Deloitte University Press

A GovLab report

The new government leader:

Mobilizing agile public leadership in disruptive times

About the authors

Katherine Ryan is a manager in the Federal Human Capital consulting practice of Deloitte Consulting LLP, where she applies data-driven, innovative approaches to helping agencies build robust talent programs and leadership capabilities. Dr. Ryan has published empirical research related to diversity and cross-generational issues in the workplace and recently served as a fellow in Deloitte's GovLab. She holds a PhD in industrial/organizational psychology from George Mason University and a BA in psychology and Spanish from the University of Notre Dame.

Abed Ali is a manager in Deloitte Consulting LLP's Federal Strategy practice, where he has primarily served homeland security and federal health clients since 2008. He is a former Deloitte GovLab fellow and is currently helping the Transportation Security Administration analyze its portfolio of capabilities to support strategic decision making. Before coming to Deloitte, Ali practiced law for several years, primarily as a legal aid attorney representing low-income clients. He obtained his JD at Tulane Law School, his masters in public policy at American University, and his BA in business and psychology at Washington University in St. Louis.

Contents

Executive summary | 1

The new government leader | 2

New leadership skills | 5

Leading in turbulent times | 17

Endnotes | 18

Executive summary

TRADITIONAL command-and-control leadership styles may no longer be adequate for the challenges that government faces today. Effective government leaders see the need for new skills to meet increased expectations for citizen interaction and to cope with an increasingly complex operating environment.

Six new behaviors will define tomorrow's successful government leader:

1. **Agile integration** recognizes the complexities and interdependencies of public, private, and nonprofit missions. Leaders adept at agile integration connect people, information, and resources, and work with other organizations and private citizens to solve complex problems that defy siloed approaches.

2. **Quiet transparency** involves the willingness to question and adapt without having all the answers, and to hold open, consistent exchanges with a variety of audiences through various media. A leader's ability to be quietly transparent sets the stage for trust and engagement with teams and constituents.

3. **Digital aikido** is the use of digital media to gauge attitudes, build influence, and motivate action through social networks—to shape and build energy on these platforms rather than resist it. Leaders can use digital aikido to assess the mood, opinions, and motivations of people within online social systems, and tailor their moves accordingly.

4. **Horizon scanning** guides strategic decision making by analyzing patterns across disciplines and environments and testing assumptions about current and future trends. Leaders who are good at horizon scanning develop questions tied to strategic priorities and use multiple, sometimes contradictory, hypotheses to test those questions.

5. **Rapid prototyping** facilitates learning through experimentation and the launch of multiple prototypes in small, controlled tests. Government leaders adept at rapid prototyping may generate several potential solutions and launch them all in small pilots, to see which ones work and which successful aspects can be combined.

6. **Rebel rousing** involves seeking out and encouraging individuals who question the status quo, creating a safe environment for contrarian thinking and challenges to established practice, and setting a clear purpose while allowing for flexibility in how the purpose is achieved. Listening to "good rebels" can be a safe way to reveal problems and potential obstacles, decreasing the likelihood that leaders will be blindsided by dissenters or "bad rebels."

The new government leader

AUSTIN'S South by Southwest Interactive Conference is an increasingly important annual gathering of the digerati of global technology, social media, and innovation. When the crowd in a packed and humid hotel conference room stood in applause, federal agency administrators were probably the last people you would have expected to see on stage. Yet Todd Park, US chief technology officer, and Macon Philips, White House director of digital strategy, had just held the attention of a room full of entrepreneurs, venture capitalists, and technology pioneers, becoming bona fide information-era rock stars.

Todd Park is part of a growing number of government leaders who recognize that the traditional leadership styles made for command-and-control environments are no longer sufficient. These leaders see the need for new approaches and tools to get things done in a world that is increasingly "volatile, uncertain, complex, and ambiguous."[1]

Park inspires trust by being atypically open about what he wants to achieve and the challenges he faces. Like many leaders, he is extremely engaging in person; his primary engagement tool, however, is social media, which he uses to hold open and honest discussions with his employees and constituents. He has more than 18,000 Twitter followers and a Klout score—a measure of the ability to drive action on social networks—of 64 out of 100 (former Secretary of State Hillary Clinton's is 61).[2]

Park believes that social media platforms "should be a standard-issue part of being a 21st-century government leader. . . [that] every government leader should have a Twitter account and really be using it to talk to folks and get insight about what to do."[3] He integrated online discussion into his introduction of the Presidential Innovation Fellows program, a mash-up of citizen-government innovators, and hosts Twitter "office hours" to communicate with his colleagues and the public.[4]

Park possesses another characteristic that is unusual, at least in government—a truly entrepreneurial spirit (prior to starting government work, he launched two health care startup companies).[5] He brought a startup mentality of "think big, start small, scale fast" to his leadership role, and he continues to challenge conventional wisdom, working with others to find new and better ways of achieving his mission.[6]

As a leader, Park realizes that anyone, not just the people who work for him, can be a "follower" who can help him realize his vision for government service.[7] He frequently uses Joy's Law (attributed to Bill Joy, co-founder of Sun Microsystems) to describe his approach to getting talented people to solve complex problems: "No matter who you are, you have to remember that most of the smartest people in the world work for somebody else."[8]

For instance, Park has created avenues that allow citizens to create new applications for government health data through his Datapalooza competitions. These competitions attract data geeks, entrepreneurs, federal bureaucrats, and health care professionals who use the US Department of Health and Human Services' (HHS's) publicly released data to create hundreds of health care applications that have the potential to improve individual and community health.

Figure 1. The new government leader: Influences and impacts

Graphic: Deloitte University Press | DUPress.com

In his previous position as CTO of the HHS, Park turned his attention to his own employees, making it a point to listen to their ideas and telling the most innovative among them, "I'll be your cover, I'll back you up. I want to see your ideas succeed."[9] He wants innovators to work in "a lean startup mode to score a lot of points and deliver significant results."[10]

We need more leaders like Todd Park in government.

Why change? Shifting expectations and increasing complexity

The modern government leader needs new skills to meet higher expectations for citizen interaction and to cope with an increasingly complex operating environment.

Citizens' expectations are changing. More and more, they expect transparency from and engagement with their institutions and the people that lead them, and want real-time interactions with these people, "anytime, anywhere, and on any device."[11] These informal interactions can be surprisingly powerful; Newark Mayor Cory Booker leads a city with a population of less than 300,000, but has 1.3 million followers on Twitter.[12]

This thirst for engagement, moreover, does not disappear when people clock in at work; employee expectations are changing as well. At home, people can Yelp a restaurant, tweet "at" (@) customer service, and poll Facebook friends in seconds.[13] At work, they also want fast responses and feedback, particularly the Millennial generation (those born between the late 1970s and early 2000s).[14]

These Millennials, the next generation of government employees, expect real-time access to leaders and information.[15] Research shows they sometime value access and connection even more than salary when choosing a job.[16]

Finally, increasing complexity and interconnectedness demand new skills from government leaders. Agencies and their leaders are being asked to solve problems that don't have a single solution, societal problems that do not fall in the province of a single agency or department. Tomorrow's government leaders must influence individuals, networks, and institutions that they do not and cannot control.

The new leadership

Leaders who recognize the need to find new ways of engaging, shaping, and creating can forge organizations capable of dealing with changing expectations and increasingly complex problems. Six new behaviors will likely define tomorrow's effective government leader: agile integration, quiet transparency, digital aikido, horizon scanning, rapid prototyping, and rebel rousing. People who develop these competencies will:

- **Engage:** Cultivate trust and inclusion to invite ideas from anyone, anywhere
- **Shape:** Build agile teams that can adapt to match challenging environments and stay ahead of future needs and problems
- **Create:** Establish platforms and avenues for generating, refining, and disseminating new ideas, solutions, and products to meet citizen expectations

New leadership skills

THEORIES and models of leadership have a rich history. Decades of research have defined the enduring characteristics of effective leaders.[17] Experts agree, for example, that good leaders develop and communicate a clear and compelling vision of their goals and make "well-informed, effective, and timely decisions."[18]

The federal Office of Personnel Management has defined the ideal characteristics of government leaders—competencies such as strategic thinking, team building, and conflict management.[19] The emerging challenges of today, however, call for an additional set of skills. Our research and interviews with government leaders have led us to define six new characteristics government leaders need.

1. Agile integration

Agile integration recognizes the complexities and interdependencies of public, private, and nonprofit missions, connecting people, information, and resources to realize both interrelated and seemingly unconnected objectives.

In the past, we relied on individual institutions to aggregate scarce expertise, information, and technology to solve problems. Today, however, expertise and information have become so widely distributed that leaders must be able to gather and use people and resources not under their direct control.

Agile integration allows leaders to work with other organizations and private citizens to solve complex problems that defy siloed approaches. According to the Center for American Progress, for example, efforts to reduce childhood obesity:

> . . . are not something that belong to the Department of Health and Human Services alone—they need to belong to the agencies regulating the food, education, and other industries as well. Nor can these strategies be something the government does to society; they need to be undertaken with families.[20]

Thus the information, energy, and solutions to an organization's biggest challenges frequently reside in areas beyond its control. For a leader, this means a search for the people, ideas, and groups that can be integrated to solve problems.

A **competency** is a measurable pattern of knowledge, skill, abilities, behaviors, and other characteristics that an individual needs to perform work roles or occupational functions successfully.

(Source: OPM.gov)

Connections

In his bestseller *The Tipping Point*, Malcolm Gladwell used the term "connector" for persons able to span several very different worlds and bring them together to solve problems.[21] In an increasingly complex and interconnected world, government leaders must be able to use relationships and social ties (together called "social capital") to create value from networks.[22] Just as a symphony conductor manages the flow of musical notes from different musicians and instruments to make music, leaders adept at agile integration must integrate knowledge, experience, and resources from different people, communities, and institutions.

Technological tools that promote connections and real-time information sharing can give a leader near-immediate access to networks of people and organizations assembled for a common purpose, as well as the ability to scale resources quickly and pursue goals more effectively.

Case study: Marc Cherna—bringing agile integration to Allegheny County

Marc Cherna, director of Allegheny County, Pennsylvania's Department of Human Services (DHS), is an example of a leader adept at agile integration. Cherna was tapped to head the newly created DHS after a successful reform of the county's child welfare system. One of the biggest problems he saw was the uncoordinated and inefficient delivery of human services in the community.

"I learned a lot about group dynamics and motivating people."

-Marc Cherna

In essence, he identified a classic government problem: the silo. Several departments merged under the new umbrella of DHS had delivered separate services, often to the same families. One offered behavioral health (mental health and substance abuse) services; one, prevention and safety net services such as homeless services and after-school programs; another, services to seniors; and still another, child welfare services.

The same households often needed more than one of these services, yet the individual departments never communicated effectively. For instance, one department might be providing senior services to a father while another provided mental health services to his son. Social workers passed one another on the doorstep with no idea of each other's purpose.

Recognizing that he would need funding to modernize and coordinate his operations, Cherna reached out to local foundations to create the Human Services Integration Fund. This fund, modeled on a venture capital operation, pledged to support ideas and initiatives developed through collaboration among business, university, and community leaders, providing capital based on the strength of the business case. This not only provided for objective analysis of these plans, but also created a flexible funding stream for the reorganization of DHS that would have been impossible to accomplish with restricted public sector dollars.[23]

For expertise and advice, Cherna enlisted local university experts such as professors of public policy, business, and the organizational sciences. He also sought assistance with issues such as human resources and the creation of economies of scale (subjects which he knew he and his staff lacked the latest expertise) by drawing on organizations such as the local Chamber of Commerce. Perhaps most importantly, Cherna turned to the community itself to identify a new vision for the department, which created instant awareness, buy-in, and support.

Traditional leadership vs. tomorrow's leadership

Leadership is often described as "a process of social influence,"[28] and factors that affect the legitimacy, credibility, and influence of leaders are a central aspect of leadership. In industrial-era models of organizational hierarchy, leadership was derived from traditional sources of power such as title and authority. Leaders held command and control over information, resources, and rewards (and punishments) by virtue of their position in a hierarchical structure. Today, title and authority are less meaningful; organizations and the problems they solve are more distributed, so influence is more distributed. Tomorrow's leaders take a flatter, more transparent approach and create relationships and influence that go beyond hierarchy.

In essence, Cherna created and used a diverse external network to create a new model for human service delivery that resulted in drastic improvements compared to the national average for service outcomes, such as triple reductions in foster placements and three times greater permanency for children.[24]

Using different people and groups from outside the organization is the essence of agile integration.

Developing agile integration

The knack for integrating perspectives, resources, and relationships is not something readily taught in a classroom. It's worth noting that Cherna's prior work experience prepared him to think holistically about his challenge and grow and use a valuable cross-sector network. Prior experience in both direct service (with United Way) and administrative oversight (with the New Jersey state government) informed the way he now leads Allegheny County's DHS.

With United Way, he recalls, "I learned a lot about group dynamics and motivating people." While at United Way, he built relationships with corporate leaders that not only yielded volunteers but also provided him with corporate mentors. In his time with New Jersey, he saw how public servants sometimes simply justified the status quo rather than looking for objective evidence to judge program effectiveness. He describes this varied experience as "kind of a design-your-own rotational assignment," with positions offering diverse learning opportunities.[25]

As Cherna's biography suggests, leaders can become agile integrators through varied experience. Fortunately, the Millennial generation of federal workers wants and even expects career mobility.[26] As David Bray, a US government senior executive, suggests:

> In general, Gen X and Millennials will be mobile by choice, intentionally moving within the government to a different agency or between government and the private sector: loyal to a profession versus a specific role . . . I would venture that most would prefer to be mobile by choice not mandate.[27]

Millennials are well suited to the experiences that cultivate agile integration, and they will be inspired by leaders who can maintain and use cross-boundary networks. Older leaders, who may not be accustomed to changing jobs and careers as frequently, can develop

these skills by seeking out experiences and people that expose them to disparate ideas, individuals, and resources.

2. Quiet transparency

Quiet transparency involves the willingness to question and adapt without having all the answers, and to hold open, consistent exchanges with a variety of audiences through various media.

Today, citizens and employees alike increasingly expect to have access to the leaders who serve them and expect to be consulted about the services delivered. A leader's ability to be quietly transparent sets the stage for trust and engagement with teams and constituents.

Transparency is hardly a new idea for leadership, but today it has taken on additional meaning and urgency simply because people in general are less satisfied with being passive recipients. They expect to be trusted to participate in solutions. In the information era, transparency and involvement are expected; anything else is suspicious.

Openness breeds partnership

A leader's trustworthiness, credibility, and, ultimately, influence comes from openness coupled with an appropriate degree of humility. These build trust and encourage others to participate. As Jose Rico, executive director of the White House Initiative on Educational Excellence for Hispanic Americans, suggests, the one thing a leader should never say is, "I'm right."[29] Leaders willing to acknowledge their own limitations and forego the need to have all the answers open up the conversation, empowering employees and network partners to own problems and take action.

Quiet transparency, moreover, transforms would-be critics into partners in the problem-solving process. Employees or citizens who might look for holes in solutions from a leader who acts like a "chief of answers" will redirect their energies to contribute for a leader who admits to not knowing all the answers.

Case study: Vineet Nayar—pulling answers from the crowd

Vineet Nayar, CEO of HCL Technologies, is a great example of quiet transparency. He invited his front-line employees, rather than managers or the board of directors, to help solve a budget crisis. When he told his employees that HCL had to cut expenses or cut jobs, they responded by doing "something truly amazing. They banded together and developed 76 ideas to save the company $260 million with no layoffs. One significant idea was to abolish flextime hours, which led to massive savings on electricity and transportation costs."[30]

Instead of pushing out an "answer," Nayar asked for inputs and found his workers had millions of dollars' worth of great ideas, many of which may have been obvious only to ground-level employees. In sum, he used quiet transparency to extract expert answers, empowering his employees, gaining buy-in, and saving money and jobs in the process.

Developing quiet transparency

Leaders who understand the concept of quiet transparency will seek ways to get employees involved in solving problems. A bottom-up approach to generating solutions empowers teams and creates trusting relationships.

Fostering this environment requires the leader to:

- **Ask:** Resist the temptation to tell. Instead of making recommendations, ask questions; ask for help. In particular, ask "why?" and focus on listening to all ideas.

- **Show:** Actions still speak louder than words. As often as possible, make leadership decision making transparent, on- or offline. Look for ways to have conversations that reveal what drives a concern, decision, or initiative.

- **Share:** Relying on two-sentence public relations statements is a recipe for failure. Talk through your thoughts in real time. This

creates a sense of shared consciousness and purpose that prompts people to follow you and act in ways that further your purpose.[31]

3. Digital aikido

Digital aikido, a term coined by social media specialist Chris Heuer, is the use of digital media to gauge attitudes, build influence, and motivate action through social networks—to shape and build energy on these platforms rather than resist it.[32]

Sixty percent of all US adults now use some sort of social networking platform.[33] Citizens and employees now expect to learn, communicate, and collaborate on digital platforms and to use them to organize for societal impact. Government leaders must develop the ability to engage and influence an online society.

As more and more jobs are performed online, the new employment model will be on-demand, virtual, and remote. In fact, some would argue that this new model is already here. Experts project that within a few years, more than 1.3 billion people will work virtually.[34] Federal work is following the trend, with agencies embracing telework and using alternative work schedules to deliver services better, faster, and cheaper.[35] Millennials expect to use social media to research, communicate, and collaborate.[36] In combination, these trends illustrate the looming need for leaders to be able to listen, influence, and motivate through digital media.

Digital influence

With the wisdom of the crowd at one's fingertips, factors such as positions, titles, and credentials are less and less accurate indicators of influence. In a virtual world, where position and title are poor proxies for impact, body language is absent, and verbal tone is illusive, a leader's reputation and relationships must be developed primarily through digital media.

Leaders of the future will need to be well versed in the principles of social psychology (the emergent properties and dynamics of groups) and epidemiology (patterns and spread of viral information) to shape critical masses of energy and direct the spread of information within a digital crowd. Leaders can use digital aikido to quickly assess the mood, opinion, and motivation of people within online social systems and tailor their moves accordingly.

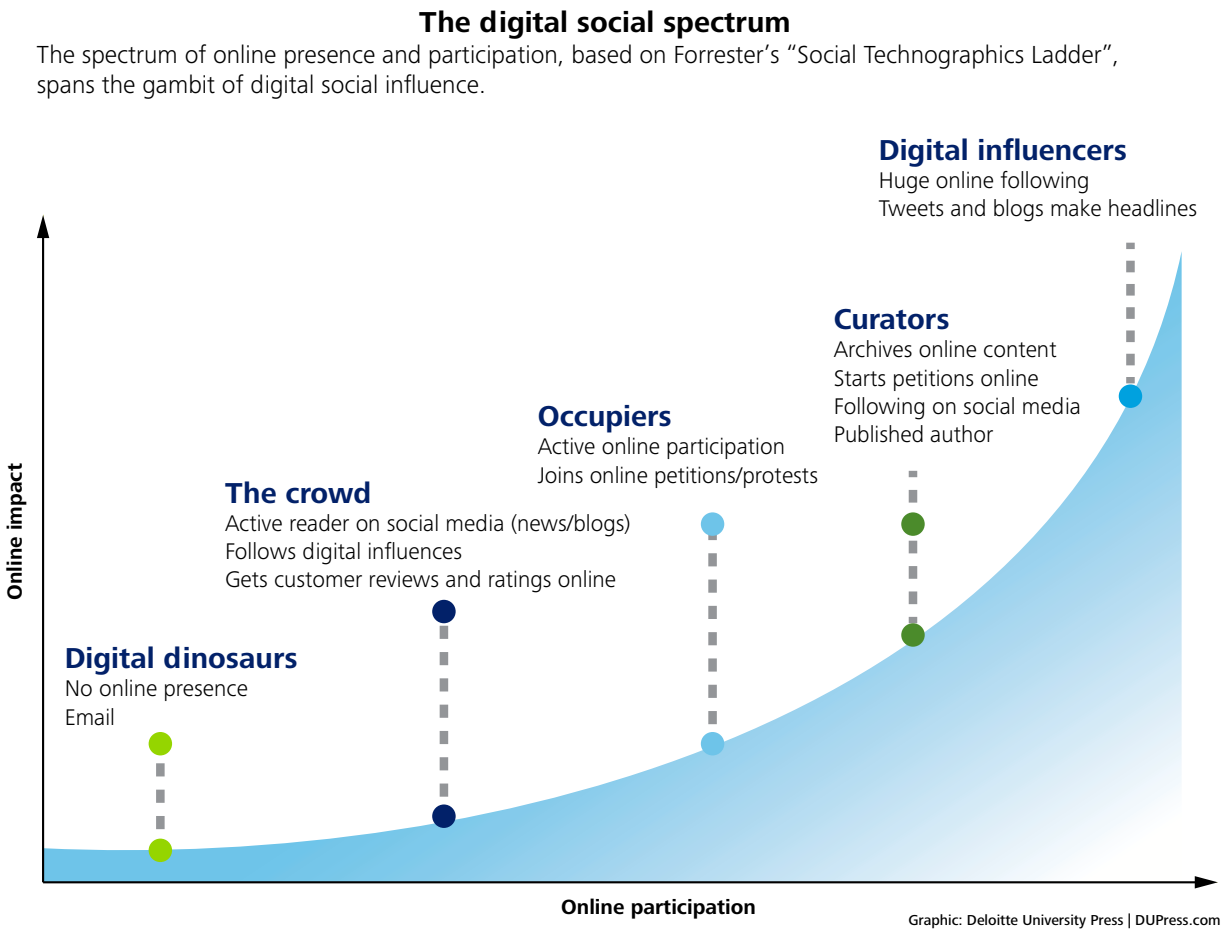
Aikido

"Aikido" is a term borrowed from a Japanese martial art whose philosophy is not based on attacks or advances, but rather on taking the energy from an opponent's swing and redirecting it to your advantage. The explosion of faster data networks, mobile devices, and social media has made it easier to collect and motivate a mob to action. Tomorrow's leaders will apply strategic digital pressures to manage the flow of energy and motivate the action or redirection of smart mobs, much like an aikido warrior physically redirects the energy of an opponent.

Case study: Are you more digitally intelligent than a fourth grader?

A class of Massachusetts fourth graders who loved the classic Dr. Seuss book *The Lorax* were excited when Universal Studios announced it was making the book into a movie. When the class began seeing promotions for the film, however, they felt it was missing the story's environmental message. They created a campaign on Change.org, an online platform where users can start online petitions. The Lorax Petition Project went

Figure 2. The digital social spectrum



viral, garnering more than 57,000 signatures in just over a month, including support from Hollywood celebrities and musicians.

Leaders at Universal Studios were listening, and rather than ignoring the message they chose to take advantage of this viral energy, injecting the environmental message into their advertising—making the petitioners happy and creating positive press for the movie.[37]

Digital aikido is about knowing how to listen to digital conversations and shape them to the leader's advantage. Like the Universal Studios executives, governmental leaders need to become attuned to the crowd and use their digital aikido skills to navigate an environment that may affect their services or key projects at a moment's notice.

Learning digital aikido

To develop this skill, carefully choose platforms for your efforts based on audience and message; don't overextend yourself. Once you have moved up through the digital social spectrum (see figure 2), you can quantify your own impact and begin to direct the energy of digitally mobilized groups. Once in motion, these groups take on a life of their own, so it is better to practice first with small, scalable instances.

Most importantly, do not try to stop or take over an emergent social media community; it is counterproductive—and ultimately impossible, like trying to halt a stampede. Successful leaders know that virtual ecosystems do not respond well to digital dictators; they crush them. Thus with digital aikido, we *direct* attention and energy, rather than force it.

4. Horizon scanning

Horizon scanning guides strategic decision making by analyzing patterns across disciplines and environments, and testing assumptions about current and future trends.

Government's external environment is increasingly complex and unpredictable. In a rapidly changing world, leaders can't always rely on lessons learned from previous experience. In a disruptive and unpredictable environment, leaders may be called upon to act in the face of near-infinite and often conflicting information. Marc Cherna described the challenge as "all this data, but no *information*."[38]

Defining the problem

Horizon scanning is about knowing what you're looking for. Advanced data analytics techniques can reveal insightful patterns, relationships, and coincidences—but *which* problem are you solving? Leaders who are good at horizon scanning will use technology to filter data, but their ability to define a strategic problem is what distinguishes them. These leaders develop questions tied to strategic priorities and can use multiple and sometimes contradictory hypotheses to test those questions. Perhaps counterintuitively, this approach may be the most risk-averse model available to government.

Case study: At the VACI—scanning the horizon

Jonah Czerwinski, director of the US Department of Veterans Affairs' Center for Innovation (VACI), recently received a call from a stranger. This cold call came from the director of a startup interested in gamifying depression therapy, using game mechanics to engage users.[39] He spoke at length about an unconventional way to treat depression with easily accessible technology. Czerwinski receives calls like this daily, and that's no accident; it is a direct result of VACI's ability to clearly define a problem on the horizon and remain open to any response from anywhere.

"We had Google Ventures attend a government webinar. That's got to be a first."

-Jonah Czerwinski

VACI's mission is to lower the barriers to entry for good ideas.[40] Czerwinski describes his role as looking into the vast, chaotic, and dynamic expanse that is the future to define problems on the horizon. To do this, he recommends:

- **Talking to everyone:** Czerwinski engages as many different people and perspectives as he can to scan the horizon, including front-line staff entrepreneurs and special advisors such as serial entrepreneur Steve Blank (creator of the lean startup movement) and Craig Newmark, founder of Craigslist.

- **Reaching for the right question:** These conversations allow Czerwinski to carefully articulate the core problem and define a common platform for testing solutions. For instance, he notes, "Instead of saying 'This is an IT challenge' or 'a health security challenge,' we said, 'We have a sterilization challenge. How do we sterilize reusable medical equipment [in a way that] that removes human touch and error? [I]f you can sterilize and automate, we want to hear about it.'"[41]

- **Casting a wide net:** Being clear about the problem and remaining open to solutions from anywhere allows VACI to engage players that do not typically see government as a customer. Instead of the typical Beltway standard industry day, Czerwinski uses webinars to attract venture capitalists and Silicon Valley titans. "We had Google Ventures attend a government webinar. That's got to be a first," says Czerwinski.[42]

Czerwinski also spends time defining impacts. Leaders should be able to set up simple rules and systems to define future success. For VACI, the rules are simple: A health care solution has "impact" if it improves access, increases quality, lowers cost, and increases customer satisfaction. The important thing, Czerwinski says, is that VACI is open to hearing about any testable solution that fits as many of these impact criteria as possible. Leaders adept at horizon scanning can articulate problems and impacts that prepare for the future—and shape it as well.

Today's citizens do not expect new products to be perfect, but they do want them fast.

Learning horizon scanning

Horizon scanning requires a high level of engagement with a diverse set of people and a disciplined focus on strategic priorities in an external environment that Patrick Littlefield of VACI describes as "turbulent, foggy, and chaotic."[43] Stepping into that fog requires a high tolerance for ambiguity and the ability to keep pathways open for multiple solutions to a problem. Littlefield and others have the following advice for leaders scanning the horizon:

- **Focus on asking the right questions and defining simple rules to assess impact:** The horizon is ill defined; it is the leader's job to create guideposts within that fuzzy future state to show followers and partners what good ideas might look like, and avoid succumbing to "the paralysis that often strikes when . . . confronted with too many alternatives."[44]

- **Examine multiple and even contradictory hypotheses:** Keep talking to people and be willing to assess multiple models for success. You'll need room for contradictory signals from the marketplace. Rather than settling on a single option, be willing to set up multiple pilots. VACI, for example, is running not one but four pilots to evaluate technology used to attach prostheses to amputees.

- **Check your bias at the door.** Be careful to acknowledge and avoid your own bias in hypothesis building. Everyone will be attracted toward certain directions, but if they're scanning the horizon for novelty, leaders must keep their bias in check to maximize value in seeking alternative answers. Be open to all of them.

5. Rapid prototyping

Rapid prototyping facilitates learning through experimentation and the launch of multiple prototypes in small, controlled tests to discern patterns across prototypes to determine what does and does not work.

Today's citizens do not expect new products to be perfect, but they do want them fast. The market's most valuable companies now release innovations as quickly as they can and rely on customer feedback to improve and refine them. Compared with Google, Facebook, and Apple, government can seem as nimble as a 50,000-ton battleship. But government leaders comfortable with rapid prototyping can create an environment in which new public initiatives are developed and released quickly to meet

citizen expectations and gain valuable feedback in real time.

Today, many government pilot programs are simply scaled-down versions of an already chosen solution. The value of rapid prototyping of ideas and program designs is that a simple prototype, released to core constituents early in the process, provides valuable feedback and insights *before* a final choice is made.

Government leadership expert Tom Fox believes that when government fails, it is usually because "it puts all its eggs in one basket. It invests in and deploys one solution without testing it first."[45] Jonah Czwerwinski of VACI, profiled above, focuses on asking the right questions and defining simple rules for impact as a way to create guideposts for rapid prototyping. Doing so has allowed VACI to spread the risk instead of betting the farm on a single approach. While innovation can seem risky for a public agency, imperfect prototypes are, perhaps counterintuitively, cheaper and less risky, because new ideas are tested with end users before significant time and resources are expended.

Cheap and fast

Government leaders can learn a lot from technology startups. Many of the most innovative technology companies have followed, at least to some degree, what entrepreneurial expert Eric Ries calls the Lean Startup approach.[46] In essence, this method employs a "minimally viable product" that can be released quickly to a group of key users (or "super-users") as a prototype. The performance of that prototype is closely measured and used to improve and refine it or to suggest a course correction. This "build-measure-learn" feedback loop has produced innovations big and small, from Facebook to an e-paper watch for mobile devices funded via a Kickstarter campaign.[47]

Government leaders adept at rapid prototyping will find ways to generate several potential solutions and launch them all in small pilots, to see which ones work and which successful aspects can be combined. While the federal government has embraced the benefits of crowdsourcing to generate new ideas and private solutions (see Challenge.gov and other crowdsourcing initiatives stemming from the America Competes Act), rapid prototyping to develop, test, and improve public services is still an emerging concept.

Case study: David Uejio—rapid prototyping at a government startup

David Uejio is president of Young Government Leaders, an organization of federal, state, and local government employees—and is adept at rapid prototyping. He recognizes that government needs to embrace innovation and faster solutions because:

> The biggest challenges confronting government in the next 10 years or the next 20 years are going to look less and less like the challenges that we've faced in the past. The cycle times will be shorter, the nuances will be greater, and the need for technical expertise will be greater.[48]

As the lead for talent acquisition at the Consumer Financial Protection Bureau (CFPB), Uejio's experimental and inquisitive leadership style has been welcomed and encouraged.

From day one, Uejio took an innovative approach to building a talent acquisition strategy. "I've always been a fan of [experimentation], but I'm an even bigger fan these days," he says. "The Web is an excellent place to experiment and take a data-driven approach to see what works."[49]

"We knew it was a success the moment we saw the application response."

-David Uejio

For example, Uejio developed a nine-week recruiting campaign during which his team created different versions of an online job posting and then tracked the website traffic yielded by each. By checking such patterns, Uejio demonstrates his willingness to accept the imperfect and his commitment to continuous improvement through experiment and iteration.

In his career as a civil servant, Uejio has noticed that successful leaders "do not prescribe a lot of parameters for how the problem is solved." Even before his first day at the CPFB, senior leadership came to him with a problem: The CFPB's user-experience and user-interface specialists were top-notch, but completely overwhelmed by their workload. Instead of imposing a solution, they told him, "This is the problem; you're expected to help solve it. Go solve it.'"[50]

Over Thai food late one night, Uejio and the team settled on creating a two-year design and technology fellows program to attract top-notch Web designers and developers to the CFPB. Through applicant-centric iterations, they settled on three key recruiting principles: use everyday language targeted toward the people they wanted to hire; highlight the opportunities to be challenged and inspired by other spectacular coworkers (after all, talent attracts talent); and illustrate both *what* work the candidate would be doing as well as *why* the work would be important and impactful.[51] "We crafted a very contemporary recruiting strategy . . . with a great candidate experience and a deliberate decision to bring people here for a [certain] period of time," says Uejio.

"We knew it was a success the moment we saw the application response," said Matt Burton, acting chief information officer at CFPB.[52] "We got over 600 applicants, many from well-respected private sector development shops around the country, and we ended up taking on 30 truly spectacular developers as fellows." These fellows are only at the CFPB for two years, and they're already making a big impact. For instance, they have already helped to revamp the CFPB's Paying for College tool, an online resource that helps high-school students make informed financial decisions about paying for college. That new-and-improved tool won an industry award less than six weeks after it was launched. At the CFPB, Uejio has noticed that "there's a lot of careful reflection going on to build continuously evolving processes that ensure we aren't left less agile later."

When leaders give people the room to experiment, as Uejio experienced firsthand, people are less likely to become trapped in the status quo. This allows organizations to create faster, cheaper, and more adaptable solutions.[53]

Learning rapid prototyping

Rapid prototyping requires leaders to encourage and reward the rapid design and testing of new solutions, rather than the incremental, risk-averse planning process typical of many government initiatives. To develop this competency, leaders should practice creating an environment where experimentation can thrive.

- **Expect and support high performance:** Create systems that encourage and support experimentation. "You [craft] better solutions when people are allowed to, empowered to, and expected to lead at their level—even when [that level] is quite high," Uejio says.

- **Embrace productive failure:** Leaders must practice becoming comfortable with trial and error, both for themselves and their employees.

- **Start small:** "The comparative risk on small projects is much lower," says Uejio. His advice? "Take bite-sized things."

6. Rebel rousing

Rebel rousing involves seeking out and encouraging individuals who question the status quo, creating a safe environment for contrarian thinking and challenges to established

practice, and setting a clear purpose while allowing for flexibility in the way the purpose is achieved.

Modern society brings an increased ability to question and alter the status quo. The ethos of the hacker culture has become mainstream; rebels such as Steve Jobs and Mark Zuckerberg are justly celebrated for their innovations. Social media and collaboration platforms make it easier for contrarians to speak up and be heard. Millennials in particular expect to be heard, regardless of their rank or tenure, and will be inspired by leaders who are open to them. Learning to identify, develop, and embrace "good" rebels—those who have the good of the mission at heart—will likely lead to more productive and more efficient organizations.

Rebel rousing explained

Rebel rousing is about how a leader engages people who have countercultural or "positively deviant" ideas.[54] Tomorrow's successful leaders will seek out "good rebels" to build regular dissent in organizations. Research shows that such individuals are willing to point out problems when others are afraid to, see new ways to solve problems, and are often first to try new approaches.[55] According to researcher and author Lois Kelly:

> No one person—or handful of people—has all the answers or the best answers. To activate the inner rebel in their people, leaders need to set a clear vision, ask questions that challenge people to think in new ways, and create safe, collaborative ways for people to get involved in creating the ideas that support the mission.[56]

Listening to good rebels at the outset is a safe way to reveal problems and potential obstacles, decreasing the likelihood that leaders will be blindsided by dissenters or "bad rebels" farther down the road. As Marc Cherna said, "I want robust dissension . . . the worst thing you can have is someone who, when you say 'Jump,' they say, 'How high?'"[57] By collaborating with good rebels, "new ideas get born, new angles get explored, and risks get mitigated."[58] You deal with conflict up front, rather than encountering passive aggressiveness on the back end.[59]

Robust dissent by rebels, good or bad, will naturally create conflict: It's a matter of making sure it's the right kind of conflict.

Robust dissent by rebels, good or bad, will naturally create conflict: It's a matter of making sure it's the right kind of conflict. Research has repeatedly shown that productive conflict focuses on ideas, while counterproductive or "bad" conflict focuses on personalities.[60] Conflict focused on ideas rather than people is a natural byproduct of diverse thinking and helpful for innovation and performance. To realize the benefit that good rebels bring to the table, leaders must suppress personal conflicts but allow and actively manage idea-based conflict.

Case study: Carmen Medina, government change agent

Carmen Medina is a former Central Intelligence Agency (CIA) executive and a current specialist leader and advisor to GovLab at Deloitte Consulting LLP. More importantly, she is a self-proclaimed "good rebel" who learned how to rouse good rebels during her 32-career with the agency. Within the first 10 years of her career, she came to believe that many of the CIA's practices and policies needed to change

in response to events such as the information revolution and the end of the Cold War. This view was not always welcomed, and she spent the middle part of her career trying to remain successful and productive while looking for constructive ways to advance her ideas.

When she became the CIA's deputy director in 2005, she met two officers who had, she immediately recognized, a rebellious idea. They believed the CIA should rethink its approach to information sharing. This led to the creation of Intellipedia, which used the MediaWiki software used by Wikipedia to create a collaborative knowledge platform for the intelligence community. The effort won the two officers, Sean Dennehy and Don Burke, the Service to America Awards for Homeland Security in 2009. By then, Intellipedia was a 900,000-page resource handling some 100,000 user accounts and 5,000 page edits a day.[61]

Medina identified these good rebels and provided top cover for their ideas. It is difficult to imagine this idea gaining widespread adoption without her influence.

Successful rebel rousing

Medina now advises corporate and government leaders on the benefits of tapping into good rebel energy. She has three pieces of advice for leaders looking to develop this capability:

- **Find them:** Practice meeting everyone, not just members of the leadership team or direct reports. While at the CIA, Medina made a point of having dinner every couple of months with a randomly selected group of analysts. By doing so, she was telling the entire workforce—particularly middle managers—that she wanted to hear everyone's ideas and concerns. Another of her favorite ways to meet people was to walk slowly through CIA corridors. "A friend I was walking with, who had to slow down to my pace, commented once on how many people would come up to me and say hi," says Medina. "When you walk quickly through an office . . . you're actually telling people that you're not interruptible. I want people to know that I'm always interruptible for a new idea."[62]

- **Protect them:** Give them (and their ideas) top cover. Show your support is concrete by attending their meetings and events. Rebels need more than words of encouragement. They need to see that senior managers will deploy their scarcest resource, their time, in support of new ideas. As Medina suggests, "Your calendar reflects your priorities. Who you make time for sends a huge signal to the organization, so make time for the people who are change agents."[63]

- **Develop them:** Give "good rebels" normal work to do. Medina believes they are too often deployed to some type of innovation center or skunkworks operation. Although this is sometimes appropriate, it can backfire if the organization perceives that the rebels are no longer doing "real" mission work. She suggests assigning promising rebels to critical jobs in the organization that allow them to learn exactly how to get things done. "One of the things I learned, admittedly in hindsight, is that to be effective, rebels need to befriend the bureaucratic black belts in their organizations," she says. "Too often, we don't know how monies get spent or priorities set. That's the type of job I wish someone had asked me to do earlier in my career."[64]

Leading in turbulent times

Leaders such as Todd Park, Marc Cherna, Jonah Czerwinski, David Uejio, and Carmen Medina are changing how government operates. Their commitment to transparency, engagement, and meeting citizen expectations for customer service provides a stark contrast to some of the less agile hierarchies of yesterday's government programs.

These leaders of tomorrow are creating an environment in which interconnected citizens partner with government to take ownership of our biggest challenges and involve themselves directly in creating solutions. More of them in government will inspire the next generation of civil servants to operate as change agents, transforming government from the inside out. They understand that an effective way to advance the future of public service is to openly engage everyone and anyone interested in making government open, agile, and, yes, perhaps even a little rebellious.

Endnotes

1. Robert Johansen, *Leaders Make the Future* (San Francisco: Barrett-Koelher Publishers, 2012), p. 1.
2. "Klout scores," Klout.com, March 17, 2013, http://klout.com/corp/kscore/.
3. Alex Howard, "Twitter: A standard-issue tool for government leaders," *O'Reilly Radar*, November 10, 2010, http://radar.oreilly.com/2010/11/twitter-standard-issue-for-a-2.html.
4. Todd Park, "It's go time for presidential innovation fellows," *White House Blog*, August 21, 2012, http://www.whitehouse.gov/blog/2012/08/21/it-s-go-time-presidential-innovation-fellows.
5. Zina Moukheiber, "Good for government: New U.S. chief technology officer Todd Park is an entrepreneur," *Forbes*, March 12, 2012, http://www.forbes.com/sites/zinamoukheiber/2012/03/12/good-for-government-new-u-s-chief-technology-officer-todd-park-is-an-entrepreneur.
6. "'Lean startup' advice: Think big, start small," *National Public Radio*, September 28, 2011, http://www.npr.org/2011/09/28/140857121/lean-startup-advice-think-big-start-small.
7. Kim Hart, "At SXSW, Todd Park talks start-ups," *Politico*, March 11, 2012, http://www.politico.com/news/stories/0312/73848.html.
8. Austin Carr, "From HHS to the USA: CTO Todd Park brings innovation to DC data," *Fast Company*, June 18, 2012, http://www.fastcompany.com/1839286/hhs-usa-cto-todd-park-brings-tech-innovation-dc-data.
9. Macon Phillips and Todd Park, "Lean startup: From the White House to the boardroom, what you can learn from lean giants," presentation at the South By Southwest Interactive Conference, March 10, 2012.
10. Jason Miller, "White House looking for a few 'bad asses' to kick-start 5 projects," *Federal News Radio*, March 24, 2012, http://www.federalnewsradio.com/239/2877084/White-House-looking-for-a-few-bad-asses-to-kick-start-5-projects.
11. The White House, *Digital government: Building a 21st century platform to better serve the American people*, May 23, 2012, http://www.whitehouse.gov/sites/default/files/omb/egov/digital-government/digital-government.html.
12. Josen Cumming, "Where has Cory Booker been?", *The Root*, May 4, 2013, http://www.theroot.com/buzz/where-has-cory-booker-been.
13. Kevin Shively, "23 percent of top brands have a dedicated customer service handle on Twitter [study]," *Simply Measured Analytics Blog*, December 5, 2012, http://simplymeasured.com/blog/2012/12/05/23-of-top-brands-have-a-dedicated-customer-service-handle-on-twitter-study/.
14. See, for instance, John Hagel, Suketu Gandhi, and Giovanni Rodriguez, "The empowered employee is coming: Is the world ready?", *Forbes*, February 9, 2012, http://www.forbes.com/sites/ciocentral/2012/02/09/the-empowered-employee-is-coming-is-the-world-ready/.
15. Lisa Petrilli, "What Millennials told CEOs they want from leaders," *C-Level Strategies*, February 29, 2012, http://www.lisapetrilli.com/2012/02/29/what-millennials-told-ceos-they-want-from-leaders.
16. Cisco, "2011 Cisco Connected World Technology Report," Chapter 3, http://www.cisco.com/en/US/solutions/ns341/ns525/ns537/ns705/ns1120/2011-CCWTR-Chapter-3-All-Finding.pdf.
17. Gary Yukl, "Managerial leadership: A review of theory and research," *Journal of Management*, 15, no. 2 (1989), pp. 251–289.
18. Soosan Kantabutra, "What do we know about vision?" *Journal of Applied Business Research* 24, no. 2 (2008), pp. 127–138; US Office of Personnel Management, "Senior executive service: Executive core qualifications," http://www.opm.gov/ses/recruitment/ecq.asp.

19. L.D. Eyde, et al., *High-performance leaders, a competency model*, US Office of Employment Management, Employment Service, Personnel Resources and Development Center, Washington, DC, 1999; D.J. Gregory and R.K. Park, *Occupational Study of Federal Executives, Managers & Supervisors: An Application of the Multipurpose Occupational Systems Analysis Inventory—Closed Ended (Mosaic)*, Washington, DC, January 1992.
20. Jitinder Kohli, *Asking questions like the British do*, Center for American Progress, March 8, 2012, http://www.americanprogress.org/issues/open-government/news/2010/03/08/7372/asking-questions-like-the-british-do/.
21. Malcolm Gladwell, *The Tipping Point: How Little Things Can Make a Big Difference* (New York, NY: Back Bay Books, 2002), p. 38.
22. Discussed further in William Eggers and John O'Leary's *XBC: Creating public value by unleashing the power of cross-boundary collaboration*, Deloitte GovLab and Harvard Kennedy Ash Center for Democratic Governance and Innovation, June 2011, http://www.deloitte.com/assets/Dcom-Global/Local%20Assets/Documents/Public%20Sector/dtt_ps_xbc_060311.pdf.
23. Karen Blumen and Jon Rubin, "Building the framework for human services integration," *Policy and Practice Magazine*, December 2011.
24. National Family Preservation Network, *An effective child welfare system & evidence-based practice for the child welfare system*, October, 2006, http://www.law.harvard.edu/programs/about/cap/cap-conferences/pp-workshop/pp-materials/24_effective-child-welfare-_system.pdf.
25. Marc Cherna (director, Allegheny County Department of Human Services), interview with the authors, September 21, 2012.
26. Jeanne Meister, "Job hopping is the new normal for Millennials: Three ways to prevent a human resource nightmare," *Forbes*, August 14, 2012, http://www.forbes.com/sites/jeannemeister/2012/08/14/job-hopping-is-the-new-normal-for-millennials-three-ways-to-prevent-a-human-resource-nightmare/.
27. David Bray (member of the US Government Senior Executive Services), interview with the authors, March 22, 2012.
28. Martin M. Chemers, "Leadership research and theory: A functional integration," *Group Dynamics: Theory, Research, and Practice* 4, no. 1 (2000), p. 27.
29. Jose Rico (executive director, White House Initiative on Educational Excellence for Hispanics), interview with the author, February 7, 2012.
30. Anand Pillai, "Why more managers need to relinquish control," *CNN Money*, September 21, 2011, http://management.fortune.cnn.com/2011/09/21/why-more-managers-need-to-relinquish-control/.
31. Jennifer Goodman, "A lesson on leadership: Stanley McChrystal," *Friducation*, May 4, 2012, http://friducation.com/2012/05/a-lesson-on-leadership/.
32. Chris Heuer (social media specialist leader, Deloitte), interview with the authors, February 13, 2012.
33. Aaron Smith, *Civic engagement in the digital age*, Pew Internet & American Life Project, April 25, 2013, http://www.pewinternet.org/Reports/2013/Civic-Engagement/Main-Report/Part-2.aspx.
34. Tammy Johns and Lynda Gratton, "The third wave of virtual work," *Harvard Business Review*, January 1, 2013, http://hbr.org/2013/01/the-third-wave-of-virtual-work/.
35. Andy Medici, "No desk, no nameplate, half the workspace: Feds adjust to 'hoteling,'" *Federal Times*, January 21, 2012, http://www.federaltimes.com/article/20120121/FACILITIES02/201210301/1022/DEPARTMENTS.
36. Jessica Brack, *Maximizing Millennials in the workplace*, UNC, Kenan-Flagler Business School, 2012, http://www.kenan-flagler.unc.edu/executive-development/about/~/media/DF1C11C056874D-DA8097271A1ED48662.ashx.
37. Allan MacDonell, "Universal Studios takes school kids' notes and greens 'The Lorax,'" *Takepart.com*, January 27, 2012, http://www.takepart.com/article/2012/01/27/universal-studios-partners-school-kids-green-lorax.
38. Cherna interview.
39. Gabe Zichermann and Christopher Cunningham, *Gamification by Design: Implementing Game Mechanics in Web and Mobile Apps* (Sebastopol, California: O'Reilly Media, 2011), p. xiv.
40. Jonah Czerwinski (director of the Center for Innovation, US Department of Veterans Affairs), interview with the authors, March 18, 2013.
41. Ibid.

42. Ibid.
43. Partick Littlefield (senior advisor to the director of the Center for Innovation, US Department of Veterans Affairs), interview with the authors, March 18, 2013.
44. Donald Sull and Kathleen M. Eisenhardt, "Shape strategy with simple rules, not complex frameworks," *HBR Blog* Network, September 27, 2012, http://blogs.hbr.org/cs/2012/09/shape_strategy_with_simple_rul.html.
45. Tom Fox (vice president for leadership and innovation at the Partnership for Public Service), interview with the authors, January 5, 2012.
46. Eric Reis, *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses* (New York, NY: Crown Publishing, 2011).
47. Kickstarter, "Pebble: e-paper watch for iPhone and Android," http://www.kickstarter.com/projects/597507018/pebble-e-paper-watch-for-iphone-and-android.
48. Uejio interview.
49. Ibid.
50. Ibid.
51. Matt Burton (acting chief information officer at the Consumer Financial Protection Bureau), interview with the authors, June 17, 2013.
52. Ibid.
53. Uejio interview.
54. Emily Malina and Kara Shuler, "What Darwin can teach government," *Governing*, January 24, 2013, http://www.governing.com/blogs/bfc/col-positive-deviance-government-organizations-problem-solving.html.
55. Lois Kelly, "Rebels at work: Motivated to make a difference," *rebelsatwork.com*, http://www.rebelsatwork.com/rebel-thinking/rebel-resources/.
56. Janet Swaysland, "Rebels at work: Motivated to make a difference," *Monster Thinking*, October 31, 2012, http://www.monsterthinking.com/2011/10/31/rebels-at-work.
57. Cherna interview.
58. Cherna interview.
59. Nilofer Merchant, "Apple's startup culture," *Bloomberg Businessweek*, June 14, 2010, http://www.businessweek.com/innovate/content/jun2010/id20100610_525759.htm.
60. Carsten De Dreu and Laurie Weingart, "Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis," *Journal of Applied Psychology* 88, no. 4 (2003), pp. 741–749.
61. Massimo Calabresi, "Wikipedia for spies: The CIA discovers Web 2.0," *Time*, April 8, 2009, http://www.time.com/time/nation/article/0,8599,1890084,00.html.
62. Carmen Medina, (specialist leader, Deloitte Consulting, LLP), interview with the authors, December 7, 2012.
63. Paula Ketter, "Change agents: Are you a good or a bad rebel?" *The Public Manager*, December 24, 2012, http://www.astd.org/Publications/Magazines/The-Public-Manager/Archives/2012/Winter/Are-You-a-Good-Rebel-or-a-Bad-Rebel.
64. Medina interview.

Acknowledgements

The authors would like to thank many individuals for sharing their time and expertise throughout the development of this article. In particular, we'd like to thank **Bill Eggers**, director of Global Public Sector Research for Deloitte Services LP, and **Tiffany Fishman** of Deloitte Services LP for their guidance, support, and wisdom. In addition, many thanks go to **Shrupti Shah**, GovLab director, for helping to shape our approach and for providing us the freedom to nurture our ideas.

We would also like to thank a host of generous experts, leaders, and big thinkers who shared their ideas about what it will take to succeed as tomorrow's government leader: **Tom Fox**, from the Partnership for Public Service; **Nick Charney**, policy advisor at Aboriginal Affairs and Northern Development Canada; **Jose Rico**, executive director, White House Initiative on Educational Excellence for Hispanic Americans; GovLoop blogger and Communications Director for the Bureau of Management at USAID **Danielle Blumenthal**; former Deloitte Consulting LLP colleagues **Chris Heuer** and **Giovanni Rodriguez**; GovLoop founder and Young Government Leader President **Steve Ressler**; **Steve Shih** from the US Office of Personnel Management; leadership and innovation consultant **Deb Mills-Scofield**; **Erin Dalton** of the Allegheny County, Pennsylvania Department of Human Services; **Jonah Czerwinski** and **Patrick Littlefield** of the US Department of Veterans Affairs' Center for Innovation; US Government Senior Executive **Dr. David Bray**; **Carmen Medina**, specialist leader in Deloitte Consulting LLP's Strategy & Operations practice; and **David Uejio**, talent acquisition lead at the US Consumer Financial Protection Bureau.

Several of our Deloitte colleagues provided insights, feedback, access, and support for our research, including **David Dye**, **Raj Gopal**, **Bev Karwoski**, **Dan Helfrich**, and **John Gibbons** of Deloitte Consulting LLP.

Lastly, we would like to thank our GovLab colleagues who not only supported a culture of collaboration and innovation that encouraged us to think big, but who continue to inspire our optimism about the collective capacity of the leaders of tomorrow.

Contact

Shrupti Shah
Director, GovLab
Director
Deloitte Consulting LLP
+1 571 814 6753
shrshah@deloitte.com

David Dye
Director
Deloitte Consulting LLP
+1 571 882 6254
ddye@deloitte.com

About GovLab

GovLab is a think tank in the Deloitte Federal practice that focuses on innovation in the public sector. It works closely with senior government executives and thought leaders from across the globe. GovLab fellows conduct research into key issues and emerging ideas shaping the public, private, and non-profit sectors.

Through exploration and analysis of government's most pressing challenges, GovLab seeks to develop innovative yet practical ways that governments can transform the way they deliver their services and prepare for the challenges ahead.

Follow @DU_Press

Sign up for Deloitte University Press updates at www.dupress.com.

About Deloitte University Press

Deloitte University Press publishes original articles, reports and periodicals that provide insights for businesses, the public sector and NGOs. Our goal is to draw upon research and experience from throughout our professional services organization, and that of coauthors in academia and business, to advance the conversation on a broad spectrum of topics of interest to executives and government leaders.

Deloitte University Press is an imprint of Deloitte Development LLC.

This publication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms, or its and their affiliates are, by means of this publication, rendering accounting, business, financial, investment, legal, tax, or other professional advice or services. This publication is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your finances or your business. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser.

None of Deloitte Touche Tohmatsu Limited, its member firms, or its and their respective affiliates shall be responsible for any loss whatsoever sustained by any person who relies on this publication.

About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/about for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms. Please see www.deloitte.com/us/about for a detailed description of the legal structure of Deloitte LLP and its subsidiaries. Certain services may not be available to attest clients under the rules and regulations of public accounting.

Copyright © 2013 Deloitte Development LLC. All rights reserved.
Member of Deloitte Touche Tohmatsu Limited