THE ARCHITECTURE OF INNOVATION

Institutionalizing Innovation in Federal Policymaking

A new report by the Massive Data Institute at Georgetown University's McCourt School of Public Policy and the Beeck Center for Social Impact + Innovation

EXECUTIVE SUMMARY

"Innovation" has become a buzzword in government, industry, and society. Yet, scaling innovation for public policy is rarely discussed.

"The Architecture of Innovation" provides recommendations for how government can embed innovation into federal policymaking to achieve scalable solutions and better serve the American public. Produced by Georgetown University's Beeck Center for Social Impact + Innovation and the Massive Data Institute at the McCourt School of Public Policy, this report offers a framework for how to structure innovation in policymaking.

The 2016 presidential transition teams have the opportunity to build upon the innovation agenda of previous administrations and to advance a *culture of innovation* throughout government to solve problems. This report is not a checklist for how to "innovate" in government; rather, it offers a structure to drive a change in culture.

As part of our ongoing "Data for Social Good" efforts, the Beeck Center and McCourt held a convening in spring 2016 to discuss institutionalizing innovation in the federal government. Upon completing more than fifty follow-on interviews with executives across sectors (government, nonprofit, academia, industry, and civil society), a consistent message emerged. To build a better public sector for the twenty-first century, government must embrace innovation and build the necessary architecture to promote and institutionalize its use as a means to achieve outcomes.

This report defines "innovation" as a means for *creating a more effective government and improving services*. A core assumption is that innovation requires a governance structure that can influence a change in culture. This report focuses on a few broad areas where government can design structural supports to enable a culture change: the potential of technology, the importance of data and partnerships to provide more effective and efficient services for society, and the creation of structural supports that enable adaptability to change.

The federal government does not need to do it alone. There is much to be learned from cities across the country that are incubating and scaling programs and redesigning public systems to be more effective. US cities are leveraging technology to engage with citizens and demonstrating the potential of civic innovations such as participatory budgeting to improve government. This report highlights best practices in cities and recommends approaches that the federal government can use to work with cities to learn from their efforts and to create more incentives for scalable policy solutions.

"The Architecture of Innovation" provides a general overview of innovation efforts at the White House, and then offers recommendations with subsequent analyses in four key areas to help organize innovation in the next administration: (1) White House and Agencies; (2) Policy Innovation Offices and Public-Private Partnerships; (3) Cities as Incubators of Innovation; (4) Recruitment, Hiring, and Training. The report concludes with a summary of recommendations organized into three categories—structure, policy, and people. This report represents a synthesis of conversations with a broad, diverse group of bipartisan stakeholders and does not endorse a particular political point of view or ideology.

SUMMARY OF RECOMMENDATIONS

STRUCTURE

White House Option 1: Empower a Deputy Chief of Staff to Manage the Innovation Portfolio and Create Designated Deputy Assistant to the President in the Councils

Establish a deputy chief of staff (COS) position to manage the implementation of the federal government's innovation portfolio. The deputy COS would have a formalized role to act as the central coordinator of innovation priorities and activities, including the conversations led by current White House features (e.g., the Data and Digital Cabinets and the Technology Policy Task Force), and would serve as the White House's representative for the innovation agenda across agencies. The deputy COS would also work closely with key cross-agency groups and councils (e.g., National Economic Council (NEC), National Security Council (NSC), and Domestic Policy Council (DCP)) to ensure effective scaling of innovation across agency initiatives. In addition to this deputy COS position, create a deputy assistant to the president (DAP) within each council (e.g., NSC, NEC, DPC), and empower the CTO and other relevant positions (e.g., chief data scientist) at OSTP to integrate and prioritize innovation in agencies. The DAPs would liaise with their agencies as the point of contact for data, technology, business model innovations, and the like, as well as address legal, policy, or other barriers identified by agencies or communities. In addition to reporting to their council leadership, this new DAP should also report to the deputy COS. The DAPs would report to their council heads but would also have direct reporting authority to the deputy COS tasked with implementation and innovation at the White House. The deputy COS would both oversee the DAP's work and set priorities for the innovation agenda in conjunction with the federal CIO and the OMB deputy director of management.

White House Option 2: Create an Innovation, Data, Evidence, and Adaptability Council at the White House (Executive-Level Leadership)

Create an Innovation, Data, Evidence, and Adaptability (IDEA) Council in the Executive Office of the White House (at the level of the DPC, NEC, and NSC). The IDEA Council would coordinate innovation and data offices across government, set priorities to deliver results on the president's agenda, and work with the OMB management team and the federal CIO to help achieve the outcomes set with the White House. It would also house and oversee the various innovation offices and fellowship models that have recently developed to bring new thinking into the DNA of government. The IDEA Council would work in conjunction with a deputy chief of staff tasked with implementation and innovation.

White House Option 3: Strengthen Innovation Capacity in OMB's Management

Strengthen the management side of OMB by creating a direct reporting relationship with a deputy chief of staff. Empowering management in OMB to administer and motivate an innovation agenda would enable OMB to utilize its managerial and budgetary pull to coordinate, inspire, and enable innovative efforts across the federal government. This option requires clarifying and defining the roles and responsibilities of key officials, including those of the CTO and CIO, and addressing the question of external events and convenings, which have often been hosted by OSTP. OMB is largely an internal-facing agency, but to drive innovation it would need to be able to lead externally-oriented events and convenings.

Ensure Agency Leadership for Innovation Offices: Agency innovation offices should report to the secretary or deputy secretary. For innovation to be prioritized, either the secretary or deputy secretary needs to oversee innovation work. This would help create the appropriate incentives for personnel within agencies to be empowered to innovate on solutions. This structure would empower innovation within agencies, integrating with tech, acquisition, program, and other key stakeholder offices.

Oversight Commission: Within six months of taking office, the next administration should create a bipartisan commission to conduct an audit to analyze the various avenues for innovation in federal government, including law, policy, technology, processes, people, and organizational structure. It would provide recommendations to Congress about how to improve innovation throughout the government. Congress would need to be a partner for long-term change.

Adopt More Flexible Hiring and Rotations: The federal government can offer more flexible hiring and rotation options to expose employees to a variety of training, leadership development, and policy opportunities. This may include allowing personnel to complete a stint in a different department within an agency, work in a different part of the federal government, or even work at an external partner

such as a university or private company. Also, flexible hiring and rotation options would enable field experts to move in and out of government with greater ease and with clearer structural supports. External talent can infuse government teams with cutting-edge practices and ideas while simultaneously exposing other sector leaders to the benefits and distinct impact of public-sector service.

Accelerate Federal Hiring Timeline: The time between submitting an employment application to the federal government and being hired can take months. Also, the hiring process can be laborious for the hiring managers and frustrating for both the applicants and the team that has an opening. Furthermore, if security clearance is required, new hires can spend up to a year waiting for clearance approval before beginning their job. While there are inflexible realities of security clearance and hiring requirements for government work, removing entrenched inefficiencies is possible. Expanding the availability flexible hiring structures can improve hiring efficiency and put people to work sooner. For example, by utilizing Schedule A hires, the Intergovernmental Personnel Act, expert or consultant appointments, term appointments, and the like,[1] much-needed human capital can be engaged in government work more quickly and, in some cases, without the restrictive requirements of career positions.[2]

POLICY

Adopt Flexible Procurement Policies: Modern, agile methods and policies increase the flexibility of government IT procurement processes by aligning the acquisition and budget processes with the technology cycle. Agile methods support the development of more modular IT development, prioritize the training of more IT acquisition professionals in government, provide numerous avenues for more efficient IT spending, bring innovation into the selection of contractors and oversight of contract execution, and require more cross-agency, collaborative, user-centered, and iterative IT procurement methods.

Take Innovation Sprints: The government should encourage "innovation sprints" with a specific agency, groups within an agency, and/or as a collaboration of agencies working on a problem together within a limited time frame. A few key problems could be addressed with radical experimentation to trigger change. This could include testing flexible hiring and procurement, or implementing new financing methods that create aligned incentives. Quick and agile sprints would use data and measure outcomes. The process, from identifying problems to developing solutions, would be fully transparent and accountable to the American public. Also, as a means for delivering solutions, if the most important issues were tackled as cross-government initiatives, an innovation sprint would create a sense of urgency and mission, thus enabling the sprint team to pull in the right expertise from across agencies and to leverage different authorities from each agency to quickly achieve an outcome.

Support Outcomes-Focused Funding: An outcomes fund should be created in partnership with the private sector and philanthropy. Such a fund would spur innovative solutions—financing mechanisms, programs, or method—with payments based on results. An outcomes fund would create a market for programs and policies that achieve outcomes. As outcomes are achieved, the pool of federal dollars dedicated to outcomes-focused programs and contracts should also be expanded. As capacity improves and models are proven, government should eventually base more mandatory funding on the achievement of outcomes. A fund would help policymakers gain more insight into what types of innovations—programs and policies—work and the appropriate methodologies that can best measure and evaluate their impact. Over time, government can then reallocate money from less effective models and policies to more effective ones. This will require congressional support. As returns on investment are demonstrated, the executive branch could work with Congress and the private sector (e.g., foundations) to expand the use of outcomes funds and innovative finance mechanisms such as pay for success.

Think Beyond Data and Apps: Innovation is not limited to the tools and approaches outlined in this report. By design, innovation should include combinations of new processes, tools, and approaches. Each new idea should undergo a needs assessment that is measured for impact, and not simply the merit of the idea divorced from potential outcomes. For example, New York City revamped pay phones to provide free, fast, reliable Wi-Fi and to serve as information hubs, and Boston's City Hall to Go leveraged a refurbished truck to deliver government services, but metrics for gauging the impact of these types of programs are still being identified. To generate these types of policy proposals, thinking should not be limited to data, apps, or legacy software.

Support Cities as Innovation Districts: Multisector actors should be leveraged to create open civic spaces, such as Superpublic in San Francisco, Startup Seattle, or Civic Hall in New York City. These types of spaces can bring civic innovators, entrepreneurs, technologists, and philanthropy together to *collaboratively* find solutions for the public good.

PEOPLE

Incentivize More Inclusive Tech Talent: The public sector can strategically recruit more inclusive tech talent to reflect America's population. For instance, hiring and training programs situated in local communities, such as the White House's TechHire initiative, can combine federal funding and private sponsorship with community partners and local employees[3] to build stronger, more inclusive networks.

Recruit for Diverse Skillsets: Today's rapidly changing environment needs dynamic personnel. The government should hire people with diverse skillsets to work across silos, for example, attorneys with engineering backgrounds, data "nerds" with English degrees, community organizers with an understanding of the role of technology, ethnographers, programmers, and so on. The government needs dynamic staffers who may not fit into traditional silos or check-the-box hiring forms. Identifying and tapping into this type of human capital may require finding new talent pools for recruitment and reclassifying some existing job descriptions. This would also require updating job descriptions to ensure nomenclatures and job descriptions accurately reflect needed skillsets and experiences.

Train Current US Government Employees with Tomorrow's Skillset: Current government employees in the civil and foreign service should have access to training opportunities to develop the skills and critical thinking techniques necessary for tomorrow's workforce. Government can actively train personnel to understand and utilize new tools to better achieve impact. This could include understanding empathy and user-centered thinking; coding and design skills; and new financial models and public-private partnerships. Some universities offer training programs for federal employees, and some companies are investing in alternative training models. Individual agencies and employees should be empowered to determine precisely which skills are needed; this can range from technology policy, to language skills, to ethnographic research.

Engage the Community: Projects that empower community residents to articulate *their* own needs are more likely to empower community residents and to offer the government services and policies needed by citizens. Several cities across the country have open data communities and participatory practices that are working to engage community stakeholders.

1 Sean Thornton, "Chicago Launches OpenGrid to Democratize Open Data," Harvard Data-Smart City Solutions, January 20, 2016, http://datasmart.ash.harvard.edu/news/article/chicago-launches-opengrid-to-democratize-open-data-778?utm_content=buffere195b&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer.

2 "Architecture of Innovation" contributor interview by Hollie Russon Gilman and Jessica A. Gover, July 14, 2016.

3 See The White House, "TechHire Initiative." Accessed August 18, 2016, https://www.whitehouse.gov/issues/technology/techhire.

PLEASE VISIT DATAFORSOCIALGOOD.GEORGETOWN.EDU FOR MORE INFORMATION

McCourt School of Public Policy | GEORGETOWN UNIVERSITY | beeckcenter social impact + innovation