “and they never get back to you.” The clock is ticking from the moment you walk out the door. And that clock expires in 24 hours.

10. START FROM SCRATCH

Your pitch is a constant work in progress — which is both good and bad. After meeting with a VC who’s concerned about the team, you add a team page. If the next one is interested in the technology, add a bit about the optimal programming language. And then if someone wants to know about the marketing plan, add a marketing slide.

Pretty soon your talk is the equivalent of a jeepney, Kawasaki says, referencing the postwar Jeep hybrids common in the Philippines: “They take fenders from a Mercedes, an engine from a Chevrolet. And it’s quite beautiful, actually, but at this point, a jeepney bears no relationship to the World War II Jeep that the Americans left,” he says. “It’s like everything is piled on and you’re adding slide after slide, and pretty soon it’s no longer 10/20/30. Don’t be afraid to throw the whole thing away and start from scratch. Because then you’ll just let your subconscious remember what’s most important.” ▲

4. OBSERVE THE 10/20/30 RULE

The optimal number of slides is 10. You should be able to give your whole talk in 20 minutes (even if you have an hour). And the ideal font size is 30 points — though you can fudge that a bit. “A very good calculation for your font size is figure out who the oldest person is in the audience, then divide his or her age by 2.”

Also, Kawasaki notes, make your slide background dark. “Dark says seriousness. Dark says gravitas. Dark says I’m not [so dumb] that all I did was boot up PowerPoint, got a white open new document, inserted a text box, and started typing,” Kawasaki says. “Black is the new black.”

5. LET ONE PERSON DO THE TALKING

You know that standard nugget of advice that investors are really investing in your team? It’s a trap, says Kawasaki. When you parade your CEO, CTO, and CMO in front of investors in an attempt to show off how dedicated, hardworking, and brilliant you all are, you really just end up with an unstable, jagged presentation. “Somebody’s going to blow it. You’re not all equally rehearsed. You’re not all equally good. Just let the CEO do the talking,” Kawasaki says. “If your CEO cannot

7. ANSWER THE LITTLE MAN

“Pretend that for everything you say there is a little man or woman on your shoulder,” Kawasaki says. “Every time you say something, the little man or woman asks the question, ‘So what?’ If you say you have a team of people who worked at HP, Google, and Cisco, for example, don’t assume the audience will make the intuitive leap that your team is full of proven, successful people. ‘You have to answer the little man for the audience.”

8. PITCH CONSTANTLY

Pitching is an acquired skill, not an innate talent, Kawasaki says. It takes practice. And yet, he says, the tendency of CEOs is to assume they’re somehow the exception to that rule and can get up and just wing it. “It takes about 25 times giving the pitch until you’re really smooth with it. This means you have to pitch all the time.”
Go Slow When Recruiting Your First Team

Take time to ensure that your earliest hires share your long-term vision.

BY STEVE HAWK

Even in the biggest, most stable corporations, putting together a small team can be a perilous process fraught with personality clashes, hierarchical imbalances, and conflicting visions.

But in a startup, the challenge of assembling a solid team — and then keeping its members inspired and focused — carries the added stress of being potentially fatal. When a company consists of a half-dozen people, a single recruiting misstep can topple the house.

Stanford Graduate School of Business professor Lindred Leura Greer has been studying and teaching the art of team building for 12 years, with an ever-increasing focus on startups. In Greer’s course The Psychology
What are the key differences between creating a team for a startup versus creating a team for an ongoing business?
First, there’s the intensity of interaction. If you’re on a project team at a big existing company like, say, Google, you’re not really married to the people on your team. But if you’re starting a business and choosing cofounders and making your first hires, you’re looking at one of the most intense relationships you’re going to have in your life. It’s similar to marriage.

At Google, there’d be more room for error, because the team is more likely to be a small cog in a huge machine. Yes. But with a startup, it’s more of a life-or-death situation. Issues around power and fairness are bigger, because your entire life is probably vested in the business. You might be living hand-to-mouth while waiting to get funded. With so much at stake, little obstacles are harder to navigate.

It’s essentially a hiring challenge? It’s hiring decisions, and it’s having a clear culture and clear statement of values even before you go looking for a cofounder. And then when you start the first phase of hiring, it’s making sure that you and your founding team have an aligned vision, so it’s clear who’s going to be a cultural fit. One of the things that can really break an early-stage team is bringing in the wrong person and then not having any idea how to fire them. That can be a train wreck, especially if there’s equity involved.

You might not even have an HR team in place. You usually don’t, so you’re doing it on your own. And that’s rough because most people aren’t trained in this.

Would you go so far as to actually sketch out a dream team and then go find them? Definitely. You don’t want to just be grateful for the first decent coder you find. You want to be intentional about it. That’s the main takeaway from my course: Be as intentional about your people as you are about your product.

Does that mean looking beyond personality and experience? It means looking at everything. Make a list of your own competencies. What are you great at? What are the skill sets you need to have in other people? And, just as important, what common values are you looking for?

Can you define values in this context? Things that you hold dear to your heart.

Of Startup Teams, students spend time outside of class analyzing the interpersonal dynamics at a nascent business, report their findings to the class and visiting experts, and then return to the startup to offer advice.

Much of this course-related fieldwork has made its way into Greer’s scholastic studies and even directed her future research. “It’s a nice feedback loop, because there isn’t a lot of good research on the people side of startups,” she says. “There’s a lot on product and strategy and structure and funding, but not a lot looking into the social interactions.”

She recently sat down with Stanford Business magazine to share what she’s learned about how startup founders can assemble strong, motivated teams.
But when it comes to personality traits, how do you narrow it down? There are dozens of personality types. Whatever is more salient to you. If you had to describe yourself in five words, what pops into your head? Like I said, risk aversion is a big one. Optimism and pessimism are also important.

Do you actually want a pessimist on your team? Yes. There’s research on that, showing that too many optimists can be bad for startup performance. Having a contrarian can be a great thing, especially at startups, where people tend to have such rose-colored goggles about the future. Having someone who’s more realistic can help turn around some pretty bad decisions.

How do you make sure that you’re asking the right questions and doing the right research on someone so that you get to know their personality? Take your time. My favorite advice I’ve heard from VCs to founders is “Hire slow, fire fast.” That one rule alone could save a lot of startups, because people are often far too quick to jump into relationships. If you meet a new coder who’s a friend of a friend, a one-day interview isn’t sufficient to say, “OK, you’re hired.”

You need to go slowly because it’s really hard to fire someone after you bring them on board and get to know them. Beyond the legal issues, it takes a lot of emotional guomption to make that decision, especially if you’re an early-stage founder and you haven’t done it before. Some startups will take six months to fire someone who doesn’t belong. But in six months, the wrong person can corrupt your culture.

Because, like you said, it’s a marriage. And it’s really hard to end a marriage. Emotionally, financially. You just don’t want to go there. That’s why it’s so important to take your time before you hire. You want to engage with them in a lot of different contexts. If you’re hiring a CTO, give them a task similar to what they’d be doing in your company. Give them two weeks to work on it, and see how they do.

Also, spend time with them one on one and in groups. Look at them across a variety of social situations, and look for indicators in behavior and personality. Just asking someone questions doesn’t tell you everything you need to know. It’s very easy for smart people to appear socially desirable.

There’s a startup I know where they really value having a positive, kind culture. The CEO has arranged his office so that when he’s at his desk, he looks out at his secretary. When people come in for an interview, his big thing is to watch how they interact with his secretary. If they’re kind and courteous or dismissive and abrupt, that’s a strong yes or no indicator for him.

Taking your time must be especially important when choosing cofounders. Definitely. You want to spend months with someone before you formally commit to a partnership. We’re actually doing new research now in the realm of close-relationship analysis, looking at the benefit of prenuptial agreements between founders.

With my students, one of the big things I ask before they commit is “Have you had a fight yet? Do you know what this person is like when things get stressful and ugly?”

And if you haven’t seen that yet, then you need to find ways to gently explore how this person will react if you disagree with them or stress goes up.

Really? Yes. Push back on something much harder than you usually do, and see their reaction. That can reveal a lot.

I’ve had students come back to me saying, “Oh, my gosh. I’m so happy I did that. That was terrifying.”

Have you ever heard any stories of people who feel like they’ve been falsely seduced during the founder-dating period? Oh, yeah. It can happen.

Are there ways to guard against that? References. Talk to people who’ve worked with the person before. See how they are with other people.

Once you’ve hired a new team, how do you keep them marching in the same direction? You have to put more effort than many founders realize into communicating your mission and your vision.

What’s your distinction between vision and mission? It’s something that we talk a lot about in my class. Mission, to me, is a very brief statement of purpose. “What’s our reason for existence?” So, again, for Disney, it’s “We want to make families happy.” For Stanford, it’s “Bring knowledge to the world.”

A vision, on the other hand, is “Where are we going with that? How are we going to do it?” It’s action-oriented. The best ones usually also have a timeline and goals that you can benchmark against.

Richard Branson (founder of the Virgin Group) has a great saying: “A good mission statement should fit on a coat of arms.” And that mission statement should not only dictate your hiring decisions, it should also be embedded in your rituals. How you celebrate success. How you decorate your office. What you do with your off-sites. That mission should be everything. And the vision should be, “Where are we going?”

Do most of the companies you study succeed at that? Actually, no. When my students go in to study startups, the single biggest problem they see is lack of alignment around the mission and vision. We usually look at companies with about 10 people. They’ve done their first round of hiring, and they’re often still in Series A funding. My students go through and ask people, “As a company do you know where you’re going? Do you know how to contribute?” And most employees say, “No, we really don’t.” And you tell that to the CEO, and he or she will say, “Well, I told them six months ago what the vision was.” It doesn’t work that way, especially in startups. Things change so much and so quickly. Six months is forever. You have to keep emphasizing in all your internal communications: “Who are we and what are we doing right now? What is our goal?”

Is building a team something that you can get better at with training? Second-time entrepreneurs are astronomically better than first-time entrepreneurs in building teams and creating startups that succeed. The number one reason startups fail is people problems, and the second time around, entrepreneurs realize this. A
“Highlighting the socioeconomic contributions of these refugees might help ease these social tensions.”
— Jens Hainmueller
For anyone who has end-stage renal failure, the best hope for long-term survival is a kidney transplant. In the United States, they could be in for a long wait. Today, more than 100,000 Americans are waiting to receive kidneys, and 3,000 new patients are added monthly, according to the U.S. Department of Health and Human Services and the National Kidney Foundation. The median wait time for a kidney transplant is more than three years, the NKF reports, and 13 people in the U.S. die every day while waiting for a donor.

Those bleak numbers prompted economist Mohammad Akbarpour, an assistant professor at Stanford Graduate School of Business, to seek ways to optimize and improve the market for viable kidneys, which can come from a live or a deceased donor. The challenge is complicated by the fact that the chance a donor kidney will match the patient’s blood and tissue type is very low. "From a purely economic standpoint," he says, "what you have is a huge demand and a low supply in the kidney market."

Reducing the Wait Time for Kidney Transplants

Is it time to consider allowing donors to sell their organs on the open market?

BY EILENE ZIMMERMAN

Mohammad Akbarpour is an assistant professor of economics at Stanford GSB.
MOHAMMAD AKBARPOUR
“What you have is a huge demand and a low supply.”
About 15 years ago, kidney exchange markets — barter markets, not cash — were introduced globally to help increase matches. Today, more than 500 of these exchanges take place in the U.S. annually.

“Suppose I need a kidney and my sister is willing to donate but her blood type is different from mine,” explains Akbarpour. “And suppose you need a kidney and your sister is willing to donate but you and she also have different blood types. We find out that my sister is a compatible donor for you and your sister is a compatible donor for me. So we’re a match.”

LOOKING FOR EFFICIENCY

These exchanges have increased matches significantly by upping the pool of potential donors. Still, the exchanges don’t operate as optimally as they could, says Akbarpour, who is working with the medical community to seek ways to make the system as efficient as possible.

His research shows that most exchanges don’t adequately take into consideration the fact that every kidney market is continuously changing, with would-be donors and recipients constantly dropping in and out. “You miss a crucial aspect of the problem if you ignore it,” he says.

He interviewed kidney exchange managers to determine how often they review their pool of applicants to find matches. Akbarpour is working to determine an optimal waiting time — whether that’s matching people daily, weekly, monthly, or quarterly. But even with that problem solved, Akbarpour says, about 20% of patients still won’t find a match under the current system. “Although we can improve the efficiency of the matching algorithm, the other solution is obvious: Increase supply.”

One way to do that is to bring in donor-patient pairs from other countries and cover the cost of their transplant operation and follow-up care in exchange for the matching kidney exchange. The cost would then make up for the financial burden of dialysis. In the U.S., dialysis costs Medicare roughly $120,000 a year per person, which works out to about 6% of all Medicare expenditures, says Akbarpour. A single transplant saves about $300,000 in dialysis costs in the first five years. “It’s a self-financing proposal,” he says.

THE PAY OPTION

The other option — the one Akbarpour says is both the most exciting and, potentially, the most repugnant — is to allow patients to pay for (and donors to sell) their kidneys. Although many medical associations, ethicists, religious leaders, and doctors have condemned the sale of kidneys on the open market, in Iran — where it’s legal — there is a very short wait list for kidneys, and many fewer people die because they can’t find donors.

Iran’s paid kidney market emerged after the country’s revolution in the late 1970s. In the early ‘80s, foreign sanctions against the government inhibited its ability to get dialysis machinery. The number of Iranians needing a kidney transplant, however, kept increasing, so in 1988 the government organized a system that regulated and funded kidney transplantation. The system included compensation for donors.

Officials euphemistically described the money given to each donor as a “gift,” says Akbarpour. “They were paying for it, but using appropriate words,” he says. The system worked so well that the kidney transplant wait list in Iran was nearly eliminated by 1999.

“We have this discussion in the West about what would happen if you have a paid market for kidneys,” Akbarpour says. “The expectation has been that poor people will be selling their kidneys to rich people. But the debate has been largely based on speculations, as opposed to evidence.”

Akbarpour is looking at five years’ worth of data about kidney sales and transplantation in the country, and his preliminary findings show that the average wealth of those buying kidneys is almost exactly the same as the average wealth of all Iranians. Most of the payment for each transplant comes from the patient, not the government.

“It’s not just rich people who can buy a kidney in Iran,” he says. “Even poor people find the money for it, because it’s so valuable. There are also charities they can tap.”

But one suspected consequence of a cash market for kidneys did turn out to be true: Poor people sell kidneys far more than any other economic group. In Iran, most kidneys come from those whose incomes are in the bottom 25% of earners.

Akbarpour isn’t advocating one system over another. One hurdle, he says, is creating a market in which people are not ashamed to let it be known they sold a kidney. “If we want a paid market to be successful, we have to be able to celebrate it,” he says. “After all, they saved a life.”

“Although we can improve the efficiency of the algorithm, the other solution is obvious: Increase supply.”
“Stanford GSB plays a significant role in my career and life. To show my appreciation and to pay it forward, I make annual gifts, and I’ve also included the GSB in my estate plan.”

Tom Shannon, MBA ’82, has included a bequest provision in his estate plan.

Give to Stanford GSB through your estate and leave a legacy that helps aspiring students become principled, effective leaders. Alumni who give back through planned gifts have touched and supported generations of students who leave the school ready to make a positive impact.

Join the Founding Grant Society, which recognizes all who include the GSB in their estate plans and welcomes donors at all giving levels. Members are invited to special events, including student performances and lectures delivered by top university scholars.
Another tactic is to offer incentives. Lee noted that several well-known firms have developed their own methods to reward responsible suppliers. If a coffee farmer or processor is found to be complying with Starbucks’ Coffee and Farmer Equity Practices program, Starbucks pays the farmer more than market price for their beans. At Li & Fung, a logistics company serving major brands and retailers, the reward for better behavior is better financial terms; “good suppliers” get paid 15 or 30 days faster than others. Ireland-based firm PCH International, a custom design manufacturer, borrows funds for its best performing suppliers at interest rates far lower than a factory would likely have to pay if it tried to borrow money from a bank.

Sports gear giant Nike has an initiative not only to make its suppliers highly efficient — known as lean manufacturing — but also to encourage the factory to treat workers better, in what it calls “equitable manufacturing,” Lee says. To achieve efficiency, Nike sends its best industrial engineers to suppliers in Vietnam, Indonesia, and Thailand to train executives there. The rationale is that more efficient factories are better able to absorb the shocks of power outages or unexpected increases in the price of raw materials, which makes them less likely to cut corners.

To make conditions more equitable, Nike also is setting up ways for whistleblowers to circumvent local managers and report issues directly to Nike. “A potential message could be ‘You guys came to audit us and you found no violations. But now the air conditioning is no longer working,’” says Lee. In the ultimate check on responsible factories, the workers can become the brand’s eyes and ears.

Lee stresses that companies should seek to use a variety of tools to manage their suppliers. “The majority of buyers tend to use one instrument,” he says. Companies need to realize that no single method will enable them to ferret out every unethical supplier. By relying on just one tool, says Lee, “you may give yourself a false sense of security.”

Illustration by Brian Rea
Deploying Tech to Simplify and Boost the Gig Economy

The former CEO of eHarmony is on a global mission to streamline invoicing.

BY ERIKA BROWN EKIEL

The first time Greg Waldorf pitched business to a potential client, he was only 13. Starting with an Atari 400 computer, he had learned to program and started working with businesses in the Los Angeles area. When clients selected him to write software, his parents had to sign the contracts.

That was 35 years ago. Waldorf has led multiple tech startups since then. His current mission is to help people who are not unlike his teenage self: entrepreneurs, self-starters, and those working in the burgeoning freelance movement.

His company, Invoice2go, enables “gig economy” workers and small businesses to bill their clients on the spot and get paid using their mobile phones. In his words: “Look more professional, save time, get paid faster.”

Invoice2go was founded in Australia in 2002 by a small-business owner who was annoyed by the complexity of existing accounting software. Waldorf took over as CEO in 2014 with the goal of turning the company into a global software powerhouse — on mobile devices. Today the company serves more than 200,000 customers worldwide. Waldorf, who earned his MBA from Stanford Graduate School of Business in 1994, was formerly the CEO of eHarmony, the online dating website, and he has been a board member and advisor at companies large and small, including Trulia and Zillow.

Who are your primary customers? The biggest bucket is home services: anyone doing something around the home, like electrical, construction, plumbing. The next category is freelancers, such as writers or designers. The third type are highly mobile: dog walker, DJ, makeup artist.

What do you think is the future of work? We are in an unstoppable trend in which more people are working in more flexible work environments. That includes independent, part-time workers in the gig economy. Technology can help them operate in a way that used to be associated only with larger businesses or people with tech skills.

What’s the biggest misconception about this group of workers? A lot of people think that part-time, gig-economy workers are unable to get full-time work. But 94% of Invoice2go customers say they have no interest in going back to full-time work.

Why is that? The ability to control your own destiny is the biggest thing.

Are there other forces for this change, beyond just wanting to exercise their free will? Technology. I took a Lyft ride last week from a guy who takes that route home from his full-time job, so if he takes a fare, it pays for his commute. It used to be harder to think about how you could make money for two hours on your own schedule. They are looking to use their time more wisely in a more satisfying and more lucrative way. The notion of working for a single employer for the bulk of your adult life is not an expectation most people have anymore.

How do you think the U.S. election will impact your business? A majority of our customers are not in the U.S. Globally, our customers want a reduction in regulation and bureaucracy. My hope is that governments at all levels — federal and local — continue to do things to help small businesses focus on growing, hiring, and succeeding. We think it’s hard here, but it’s even harder elsewhere. In the U.S., we don’t think much about opening a business bank account, but in other countries it can be complicated and expensive. Then there are the fees and the time it takes to register a new entity. Most of our customers are focused on improving cash flow and being more efficient with their time, so the biggest thing you can do for them is get out of the way.

How does Invoice2go help with that? We lower the barrier to getting started. When you start a business, the first thing you need to do is find a customer; the second thing is to get paid. Our customers can be up and running in five minutes, sending invoices and accepting card payments. Small businesses sometimes forget to invoice for work they’ve done. With our mobile app, they can invoice as soon as the work is complete, on the spot. We also make it possible to accept a credit card payment with no fixed monthly fees and no need for a bank or a terminal.

Is mobile your main competitive lever against the QuickBooks of the world? It’s speed and simplicity. We give you the benefit of mobile and cloud software without having to set up financial accounting systems. Most small businesses don’t think about or understand or want to set up a balance sheet. They want to keep it simple.

Do you remember when your love of business or technology began? I started working in tech when I was 13. It was the early 1980s. I was fortunate to be able to get an Atari 400 computer. It had 8K of RAM. It gave me a path at a really young age to do something unusual. I presented to CEOs at executive off-sites. When you’re a teenager, that is awesome. The typical teenage experience is an angst-filled fishbowl of peer pressure, but this gave me access to older people who gave me affirmation that I was doing something well.

Who “discovered” you and helped you see what was possible? My first big client was an investment real estate firm in Southern California. The CFO hired me to write software to power the front end of their business. Looking back on it, the guy took a huge chance on me. When you’re a kid, you don’t have a sentimental sense about things.
— you just want to get it done and break it down. That’s why so much innovation comes from young people.

Everything great in my professional life, I would attribute to being involved with tech. I’ve learned about how technology can powerfully affect people and business for the better. With eHarmony, I had the opportunity to help people find love. Invoice2go makes a big difference in customers’ lives by helping them have more control of their schedule and get paid faster and look more professional.

You are a serial entrepreneur. What still surprises you? People-related issues come to you in endlessly new sets of circumstances. I’ve built what I think of as my own personal best practices: Be straightforward, be transparent, don’t be overly clever in the way you try to deliver feedback, and make sure people know you care. But new people issues always arise.

What is the same? I just assume that business is going to be hard. That doesn’t mean it won’t be fun, but I wake up every day thinking things will be challenging.

How do you keep that from paralyzing you? What we are doing is important. We are supporting hundreds of thousands of small businesses. I have a responsibility to my colleagues and investors to make this a success. I find great satisfaction in helping other people to be successful in their roles.

Is selling to consumers different or the same as selling to small businesses? They are both hard to reach because there are a lot of them. But when you succeed, they tell a lot of friends. It’s not about having a big sales force; you have to reach customers digitally.

What is the best business book you’ve read? I’m fond of Monetizing Innovation. It explains that you have to develop your products from the ground up to be something your customers want to pay for.

Greg Waldorf received an MBA from Stanford GSB in 1994.
ADAPTATION

How We Ease the Stress of Disasters

A study of post-earthquake phone records in China shows that many survivors find solace in fun.

BY BILL SNYDER

Even if you’re not seriously injured in a major earthquake, recovering from the trauma isn’t easy. Honoring the dead, helping to rebuild, and reconnecting with loved ones all help people feel better in the aftermath of a temblor. But there’s another tactic that hasn’t received much attention: having fun.

When a 7.0 earthquake devastated parts of Sichuan, China, in 2013, researchers wondered if the use of smartphone apps could provide clues to the behavior of survivors. After reviewing the cell phone usage of more than 157,000 Sichuan residents and interviewing hundreds of survivors, professors from Stanford’s Graduate School of Business and three other universities concluded that “having fun has a special role in alleviating the negative psychological impact of disaster.”

Their 2016 study concluded that the use of enjoyable apps like online games, shopping, and music reduced anxiety and that “too much communication — such as blanket media coverage and incessant checking of news sites — can increase the feeling of risk, make people more fearful,” says Baba Shiv, a Stanford GSB professor of marketing who coauthored the study.

“That’s not to say people shouldn’t get information after a disaster. But we believe that the morale of survivors is often overlooked,” adds Jayson S. Jia, an assistant professor of marketing at the University of Hong Kong and the study’s lead author.

The researchers had an unusually rich trove of data to work with. Three months of anonymized cell phone records — including voice calls, text activity, web browsing, and the use of mobile apps — told them what applications people were using both before and after the earthquake. It also told them where the users lived.

The researchers linked that information to detailed records of the quake, which enabled them to determine how much shaking each phone user had endured. Finally, they conducted interviews with 800 survivors to ascertain whether they felt more or less at risk a week after the shaking stopped.

The results were striking. Survivors in areas that had the worst shaking increased their use of all types of mobile applications the most and continued that behavior for three weeks. “But only hedonic (pleasurable) behavior could reduce perceived risk, the negative psychological impact of the disaster,” the researchers write.

Although the finding that hedonic online behavior reduces feelings of risk is “statistically very significant — there’s less than a 5-in-1,000 chance we got it wrong — it is hard to map exactly how scared someone feels,” says Jia, who earned his PhD at Stanford GSB in 2013.

NO SHAME IN ENJOYING YOURSELF

The researchers hope their results may inspire public health officials to rethink post-disaster strategies: “We witnessed an entire population engage in psychologically adaptive activities that reduced their perceived risk,” they write. “The challenge is to also get the people who didn’t engage in as many hedonic activities to do so.”

How that might happen is beyond the scope of the study, but Jia notes that people who engage in entertaining activities after a disaster are sometimes shamed by other survivors. Rather than postponing events like football games, letting them proceed might do more to facilitate recovery, he says.

Indeed, the morale of combat troops, people with every reason to feel stressed and at risk, was improved by USO shows during World War II and the Vietnam War, Shiv notes.

The findings of the earthquake study track with earlier work on how people cope in the wake of disasters. “After September 11, 2001, for example, people reported increases in overeating and going off diets, drinking, smoking, time spent with family and friends, shopping, and church attendance,” Shiv and colleagues from Duke University wrote in a 2005 research paper.

But most work on post-disaster recovery has been based on lab studies, Shiv says. Because the earthquake paper is grounded in the experiences of thousands of people, it’s a departure. “The skeptic in me always wonders if it [the effect both papers uncovered] is manifest in the real world,” he says. “This confirmed it. And the strength of the correlation surprised me.”

Baba Shiv is the Sanwa Bank, Ltd., Professor of Marketing at Stanford GSB.
ASSIMILATION

Fast-Tracking Those Seeking Asylum Pays Off Over Time

The longer refugees are kept in limbo, the harder it is for them to find work.

BY IAN CHIPMAN
In the face of a staggering refugee crisis, countries around the world are straining to find a way to honor international laws and meet humanitarian obligations while respecting the rocky peaks of public opinion. The volatility of the situation is compounded by the fact that policymakers are largely flying blind, says Jens Hainmueller, who teaches political economy at Stanford Graduate School of Business.

“There’s just not a lot of evidence that gets into the nitty-gritty details of what policies actually work,” Hainmueller says. “But they have to do something. It’s a big crisis. You can’t just walk away from it.”

Hainmueller and colleagues Dominik Hangartner, Duncan Lawrence, and Kirk Bansak recently published a pair of studies with complementary insights to help policymakers shape responses that improve the welfare of asylum seekers and host countries alike. The findings suggest that highlighting the economic potential of refugees could boost public support for admitting them. They also found that speeding up decisions on asylum seekers’ claims can have a dramatic effect on their subsequent employability and ability to integrate in their new homes.

UNCERTAINTY’S STEEP TOLL

Sparked by conversations with officials at the UN Refugee Agency, Hainmueller and his colleagues at Immigration Policy Lab, which has branches at Stanford and the University of Zurich, wanted to explore the repercussions of the lengthy wait times that asylum seekers typically endure while their claims are being processed. In Germany, for example, 1.6 million new asylum claims have been lodged in the past two years alone, and it may take until 2019 to process them all.

In particular, the researchers sought to capture how the waiting itself — often a years-long limbo living in temporary housing camps on subsistence-level support — impacts asylum seekers’ ability to find a job after being resettled.

The researchers analyzed high-quality panel data from Switzerland from 1994 through 2004 to find that while some fortunate asylum seekers might receive a decision on
their claim in a few months, many spend years in a state of uncertainty. On average, refugees waited 665 days for a decision. “You don’t know from day to day whether or not someone’s going to tell you that you need to go back to the area that you risked your life to flee,” says study coauthor Duncan Lawrence, the lab’s executive director. As a young Afghan seeking asylum in Sweden described the experience in another paper, “Even in prison they operate with a time limit! ‘This is when you are going to be free,’ they’ll tell you. But here they only tell you to wait, just wait.”

The researchers next examined these wait times in relation to employment prospects. They found that each additional year of waiting reduces the subsequent employment rate by between 4 and 5 percentage points, regardless of a refugee’s age, gender, or country of origin. That means if two refugees enter Switzerland at the same time and one waits for two years before being granted asylum while the other waits three years, the one with the longer wait is nearly 25% less likely to find work.

The researchers say more work is needed to unpack exactly why longer wait times are so debilitating, but they have two theories to explain what might be happening. The first is that the person’s skills atrophy as a result of being out of the workforce for so long. However, the fact that the effect persists whether the person had been a highly educated doctor or unemployed before fleeing their home country suggests a different explanation. The wait time itself — and the stress, apathy, and depression that can accompany it — takes a steep psychological toll that is difficult to overcome.

“Every one of us hates waiting, but imagine your whole life on hold,” Hainmueller says. “Then, once you get the decision that you are allowed to stay because the government acknowledges that you’ve been persecuted, you’re supposed to turn into a productive citizen. But you’ve waited so long for a decision on your future that it’s hard to start over.”

The researchers note that asylum seekers aren’t the only ones who stand to gain by speeding up wait times. For the host countries, even marginal improvements could have a sizable economic impact. They estimate that reducing wait times by only 10% — or around 60 days — could save around $3.6 million per year.

“By speeding up the wait times, which you can easily do by hiring additional caseworkers, you increase the employment of these refugees, which would lead to them paying taxes and the government not having to pay for them while they’re waiting in these camps,” Hainmueller says. “It’s an investment that’s well worth taking.”

OVERCOMING OBSTACLES

One of the primary challenges in addressing these long wait times, Lawrence says, is maintaining a balance between expediency and fairness. Some fear that speeding up the process will simply lead to more asylum seekers’ claims being summarily rejected. However, an even bigger challenge might come from the politically charged atmosphere and nativist backlash sweeping across Europe and many other countries. The researchers hope that their findings can help policymakers on both fronts.

“Allocating additional short-term resources to asylum processing can be challenging for policymakers, given the entrenched ideological views on immigrants and refugees,” says Lawrence. “But our evidence suggests that if you are able to maintain the rigor and fairness of the process, it’s actually less costly in the long term to be quicker.”

These findings square with another recent study conducted by Hainmueller, Stanford political science PhD student Kirk Bansak, and Immigration Policy Lab faculty co-director Dominik Hangartner. The project, whose findings were recently published in Science, pins down the granular factors that shape Europeans’ attitudes toward asylum seekers and highlights the role that economic considerations play in the broader court of public opinion.

The researchers asked 18,000 voters in 15 different European countries to evaluate different profiles of asylum seekers and determine which they would be willing to admit. The profiles varied across nine attributes: age, gender, religion, language, previous occupation, consistency of asylum testimony, special vulnerabilities (such as PTSD), country of origin, and reason for migrating.

Their findings highlight the degree to which Europeans’ attitudes are shaped by humanitarian, economic, and religious considerations. First, they found strong public support toward asylum seekers who are victims of political, religious, or ethnic persecution, which aligns with international law as set out by the 1951 Refugee Convention that stipulates that anyone with a legitimate humanitarian claim must be granted refugee status.

Second, they found that people were more supportive of asylum seekers with greater potential to contribute economically. While it may be intuitive why they would prefer a doctor over someone who was previously unemployed, such considerations are not supposed to matter when weighing the validity of asylum claims.

And finally, the researchers found a strong anti-Muslim bias that persisted across the ideological spectrum of the people they surveyed, though it was twice as strong among right-wing voters as those on the left.

“It’s a mixed message,” Bansak says. “The fact that we find these humanitarian considerations to be important was reassuring. On the other hand, the anti-Muslim bias is certainly concerning, from both a normative and policy perspective, especially given right now most asylum seekers originate from Muslim-majority countries.”

Taken together, the findings underscore the importance for policymakers to consider all of the contours of public opinion and can help them confront the mounting refugee crisis.

“Do these countries have the economic capacity to shoulder the burden?” Hainmueller asks. “I think they do, so it’s really a question of whether the political will is there. Can you sell this to the public? The anti-Muslim bias is a difficult conflict, but highlighting the socioeconomic contributions of these refugees might help ease these social tensions. If these measures can help to better integrate immigrants into the economy and society, I think you will see a spillover into people looking more positively on the whole refugee issue as well.”
Immigration Policy: What Works?

Researchers examine the ramifications of these regulations at a multi-university lab.

To help address the ongoing refugee crisis, an interdisciplinary team of researchers at the Immigration Policy Lab employs state-of-the-art statistical methods, large-scale data sets, and randomized experiments to evaluate different immigration policies and programs in countries around the world.

The lab partners with community-based organizations and governments to test the effectiveness of policies that ultimately impact millions of immigrants and the economic and social prosperity of the countries where they reside. “We ask policymakers and service providers, ‘In your day-to-day work, what are the most important questions that you would want to have answered if you had a team available with the time and resources and skills to actually look at and analyze data?’” Hainmueller says.

“The lab’s overarching research program,” adds executive director Duncan Lawrence, “is to provide better evidence for policymakers and service providers about the impact of the programs and policies that they are implementing or piloting. Currently, when it comes to immigration policies, people tend to rely on anecdotes and ideology rather than evidence. The goal for our lab is to provide an evidence base, so that those with an open mind will have the information to make informed decisions to improve the lives of immigrants and their host communities.”

Immigration Policy Lab

- Established: 2015
- Funded by: Office of the President, Office of the Dean of Humanities and Sciences, Office of the Dean of Research, Institute for Research in the Social Sciences (IRiSS), and Ford Foundation
- Locations: Stanford and Zurich
- Partners: The Europe Center, Stanford Center for Population Health Sciences, Stanford Center for Advanced Study in the Behavioral Sciences, Stanford Center for Poverty and Inequality
- Contact: ImmigrationLab@stanford.edu

Lives on Hold: How Wait Times Impact Refugees

To assess the impact of wait times on refugees, the Immigration Policy Lab analyzed administrative data from more than 17,000 individual asylum cases in Switzerland.

665 days Average Wait Time

10% Reduction in Wait Time

$5.6 million Annual Savings

What Types of Asylum Seekers Are Europeans Likely to Support?

* Difference in the Probability of Support for Gaining Asylum

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<td>Europeans are more supportive of employed asylum seekers, and they are more supportive of doctors than farmers. This pattern suggests that evaluations of the expected economic contribution of asylum seekers play an important role in structuring public attitudes.</td>
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<td>Europeans are less supportive of asylum seekers who are Muslim rather than Christian. This pattern is more pronounced among voters who are on the right of the left–right ideological spectrum.</td>
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Results based on a survey experiment involving 18,000 citizens in 15 European countries
Data-fueled machine learning has spread to many corners of science and industry and is beginning to make waves in addressing public policy questions as well. It’s relatively easy these days to automatically classify complex things like text, speech, and photos or to predict website traffic tomorrow. It’s a whole different ballgame to ask a computer to explore how raising the minimum wage might affect employment or to design an algorithm to assign optimal treatments to every patient in a hospital.

The vast majority of machine-learning applications today are just highly functioning versions of simple tasks, says Susan Athey, professor of economics at Stanford Graduate School of Business. They rely in large part on something computers are especially good at: sifting through vast reams of data to identify connections and patterns and thus make accurate predictions. Prediction problems are simple, because, in a stable environment, it doesn’t really matter how or why the algorithm operates; it’s easy to measure performance just by seeing how well the program works on test data. All of which means that you don’t have to be an expert to deploy prediction algorithms with confidence.

Despite the proliferation of data collection and computing prowess, machine-learning algorithms aren’t so good at distinguishing between correlation and causation — determining whether the connection between statistically linked patterns is coincidental or the result of some cause-and-effect force. "Some problems simply aren’t solvable with more data or more complex algorithms," Athey says.

If machine-learning techniques are going to help address public policy problems, Athey says, we need to develop new ways of marrying them with causal-inference methods. Doing so would greatly expand the potential of big-data applications and transform our ability to design, evaluate, and improve public policy work.

Susan Athey is the Economics of Technology Professor at Stanford GSB.
WHAT PREDICTIVE MODELS MISS

As government agencies and other public sector groups embrace big data, Athey says it’s important to understand the realistic limitations of current machine-learning methods. In a recent article published in Science, she outlined a number of scenarios that highlight the distinction between prediction problems and causal-inference problems and where common machine-learning applications would have trouble drawing useful conclusions about cause and effect.

One question that comes up in businesses is whether a firm should target resources on retaining customers who have a high risk of attrition, or “churn.” Predicting churn can be accomplished with off-the-shelf machine-learning methods. However, the real problem is calculating the best allocation of resources, which requires identifying those customers for whom the causal effect of an intervention, such as offering discounts or sending out targeted emails, is the highest. That’s a harder thing to measure; it might require the firm to conduct a randomized experiment to learn where intervention has the biggest benefits. Athey points to a recent study that showed that in one firm that carried out a more rigorous analysis, the overlap between customers with high risk of churn and those for whom intervention works best was only 50%.

In another case, predictive models already have been used to identify patients who, though eligible for hip replacement surgery, should not be given the operation due to the likelihood that they will soon die of other causes. What those methods fail to solve is the much harder problem of prioritizing patients who would most benefit from the procedure.

“If you’re just trying to crunch big data and not thinking about everything that can go wrong in confusing correlation and causality, you might think that putting a bigger machine on your problem is going to solve things,” Athey says. “But sometimes the answer’s just not in the data.”

That’s especially true in many of the real-world contexts where public policy takes shape, she says.

The gold standard for picking apart correlation and causality is the randomized controlled experiment, which allows for relatively straightforward inferences about cause and effect. Such experiments are commonly used to test the efficacy of new drugs: A randomly selected group of people with a particular illness is given the drug while a second group with the same illness is given a placebo. If a significant portion of the first group gets better, the drug is probably the cause.

But such experiments are not feasible in many real-world settings, Athey says. For instance, it would be politically and practically impossible to conduct a massive controlled experiment examining what happens when the minimum wage is raised or lowered across a variety of locations. Instead, policy analysts have to rely on “observational data,” or data generated in ways other than through random assignment. And drawing useful conclusions from observational data — which are often muddied by uncontrolled and thus unreliable input — is a challenge beyond the reach of common predictive methods.

It’s here that Athey hopes her research will push the envelope of what machine learning can accomplish. Combining pure prediction with causal inference, she says, will get us closer to being able to address the really hard problems that involve sussing out all of the alternate outcomes that could result from implementing different policies.

“How can we continue to modify and build new techniques that really fully exploit big data?” Athey asks, noting that many public policy problems have questions of causal inference at their core. “That’s the really hard stuff, and you have to proceed with caution to understand the effect of something. But that’s most of the world.”

COMPUTATIONAL POWER TO THE PEOPLE

While those advances may still be around the corner, Athey says the momentum of big data and machine learning in academic research and practical applications is invigorating. “The gap between research and practice, which used to be insurmountable, is disappearing,” she says. “It’s so cool when our research gets adopted within months.”

She finds it especially gratifying to witness the widespread adoption of predictive methods that not too long ago were the exclusive province of a specialized cadre of data scientists. “It’s amazing, because you’re empowering people who in a previous generation wouldn’t have used a computer for anything other than word processing,” Athey says. “Now it’s not just the geeky engineers, but people at high levels of a company are interested in the most recent research. They recognize the power of being able to use data to optimize decisions and investments. They’re building big-data models and open-source software to make great predictions with cutting-edge techniques. It’s been completely democratized, and I think that’s a huge success story.”

“You might think that putting a bigger machine on your problem will solve things. But sometimes the answer’s just not in the data.”
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“Look for the smartest people, and do something you feel a little unprepared to do.” —Yahoo CEO Marissa Mayer, for Stanford GSB’s View From the Top speaker series Watch: http://stanford.io/2ld1zwN
The Takeaway

Buying a Kidney
One way to reduce the three-year waiting list for kidney transplants in the U.S. might be to allow donors to sell them on the open market, as they do in Iran.
— Mohammad Akbarpour

Use Many Tools
Too many global firms deploy only one instrument to manage foreign contractors. Companies need to realize that no single method will enable them to ferret out unethical suppliers.
— Hau L. Lee

Big Data’s Shortcoming
The challenge is moving beyond prediction and fully exploiting the potential of machine-learning techniques to unravel cause and effect.
— Susan Athey

Too Many Choices?
Consumers do in fact like bigger selections — but much depends on where they are in the decision-making timeline.
— Itamar Simonson

The Art of Startup Team Building
There’s a deep well of research on the product, strategy, structure, and funding side of startups, but there isn’t a lot on the people side.
— Lindred Leura Greer

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The Lean Startup: How Today’s Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses, by Eric Ries, 2011
http://stanford.io/2lMSWHd

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“Just Supply Chains,” by Joshua Cohen and Richard Locke, Stanford Center on Democracy, Development, and the Rule of Law
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