RISK AND REWARD

A Framework for Federal Innovation

PARTNERSHIP FOR PUBLIC SERVICE

slalom

Executive Summary

The federal government is one of the most prolific innovators in modern history—sending astronauts to the moon, curing diseases across the globe and helping launch the internet. Other less heralded but critically important government innovations have improved federal agency productivity and efficiency, saving taxpayers millions of dollars while providing a better customer experience to the American people.

What unites these seemingly disparate examples is a definition of government innovation that is focused on impact: a new or improved process, product or service that delivers significant positive outcomes in furtherance of the public good. To launch and sustain these initiatives, federal leaders brought vision, collaboration and resources to address formidable challenges.

Despite this legacy, outdated systems, rules and processes hinder innovation at a time when government must grapple with an array of critical and complex 21st-century challenges. Day-to-day obligations needed to achieve agency missions and the urgency of dealing with the latest crisis often demand attention, while the scale and complexity of the federal government and its work makes change difficult. It also can be challenging to alter the status quo in a climate where risk aversion is common and success is not always recognized or rewarded.

To determine the characteristics that can help federal agencies foster innovation and better serve the public, the Partnership for Public Service and Slalom Consulting researched innovative federal organizations and examined the initiatives they have undertaken.

Through interviews with dozens of experts, 10 characteristics of innovative government organizations emerged that can foster creative problem-solving, deliver operational changes and improve institutional performance. The research shows innovation thrives in federal organizations that:

- **Prioritize innovation through leadership support.**
- **Empower employees to be creative.**
- **Remove barriers to effectiveness.**
- **Make small bets on new ideas, iterate and learn from failure.**
- **Scale successful initiatives and projects.**
- **Value external expertise, creative thinking and diversity of thought.**
- **Center on the customer experience.**
- **Align innovative efforts with strategic goals.**
- **Demonstrate strong business practices.**
- **Create a culture of change.**

The pages that follow describe these 10 characteristics in greater detail and, through profiles of innovative work at five federal agencies, illustrate how incorporating these attributes into the culture of an organization can contribute to improved outcomes. This report provides a framework for federal agencies to create an innovative environment and better serve the public interest.

Introduction

Our nation faces an array of complex challenges that Americans expect their government to address, from the opioid crisis and cybersecurity threats to more frequent and destructive natural disasters. The world is also in the midst of a technological revolution, creating new opportunities and expectations. Americans want the same speed, personalization and efficiency in their government interactions as they receive from private sector companies.

However, decades of persistent neglect, antiquated systems and outdated approaches to service delivery and problem-solving have left the federal government unable to meet many of the demands of our fast-paced, interconnected, technology-driven world. In short, we have a government that is struggling to keep up with the world around it.

Innovation has been a central tenet of presidential management agendas across administrations, but a variety of obstacles has stymied progress in this arena.

There is a frequent lack of leadership support for testing and implementing new ideas. Scarce resources inhibit development of new products or services that would more effectively serve the public. Promising ideas that could improve government performance are quashed by those who unnecessarily raise legal and regulatory roadblocks. Fear of being subjected to congressional scrutiny or an inspector general's report if an initiative is unsuccessful is another factor that deters leaders from taking new approaches to agency services or problems.

Other barriers include the lack of the data or the analytical skills needed to make informed decisions that would result in more effectively achieving agency missions. For example, agencies that seek to improve customer service need to understand how customers are currently experiencing those services. But the Paperwork Reduction Act, which was intended to lighten the burden of information requests on government agencies, makes it difficult to collect customer feedback—an important element needed to test new ideas and meet user needs.

Employee motivation to overcome obstacles and bring about change also is an issue in the government. The 2018 Federal Employee Viewpoint Survey revealed that only 60% of civil servants feel encouraged to come up with new and better ways of doing things, compared to 76% of private sector employees—a 16-point gap. The survey also found that only 40% of federal employees believe that creativity and innovation are rewarded.

This report highlights 10 organizational characteristics that help foster innovation and create change-oriented cultures within federal agencies. The report also profiles five organizations that have been successful devising and implementing innovative initiatives because they have incorporated many of the 10 characteristics into their DNA.

■ Innovation

A new or improved process, product or service that delivers significant positive outcomes in furtherance of the public good.

Innovation can be a buzzword without a common definition, which may lead people to believe it only applies to technology. This report defines innovation around impact—including actions that lead to significant improvements across government. Any organization can create the conditions for innovation to thrive by putting transformative ideas into practice.

Percentage of employees who feel encouraged to come up with new and better ways of doing things

60%

Federal government

76%
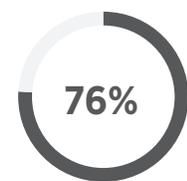
Private sector

Source
Government-wide data: 2018 Federal Employee Viewpoint Survey.
Private-sector data: Mercer | Sirota, 2018.

10 Organizational Characteristics that Foster Federal Innovation

Based on research and consultation with a wide range of experts, the Partnership for Public Service and Slalom Consulting identified 10 key characteristics that are critical to building an innovative federal workplace culture that can foster creative problem-solving, deliver operational changes and improve institutional performance.

Prioritize innovation through leadership support

Leaders openly and purposefully support innovative efforts

Leadership support is critical for innovation to take place in federal agencies. In organizations that are receptive to new ideas, high-level support can accelerate initiatives. This atmosphere allows employees and teams to move forward knowing they have leadership backing for their ideas and are free to take prudent risks. In offices where risk-taking is less common, visible leadership support can help clear hurdles and provide the space for innovators. Due to limited resources, leaders also must prioritize innovative efforts. This involves building innovation into key management documents, including strategic plans and organizational priorities.

Alex Cohen of the Census Bureau's Center for Applied Technology said leadership support has been critical for his office to adopt new ways of doing its work.

"Our leadership would say, 'We're going to try this anyway' about projects that were not universally popular at the beginning, but ended up being very successful," Cohen said. "Without that air cover, we would have been dead in the water."

Innovative organizations:

- Have leaders who frequently and publicly support innovation as a key priority.

- Have leaders who back employees and teams experimenting with creative projects.

- Are clear about their goals and set aside resources to help their employees find innovative ways to meet those goals.

Empower employees to be creative

Employees have the freedom and resources to innovate in their day-to-day work

For an innovative culture to thrive, employees need an environment where they have the freedom to generate new ideas, the ability to make decisions, the encouragement to take risks and the resources needed to succeed. These efforts can be reinforced when managers back employees even if an initiative does not work out as planned, and when they recognize and reward those who succeed through formal mechanisms, such as performance reviews and awards, or informal channels like praise from a department lead.

The National Geospatial-Intelligence Agency created this type of environment when it launched the Office of Ventures and Innovation in 2017, consolidating different internal innovation initiatives into one office. OVI's primary focus is to improve existing, invent new and imagine transformational geospatial intelligence capabilities by making innovation and acquisition faster and easier. Through its Venture Board, employee teams pitch their new ideas and, if chosen, embark on their projects. In its first year, the Venture Board invested in five initiatives, two of which involved ways to automate access to quickly changing data needed for intelligence gathering.[1]

"In giving these folks the time away from day-to-day responsibilities and the freedom to innovate, we really wound up with some great return for the agency," said Christina Monaco, the chief ventures officer at the NGIA.

Innovative organizations:

- Empower employees in their day-to-day work, positioning them to identify and implement new ideas.

- Promote innovation by recognizing and rewarding employees for identifying better ways to do their work.

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[1] Rachel Kirkland, "NGA's Innovation Office 'Not a Set-aside Shop' Solely Focused on Internal Innovation, Says Christy Monaco," WashingtonExec, March 10, 2019. Retrieved from https://bit.ly/2kIDi3U.

Remove barriers to effectiveness

Organizations identify and remove outdated processes, policies and technologies that serve as barriers to innovation

The most innovative federal organizations remove or lower implementation barriers, whether it is a bureaucratic process that slows and impedes progress, a perceived legal impediment that is unjustified, antiquated processes that delay acquisitions, a lack of information needed to make informed decisions, or an outmoded technology that hinders efficiency.

At the Defense Advanced Research Projects Agency, the goal of making pivotal investments in breakthrough technologies for national security was being hampered by a longstanding but unnecessary administrative process.

After learning that researchers at its Small Business Programs Office were missing important opportunities to have entrepreneurs participate in their projects due to the restrictive timing of the application process, leadership removed the time barrier and permitted applications year-round. This allowed program managers who rotate in and out of DARPA every two years to more easily engage private-sector partners in their research projects, and helped advance the agency mission by generating new technology initiatives.

Innovative organizations:

- Conduct analyses to identify roadblocks to success.

- Actively and frequently review and revise outdated processes.

- Implement best-available solutions, including processes and technologies that improve performance.

Make small bets on new ideas, iterate and learn from failure

Innovative organizations pursue small bets on new ideas by encouraging experimentation and learning from failures

Testing ideas on a small scale allows organizations to evaluate what works before committing significant resources to a project. Making small bets reduces risks and builds an evidence base for success. It also helps organizations build a reputation for being innovative—people are more comfortable with an organization taking risks if it has successfully done so in the past. Learning from failures and making changes as circumstances warrant are important elements of an innovative culture, allowing organizations to analyze past experiences to inform future efforts.

NASA's Center of Excellence for Collaborative Innovation built the concept of small bets into its procurement process. The center runs challenges and prize-oriented competitions for both NASA and other government agencies, harnessing the power of the crowd to solicit solutions to real-world operational problems. The process allows the center to obtain engineering concepts, designs and prototypes for existing NASA challenges, offering solutions in a faster time frame and at a lower cost than more traditional acquisition methods.

Innovative organizations:

- Often test new ideas so they can evaluate what works before spending considerable resources or committing to a particular path.

- Approach new ideas with a process for learning quickly, iterating and building an evidence base before broad implementation.

- Sunset failed initiatives and learn from the experience.

Scale successful initiatives and projects

Organizations establish processes for turning innovative ideas and projects into scalable, sustainable and effective long-term initiatives

Successful organizations understand the importance of expanding innovative ideas from the infancy stage to use on a larger scale, and devising ways to do so.

"Scaling is definitely a big issue," said Stacey Dixon, former deputy director of the Intelligence Advance Research Projects Activity, an arm of the intelligence community that invests in high-risk and high-payoff research.

Agencies can start by identifying and testing a process for expansion that makes sense for their organizations. This should include a start-to-finish plan that identifies the responsible parties and key stakeholders at each stage of the process, the goals, performance metrics and accountability mechanisms.

The Defense Digital Service at the Department of Defense has been developing a playbook to guide employees as they embark on bringing projects to scale. One of its key precepts is that teams must track and separately account for project development and transition. From experience, DDS employees found that initiatives are unlikely to succeed if only planned through the development phase. The playbook includes advice on planning a transition or exit strategy for the developers at the outset of a project and including transition partners in the project at an early stage.

Innovative organizations:

- Know from experience what steps are necessary to turn successful innovations into scalable, sustainable and effective long-term initiatives.

- Understand the feasibility of expanding any given project and why past initiatives did not achieve broad adoption.

- Assign long-term owners to initiatives, consider cost-effectiveness and build business plans early in the process to lay the foundation for future expansion.

Value external expertise, creative thinking and diversity of thought

Teams draw on skills and expertise from other departments and agencies, academia and other sectors

In interviews, federal employees frequently mentioned the importance of including external perspectives in their work. Diversity of thought encourages organizations to think differently and come up with new ways to tackle existing challenges. Organizations that excel in this area build outside expertise into their processes, broadening the diversity of thought and ensuring that the interactions with external experts are not dependent on the relationships of one or two program leads.

To generate new ideas and increase access to outside expertise, the Frontier Development Lab, a NASA research project, convenes data scientists, computer scientists, subject-matter experts and private-sector stakeholders from different industries for short periods of time—usually eight weeks—to identify and quickly prototype possible solutions to their research questions. These partnerships provide NASA with access to the latest technologies and ideas, increasing its ability to address mission-critical problems.

In its first year, one of NASA's goals was to deliver a visual representation of an asteroid based on radar data. Normally such a process takes weeks. Due to the work of the Frontier Development Lab, NASA developed a method that produced a positive result within days.

At the Intelligence Advanced Research Projects Activity, the research staff is term-limited and external to the organization. Their temporary time frame for involvement in projects and a mandate to think innovatively means that they are comfortable challenging the status quo. Asking questions and providing constructive feedback are the norm for the external research staff, which has a downstream effect on permanent staff. As a result, career staff have become more adaptable, according to Marianne Kramer, chief of IARPA's technology transition.

Innovative organizations:

- Leverage expertise from a larger network of individuals and organizations, including other departments, agencies, components and industries.

- Bring outside expertise to work in government for temporary periods of time.

Center on the customer experience

The experience of the customer or the end user is central to an organization's operations

Americans have seen tremendous customer service improvements in many aspects of their lives, but the same experience has not always taken place in their interactions with the federal government.

The fallout from poor service has many ramifications, from veterans with serious health problems waiting months for care due to flawed scheduling; disaster victims suffering from complicated processes required to get aid; or small businesses unable to get loan guarantees or meet regulatory requirements because of unclear, slow or low-quality assistance. It also fuels a lack of trust in government.

Innovative agencies make the customer experience a driving force behind the design and delivery of their services rather than structuring them according to agency organizational charts. They involve their customers in every possible part of the process, such as problem identification and user testing to gain a deeper understanding of how interactions should be changed to deliver information and services most effectively.

Innovative organizations:

- Center on the customer experience in the development of their organizational practices.

- Employ design methods, such as human-centered design, to help better understand the challenge at hand and identify an appropriate solution.

- Coordinate with other agencies to help serve multiple customer needs.

Innovative agencies use a variety of techniques, including surveys, focus groups, interviews and direct observation of customer interactions, to gain a deeper understanding of the customer experience. Social media comments also can be a valuable source of feedback, helping organizations understand how their customers view agency services and identify areas for improvement.

Agency customers include not only the public, but also employees within an agency and other government organizations. Innovative agencies can strengthen their customer service by understanding the impact of their internal processes on employees and by coordinating with other agencies to pool knowledge and resources to accomplish shared goals.

"Going out and talking to customers and then using their feedback to inform what gets made is incredibly innovative in government," said Erin Siminerio of the Veterans Experience Office at the Department of Veterans Affairs.

"It seems like common sense: ask people what they need before you make something for them. I have seen how transformative that is," Siminerio said. "When you bring those insights back to a business unit, people are able to see things from another person's point of view."

Align innovative efforts with strategic goals

*Innovation efforts tie directly to the mission and strategic goals of the agency*

Intentionally aligning an innovative project with an agency's mission or strategic plan increases the likelihood that it will receive top-level support. In an environment of constrained resources, federal leaders are more likely to direct funding and staff to initiatives that will help the organization achieve its overarching goals.

In examining innovative efforts across the government, organizations that were more intentional about tying their initiatives to strategic priorities tended to have an easier time making the case for their initiative to be prioritized.

Ben Schrag of America's Seed Fund, a program at the National Science Foundation that provides funding to small businesses, explained how traditional and entrenched processes had to change to accomplish his office's strategic goals.

"Many aspects of our program were initially copied verbatim from the peer review process used by most agencies to evaluate basic science and engineering research proposals," Schrag said. "This process did not prioritize decision speed or accessibility to new applicants, both of which were much more important to the technology entrepreneurs that we're looking to support."

As a result, the organization shifted the way it reviewed business proposals and provided funding in a much shorter timeframe—helping Schrag's office reach first-time entrepreneurs that previously struggled to compete with long-time participants.[2]
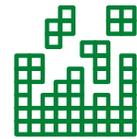
Innovative organizations:

- Align innovation initiatives with the organization's strategic plan and overall mission.

- Strategically direct resources toward initiatives that best align with broader priorities.

2 National Science Foundation, "Small Business Innovation Research Program Phase I Solicitation (SBIR)," Dec. 2, 2014. Retrieved from https://bit.ly/33SdfrN.

Demonstrate strong business practices

Organizations demonstrate expertise and standardization in management practices

Standardized business practices are core to a successful, modern organization. Organizations that have strong business practices can more effectively accomplish their goals and have greater potential to dedicate resources to innovative endeavors.

One area of importance is the strategic use of data. Ensuring that data is available and having employees with skills and the resources to interpret the data are critical elements needed to make informed decisions and build a strong business case for new, creative ideas.

In addition, ensuring that initiatives are properly organized and efficiently managed are central to success. Once processes are created to help bolster sound business practices, they should be continuously monitored and refined to ensure they do not become overly burdensome or cause delays.

Reflecting on the connection between strong management and innovation, Sandeep Patel of the Department of Health and Human Services said, "If a government organization is not already making decisions and prioritizing using basic tools like data, I would be worried. Those practices have to exist before we can discuss innovation."

Innovative organizations:

- Actively deploy strong project management processes.

- Make data-driven and evidence-based decisions in an efficient and timely manner, and build accountability mechanisms into projects to ensure that desired outcomes are met.

- Teach innovators how to build business cases and collect and use data in an effective way.

Create a culture of change

Organizations are ready, willing and able to adapt to change

Innovative organizations have cultures where exploration and implementation of new ideas are the norm. Creating such an environment requires getting buy-in for new ideas from employees and communicating with those most affected by changes within and outside the organization.

Federal agencies willing to try new approaches to service delivery or internal operations have the ability to shift resources more quickly and efficiently to areas that will have the greatest impact and to create accountability mechanisms to reinforce desired behaviors.

Jennifer Main, the chief operating officer of the Centers for Medicare and Medicaid Services who is working on a large-scale effectiveness effort, said bringing about change requires flexibility and development of organization-wide buy-in and commitment.

Bringing about systemic change requires understanding the impact on the organization as a whole and on individual initiatives. It also requires constant communication, transparency and flexibility.

"There is so much need and we have so much to do, so there is definitely a mindset of innovate, tweak and update," Main said. "We are expecting to be in a constant state of innovating. That's a huge thing in and of itself—bringing that mindset here."

Innovative organizations:

- Treat change as an ongoing opportunity for growth, rather than discrete events.

- Communicate early and often with frontline employees, especially about impending changes.

- Have leadership that is openly supportive of change and informed risk-taking.

Profiles of Innovative Federal Organizations and Initiatives

The five organizations profiled in this report produced positive outcomes through innovation. Of the many federal innovation efforts underway, these five were chosen because they illustrate accessible and feasibly replicable initiatives currently in practice.

These five entities have embraced many of the 10 critical characteristics identified as essential to creating innovative workplace cultures, and in some instances are part of larger agency organizations that are dedicated to experimenting and embracing new ideas. These organizations and initiatives can serve as models for future innovation efforts across government.

Diffusion of Excellence
Department of Veterans Affairs

Soliciting promising health care practices from employees and expanding those ideas throughout the system

Diffusion of Excellence, part of a broader Department of Veterans Affairs effort to infuse an innovative culture within its nationwide health care system, is designed to identify and promote promising clinical and administrative practices at VA medical facilities through an annual employee competition.

Diffusion of Excellence has received more than 2,200 submissions from employees in the past four years, with the top 20 practices each year selected and presented to a panel of VA medical center directors, business directors and chiefs of staff for consideration. Based on bids and demand, 10 winners take part in a six- to nine-month pilot process that focuses on maturing the practice and planning for potential growth by building business cases, tracking metrics and addressing relevant policies.

After the pilot phase ends, Diffusion of Excellence staff members create a task force to determine which practices to implement throughout the VA health care system. The task force, composed of the Diffusion of Excellence team, leadership and key VA stakeholders, rates completed pilot projects on a variety of issues, including ease of implementation, veteran impact, cost effectiveness and alignment with departmental priorities.

Diffusion of Excellence has effectively identified and spread 36 best practices at more than 344 facilities within the Veterans Health Administration. These include successful programs to reduce the number of hospital-acquired pneumonia cases and to curb opioid deaths on VA medical center grounds.

In the case of hospital-acquired pneumonia, Shannon Munro of the Salem VA Medical Center in Virginia, discovered that improving a patient's tooth-brushing practices could decrease the likelihood of contracting the bacteria that causes the disease. Munro started an initiative known as HAPPEN (Hospital-Acquired Pneumonia Prevention by Engaging Nurses) at her home medical center, and it is now being adopted at VA medical centers nationwide with support from Diffusion of Excellence.

The VA reported that the incidence of hospital-acquired pneumonia not associated with a ventilator decreased by 92% during the initial pilot program. By preventing hospital-acquired pneumonia, and its associated complications such as sepsis, the program has saved an estimated 42 lives and $9.4 million as of July 2019.[3]

Reducing opioid deaths

The initiative aimed at reducing opioid deaths on medical center grounds has had similar success.

In this case, Pam Bellino, a patient safety manager at the Boston VA Healthcare System, saw a need to make Naloxone, a drug administered to reverse an opioid overdose, more accessible at VA facilities. Bellino led a program that equipped police at her medical center with the medicine and placed the drug in existing hospital external defibrillator cabinets.

Within a nine-month period, the Rapid Naloxone Initiative helped 38 patients recover from opioid overdoses. As of May 2019, police officers at 116 VA medical centers carried Naloxone and 56 medical centers had placed the drug in defibrillator cabinets. Diffusion of Excellence officials estimate that the initiative has saved the lives of at least 132 individuals since the program started in 2015.

Other ideas emanating from Diffusion of Excellence included a nurse-administered telemedicine program for patients with advanced diabetes and an initiative to improve the recruitment and retention of nurses at rural medical facilities.

Initiative embodies critical innovation characteristics

Diffusion of Excellence embodies many of the 10 characteristics needed to create an innovative environment, including full engagement and support of VA leaders who are involved in selection and implementation of the new

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3   U.S. Department of Veterans Affairs, "Oral hygiene to fight pneumonia." Retrieved from https://bit.ly/2klp3Sk.

health care practices. Without leadership participation and the commitment of resources, expanding these initiatives would not be possible.

The leaders and the staff constantly seek out new ideas from employees who have first-hand experience, providing space for them to be creative. The initiative provides an opportunity for employee ideas to be tested on a small scale, and have those successful practices expanded across the nationwide medical system.

Creating business cases, addressing relevant policies, and setting goals and performance metrics early in the process also provide programs with the foundational business practices they need for success.

The program, moreover, is centered on the customer (the veteran) and the mission of the VA (providing high-quality health care). This focus on the end-to-end process, from small bets to scale, helps the organization embrace change and makes innovation the norm.

Diffusion of Excellence is part of the VHA Innovation Ecosystem—a dedicated effort to enable the discovery and spread of health care innovations within the VHA that exceed expectations, lower costs and improve the delivery of health care for veterans.

The VHA Innovation Ecosystem, in turn, is part of a broader VA effort to infuse an innovative culture within its nationwide health care system dedicated to lowering the barriers to quality innovations across the VA. Diffusion of Excellence has strong institutional support because it is part of these larger, department-wide efforts to bring constructive change to the VA and its nationwide health care system.

Procurement Innovation Lab
Department of Homeland Security

Helping empower DHS to adopt innovative practices that speed and improve the acquisition process

Federal procurement of goods and services is often a time-consuming process, frequently taking years to complete because of detailed requirements and risk-averse cultures, and often yielding unsatisfactory results.

The Department of Homeland Security sought to alter this dynamic with the creation in 2015 of the Procurement Innovation Lab, known as the PIL. The lab serves as a free in-house consulting group for DHS contracting officers and contract specialists.

Contracting employees from across the agency bring their innovative procurement approaches to the lab, and the consultants help them think through their ideas, determine the challenges and limitations, and ensure that the right parties are involved so that ideas can be properly executed.

This process allows contracting officers to test new procurement techniques in a supportive environment.

As Polly Hall, the lab's director, said, "Empowering contracting officials to re-envision how they execute is really important. Empowered teams bring forward new ideas that generate more efficient and effective outcomes."

The lab's consultant team collects evaluation data through interviews with contracting teams and other affected parties to understand the impact of a new process on all relevant stakeholders. The lab shares its findings on various projects by hosting webinars open to the entire agency and by holding boot camps to teach innovative practices. As of the summer of 2019, the lab had held nine boot camps that drew 400 attendees. Two of those boot camps were open government-wide and 22 agencies were represented.

The lab's goals, according to officials, are to improve and encourage increased competition from the private sector, reduce the time for contract awards, achieve cost savings and promote better mission outcomes.

Leaders encourage innovation

Soraya Correa, the chief procurement officer at DHS, said a key element of the lab's success is the leadership support it offers acquisition professionals. "The most important thing I'm hearing is that our procurement employees believe leadership is encouraging creativity and innovation, and is supportive of their work."

Correa said the lab plays a critical role in challenging the culture of risk aversion by providing a safe place for employees to test out new and creative ways of applying federal acquisition rules. She added that the lab has helped DHS procurement officials "overcome fear of criticism, fear that people are going to challenge what you're doing, and how you're doing it."

In recent years, the lab assisted procurement projects with the Transportation Security Administration, the Federal Law Enforcement Training Centers, the Secret Service and other DHS agencies. In mid-2019, there were more than 35 lab projects in various stages of development.

One completed project involved helping the Federal Emergency Management Agency quickly modernize its National Flood Insurance Program's legacy technology system. The lab helped FEMA successfully navigate the Federal Acquisition Regulation, the lengthy and complex set of rules governing federal acquisitions, by using an innovative, multi-phase process to identify a vendor, assess the offering and secure a competitive price.

The process enabled FEMA procurement officials to talk directly to vendors and understand their proposed solutions, not just read about them on paper. In addition, the prospective vendors were asked to develop working prototypes of a web-based application and demonstrate how the system would work for customers and on the back end for the agency.

After evaluating the vendors and rating the systems, FEMA awarded the contract for the web-based platform that consolidated the flood insurance program's core business processes. The system includes a means to validate insurance policies, a complex modeling process, website hosting, policy management, claims review, approvals and status inquiries. The $17.7 million contract was awarded in just four months, down from the typical year-long procurement process.

The FEMA example and other lab projects exemplify a culture that embodies many of the 10 characteristics necessary for innovation to prosper. The lab provides leadership support along with a safe place for procurement employees to be creative and experiment with innovative ways to apply the federal acquisition rules.

The lab helps procurement employees remove barriers that delay acquisitions, promotes managed risk-taking and encourages the sharing of best practices through its webinars and boot camps. The lab also encourages acquisition teams to take the initiative and follow sound business judgment to obtain the best value while meeting customer needs.

"People are coming to the Procurement Innovation Lab to try new things," said Correa. "People are not afraid to try to do things differently."

Defense Digital Service
Department of Defense

Bringing military and civilian talent together to solve critical challenges

On a complex global stage, our nation's military increasingly relies on innovative solutions to protect our troops. Adversaries, for example, can modify consumer-grade drones to drop grenades on soldiers, and it is the military's job to come up with ways to prevent such attacks.

In 2017, Defense Digital Service and Army Cyber Command leadership discovered a group of soldiers operating out of a small workshop who were using their spare time to develop technology to counter drones. After the Department of Defense had spent hundreds of millions of dollars failing to develop a suitable solution, the Defense Digital Service provided support to the soldiers, who developed a prototype of an effective hand-held device that could remotely disable enemy drones.

"Within the first six months and $40,000, they were able to build a solution that is currently being fielded in theater and saving lives," said Kevin Carter of DDS, an organization that deploys designers, engineers, product managers and specialists to support Pentagon modernization efforts.

The drone experience led to a partnership between the Army Cyber Command and DDS that merges Army, and now Navy, technologists with experts from the private sector.[4]

Testing new ideas is encouraged

Informally called "JYN" by its participants, short for Jyn Erso, the rogue operative in the Star Wars movie Rogue One, the program has the resources, space and permission for civilian and military personnel to test new ideas and tackle difficult military-related problems.

DDS identifies top talent within the military and civilian ranks and invites these individuals to apply to work full-time in DDS incubator-like spaces for six to nine months, supported by a project manager, designer and technical leads who come from the private sector and serve as mentors. The program, which leverages non-traditional

procurement authorities, provides the resources including cloud access, collaboration tools and the opportunity to experiment.

Under these conditions, participating military and civilian personnel thrive and have high-level backing as part of the larger innovative DDS organization that values moving fast and delivering products.

Leadership support, for example, is central to DDS's success. The DDS director reports directly to the secretary of defense, providing strong backing for its work. The program is built around the concept of small bets, allowing personnel to build and test prototypes. If a particular challenge is not solved, it is taken in stride.

The staff is dedicated to meeting the needs of the customer, as was the case with the drone-disabling device when the developers went out into the field, worked side-by-side with the military personnel who were going to use the tool, received feedback and made changes to meet their needs within hours—not the usual weeks, months or years that are typically found with government programs.

Employees are empowered

The program empowers employees and makes space for creativity by recognizing in-house talent, providing the necessary resources to tackle real-world problems and teaching widely transferrable skills.

"Letting the people who do the work be the deciders and removing some of the levels of approval allows you to move quickly," Carter said. "It's what allows you to be efficient enough to make small bets."

The program also incorporates a diversity of perspectives, using technical experts from outside government who serve as guides and mentors to DOD personnel. It relies on the participation of civilian personnel and individuals from different military units. After their rotations are finished, the military and civilian DOD participants return to their home units to spread the culture of innovation and risk-taking.

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4   Issie Lapowsky, "The Pentagon Is Building a Dream Team of Tech-Savvy Soldiers," Wired, July 2, 2018. Retrieved from https://bit.ly/2KAYTpX.

Development Innovation Ventures
U.S. Agency for International Development

Soliciting outside expertise to develop creative solutions to global development challenges

At the U.S. Agency for International Development, an innovative entrepreneurial venture capital–style program—Development Innovation Ventures—identifies, tests and finances creative solutions to economic and social problems faced by developing countries around the world.

DIV draws on ideas from local problem-solvers, entrepreneurs, faith-based organizations, university labs and others. The program provides flexible, tiered grants to pilot new ideas, takes strategic risks, builds evidence of what works and then increases its support for successful solutions on a wide range of issues.

"Our innovation venture program is open to anyone, anywhere, anytime and on anything," said Alexis Bonnell, USAID's chief innovation officer. "Open innovation is our attempt to ask: 'What are the things we aren't smart enough to be looking for, but could have great impact on our work?'"

She said these ideas do not have to be perfectly aligned with USAID's day-to-day business, but "represent what we should be thinking about, what opportunities the future might bring."

Proposals can receive up to $200,000 in seed funding over three years to determine if they are viable. Projects that demonstrate promise are given between $200,000 to $1.5 million for further testing and laying the groundwork for wide-scale application. Stage three funding of $1.5 million to $5 million is provided to expand successful programs over a five-year period. But proposals can enter at any of the three stages.

Making small bets to see what works

Jeff Brown, former chief of DIV, said the program makes small bets in the initial stages and requires grant recipients to prove impact and possibility of expansion to continue to receive funding. "If we fail, we're going to fail cheaply and quickly. If we succeed, we succeed exponentially," Brown said.

Since 2010, DIV provided $106 million in flexible, tiered grant funding to more than 190 innovations across 46 countries that demonstrate rigorous evidence, maximum impact per dollar and a pathway to scale and sustainability.

One unique aspect of the program still in the early stages is an effort to analyze the return on investment for the portfolio using a cost-benefit analysis.

USAID examined 41 innovations it funded for $19.3 million between 2010 and 2012, and identified 10 that have since reached at least 1 million people. Of those 10 innovations, DIV conducted a cost-benefit analysis on four: programs designed to reduce traffic deaths in Kenya, provide eyeglasses for aging workers in India, ensure clean drinking water in sub-Saharan Africa and increase attendance of employees in primary health centers in India.

DIV co-founder Michael Kremer and other researchers calculated the net benefit of the four initiatives and divided that by the total cost of the entire 2010–2012 portfolio. Based on this analysis, USAID found that the four initiatives alone generated at least $5 in social benefits for every $1 spent on the portfolio.

Through this process, USAID identified characteristics associated with innovation success (defined as reaching over 1 million direct beneficiaries). Significant predictors include having pre-application impact evidence for the innovation, low unit costs and partnering with existing organizations to reach consumers.

DIV possesses many of the important characteristics that define an innovative organization, one that encourages experimentation, makes small bets on projects and invests further on those that prove successful.

In government procurement, there are often limiting specifications regarding the timing of submissions and who can compete for funds, which can prevent or discourage capable individuals or organizations from applying. DIV was able to address many of these barriers to make innovation programming more open.

The program also turns to a wide range of individuals from outside USAID with diverse backgrounds and experiences to bring new ideas into the fold, and it requires grantees to present strong business cases in a step-by-step process and prove the viability of their work to continue to receive funding. DIV backs initiatives that strongly align with the foreign policy interests of the United States and that are designed to serve the customers—the people—in developing countries.

"Congress entrusts us with resources to meet certain goals: 'Make sure fewer mothers and children die in the first 48 hours of birth around the world. Make sure more people are fed during famine, increase democracy, bring electricity and clean water to those who lack it,'" Bonnell said. "For us, increasing the impact of our investments is what we expect to deliver."

Virtual Student Federal Service
Department of State

State Department facilitates expansion of virtual internships throughout the government

Federal agencies often struggle to hire student interns as a means of assessing and recruiting young talent while simultaneously giving them employment experience as they complete their education.

However, traditional internships are not feasible for all students—the schedule, location and housing costs can be prohibitive. At the same time, agencies face recruitment challenges and are forced to establish their own processes for handling internships, fostering inefficiency across the federal government.

The Virtual Student Federal Service, a virtual internship program organized by the Department of State, has addressed these problems.

The program, originally known as the Virtual Student Foreign Service, began in 2009 as a means of marrying technology with global service. Bridget Roddy, the architect of the program, understood that having American students partner with U.S. embassies reflected the realities of today's networked world.

The success of the program prompted Roddy to garner State Department support to expand the internship program to other agencies. It has since morphed into what is now called the Virtual Student Federal Service, operating at 55 agencies and offering 600 yearly internships.

Today, federal agencies looking for virtual interns can submit their projects at the website vsfs.state.gov every spring. Starting each July, U.S. citizens enrolled in an undergraduate, graduate, post-graduate certificate or degree program can apply for the listed internships on the USAJOBS.gov website. Supervisors review the applications each August, and by early September make offers to students for that academic year.

Students work on a timetable that fits their schedules and the needs of the agency and engage with supervisors from wherever they are located—anywhere with an internet connection. Interns are involved in a wide variety of tasks, including creating podcasts about government services, developing data visualization and graphic design projects, managing social media sites, conducting research, and engaging in language translation, writing and editing.[5]

The internship program has grown by leaps and bounds due to the work of Roddy and Nora Dempsey, both of the State Department's Office of eDiplomacy, Diplomatic Innovation Division.

Building on success

The creative initiative filled an important need, had high-level backing and was driven by Roddy and Dempsey, two individuals who were willing to take risks and build on what worked.

Roddy said she found people in influential positions who were open to new ideas and worked "behind the scenes to make things happen." In addition, Roddy and Dempsey created an easily navigable process, where barriers were removed and common questions addressed.

Combining technology and a deep understanding of what their customers need, Roddy and Dempsey built a website that streamlines the application and matching process for federal agencies and students. Through social media, relationship-building within and outside the agency, and word of mouth about how easy it is to participate, the program grew. It is well known for its flexibility, a smooth customer experience and a staff knowledgeable about human resources challenges. Barriers to entry have been removed while the cost of participation is low.

"People realized that we have an entire untapped resource of college students, so the program just spread. It is not scary or daunting, and there is no bureaucracy, no memorandum of understanding, no paperwork, no transfer of money or anything," Roddy said. "It is simple and it is free. In addition, there are no barriers. It kind of works for everyone."

Katherine Tobin, now the director of Lateral Innovation at the Office of the Director of National

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5   Virtual Student Federal Service, "All about VSFS." Retrieved from https://bit.ly/2oCK74W.

Intelligence, began offering virtual internship opportunities while on rotation to the CIA in 2016 and said the program has been extremely beneficial. It has since expanded to other agencies in the intelligence community.

"Through the internships, the CIA has had access to students from non-traditional majors, which helped them realize creative solutions to problems," Tobin said. For Tobin, virtual interns also mean a cost savings, access to a more diverse workforce and a new pipeline of talent. Of the two dozen VSFS interns with whom Tobin has worked, many have pursued careers supporting U.S. national security upon graduation.

The virtual internship program is an example of what highly motivated and creative employees with great ideas can do when they have the ability to sell their ideas, win internal agency support, and are provided with the freedom to take risks and expand successful initiatives.

With leadership backing and the freedom to innovate, Roddy and Dempsey focused on what was important to make the program successful on a broad scale: the removal of barriers to participation, a cost-effective business plan, building relationships with key stakeholders across agencies and a laser-like focus on the customers—the students and the agencies.

Conclusion

The federal government has the means, the ability and the need to create innovative workplace cultures—to leverage its resources and empower employees to create new or improved processes, products or services that deliver significant positive outcomes in furtherance of the public good.

While innovative ideas are often stifled by a lack of leadership support, bureaucratic barriers and the absence of incentives and resources, there are many bright spots across the federal landscape.

As evidenced by the five profiles and other examples cited in this report, there are agencies rising to the challenge—creating environments where new ideas are encouraged and are flourishing in areas dealing with national security, global development, health care, federal procurement and space exploration, among others. In some cases, these innovative solutions are employee-driven; in others, agencies are soliciting and implementing ideas drawn from outside sources.

The agencies where new ideas are taking hold possess many of the 10 organizational characteristics identified as key ingredients in helping foster innovative and change-oriented cultures.

As outlined in this report, these critical elements include strong leadership support and the empowerment of employees to experiment, take risks and have permission to fail. Innovative organizations provide the resources to expand initiatives that prove to be successful, remove barriers to change and place the customer experience at the center of their work. Moreover, organizations that foster innovation align their initiatives with strategic goals, solicit external expertise to provide new perspectives, and are willing to make adjustments as circumstances warrant.

Every part of our government, from federal agencies to the White House and Congress, can play a role in encouraging and facilitating innovation as the norm in government, not the exception. The innovation framework in this report and the examples of innovation in government now taking place offer a template for federal leaders to create a climate that both welcomes and pursues new approaches to better serving the needs of our country.

Methodology

The Partnership for Public Service and Slalom Consulting identified 10 characteristics that foster innovation in government based on secondary research and interviews with a wide range of practitioners and experts.

We conducted 33 interviews with employees at 16 agencies and 26 subcomponents. We identified interviewees by consulting with government innovation experts who provided recommendations and identified agencies that promote innovation. We also analyzed federal employee survey data. The innovation framework summarized in this study captures key themes that emerged through our research and interviews.

Appendix I

The individuals listed below generously offered their input on this study. We greatly appreciate their time and counsel. The contents of this report do not necessarily reflect the views of those with whom we spoke. Additionally, the views of participating federal officials do not necessarily reflect positions or policies of the federal government or its agencies.

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FEDERAL INNOVATION COUNCIL

The Federal Innovation Council is a cross-agency community of federal innovation leaders who, in addition to their creative work in their respective organizations, provide thought leadership to the Partnership for Public Service on innovation topics. During the course of this study, innovation council members generously shared ideas and suggestions for content and contacts. We are grateful for their contributions to this project and their ongoing innovation efforts across government. This study does not necessarily reflect the views of council members or their agencies.

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