### Building an Innovation Toolkit for the Public Sector (Draft 3/10/17)

One element of the Obama Administration's *Strategy for American Innovation* was the use of several dozen approaches for solving problems, improving some of the core functions of government, and fostering innovation inside and outside of government (see attached). As opposed to focusing on the *what* of innovation (e.g. ending cancer as we know it, making solar energy as cheap as coal, keeping the United States at the cutting-edge of advanced manufacturing) – these efforts focused on the *how* of innovation – tapping the distributed expertise of the American people, recruiting innovators to government for "tours of duty," paying for outcomes as opposed to inputs, embracing approaches to procurement that allowed the government to partner with startups and commercial firms, building/using evidence about "what works," and adopting private sector methodologies such as human-centered design and the lean startup methodology.

For example, in the area of incentive prizes, the Administration worked with Congress to pass legislation that gave every agency the authority to sponsor incentive prizes of up to \$50 million, recruited experts in prize design to the Office of Science and Technology Policy, directed GSA to develop challenge.gov, launched and sustained a government-wide community of practice, and created a "toolkit" to capture the experiences of this community in all aspects of the prize design and management life-cycle. Federal agencies have sponsored over 700 prizes and challenges. One agency has reported that for some classes of problems, incentive prizes are delivering results comparable to traditional contracts at 1/10<sup>th</sup> the cost. This ability to deliver results at lower costs is critical, given the fiscal constraints that exist at all levels of government.

However, there is more that can and should be done to increase *awareness* and *effective adoption* of these and other approaches at all levels of government and by the philanthropic sector more generally. More and better tools (and an understanding of which tools or combination of tools to use given the nature of the problem to be solved) could significantly increase the productivity and effectiveness of government, the private sector, and civil society.

For example, the Obama Administration did not complete an effort to develop a set of online resources to help individuals and organizations adopt these approaches, in part because no agency had the responsibility and resources to do this. As a result, in many cases, much of the information around these tools is either (a) difficult to find; or (b) has never been captured by interviewing experts and practitioners.

#### Some questions worth exploring are:

What incremental work (interviews, writing, landscape analysis, literature reviews)
would be required to capture, organize and disseminate the lessons learned from the
Obama Administration efforts?

• What strategies have been most useful in getting governments to experiment with these approaches? For the most relevant elements of the toolkit, what are the most important gaps in the availability of resources (e.g. training/experiential learning, technical assistance, online resources)?

A more ambitious project that is also of interest would be to encourage a coalition of foundations and philanthropists to invest in "field-building" around a set of tools and methodologies for solving complex and urgent societal challenges.

Previous examples of these types of investments include:

- The Rockefeller Foundation's support for the Kennedy School's Government Performance Lab, which is helping state and local governments adopt "pay for success," results-based contracting and performance management.
- Gates Foundation support for the development of "market-shaping" interventions to solve market failures in global health. For example, the G7 + Gates Foundation Advanced Market Commitment for a pneumococcal vaccine is projected to save the lives of 7 million poor children over the next 20 years.
- Arnold Foundation's investment in evidence-based policy through organizations such as JPAL North America and ideas42, and Bloomberg's support for the Center for Government Excellence at Johns Hopkins University, with a focus on decision-making based on evidence, open accountability, and citizen engagement.
- Work by the Carnegie Foundation for the Advancement of Teaching in "networked improvement communities." This approach is being used to drive continuous improvement in important educational outcomes, such as increasing the fraction of students that take remedial math at the community college level that go on to successfully complete college-level math.

#### **Elements of the Innovation Toolkit**

Below are some examples of the tools and methodologies that federal agencies used to solve problems, do more with less, improve core processes of government, and promote innovation both internally and externally.

# People/culture

- Appoint a "Chief Innovation Officer" or "Chief Technology Officer" and provide recognition and support (time, funding, training, top cover) for career employees with innovative ideas (HHS CTO, HHS Idea Lab)
- Create mechanisms to quickly recruit and hire world-class technical talent (GSA/18F, USDS, Presidential Innovation Fellow program)
- Promote "operational innovation" by designating innovation roles in functions such as HR, legal, and acquisition such as Chief Innovation Counsel (USAID)

## Open/digital government

- Make open data the default, and encourage entrepreneurs and developers to create compelling applications that take advantage of it (Data.gov, Commerce Data Service).
- Enable smart IT delivery using agile-assisted acquisition, Digital Services Playbook, and contracting to reward success/penalize failure for smart IT delivery (USDS, GSA/18F)

#### Paying for outcomes/new approaches to acquisition

- Use incentive prizes (Prizes Community of Practice, Challenge.gov)
- Pay for Success (Labor, Treasury)
- Use approaches to contracting (e.g. Other Transactions) that allow the Federal government to engage with entrepreneurial firms that can deliver more bang for the buck (DARPA, DIUx)
- Partner with venture-backed startups (In-Q-Tel, DIUx)

# Science and Technology

• Identify and pursue Grand Challenges (Energy – Sunshot and EV Everywhere, USAID)

• Use "DARPA" model for supporting high-risk, high-return research.

#### Evidence-based approaches to innovation

- Use tiered evidence approaches to grant-making to develop, validate, and scale high-impact interventions (Education)
- Recruit senior evaluation officer, develop agency-wide "learning agenda," and establish evaluation set-aside (Labor)
- Use and test behavioral insights to improve policy and practice (Social and Behavioral Sciences Team)

#### External collaborations

- Create an organization to design and launch formal public-private partnerships (Foundation for the NIH)
- Encourage the use of crowdsourcing and citizen science (Citizen Science and Crowdsourcing Community of Practice)

## Innovation Methodologies

- Use human-centered design to solve problems and significantly improve the delivery of government services.
- Use the "Lean LaunchPad" to improve the commercialization of Federally-funded research (NSF)

These approaches are only a fraction of the approaches that public and private innovators have used to solve problems and drive social challenge. Others include:

- Impact investing, blended finance, capital stacks, other financial innovations.
- Changes in corporate governance to allow new types of organizations such a "public benefit corporations."
- Rapid cycle evaluation, especially using digital tools for A/B testing
- The combination of networked improvement communities and improvement science
- Market-shaping approaches, used primarily by the global health community.

• "Collective impact" approaches pioneered by Cincinnati's STRIVE.

### Different approaches to increasing awareness and effective adoption

Create high quality, updated, online resources that help people understand why, how, and under what circumstances they might want to use these approaches to solve a particular problem.

Create incentives for adoption (recognition, including in performance management plans in ways that "cascade" throughout the organization, link to promotion).

Pass and implement enabling legislation, regulation, or policy frameworks, including "model" legislation or executive actions.

Invest in professional development such as training and experiential learning (e.g. GovLab Academy).

Support internal and external centers of excellence (e.g. NASA's Tournament Lab with the Harvard Business School on open innovation, Washington State Institute for Public Policy for evidence-based policy).

Recruit or designate high-level champions and advocates. Send clear and consistent messages that use of these approaches is not allowed but encouraged, and that federal employees will not be penalized for intelligent risk-taking. For example, the U.S. Surgeon General recruited a "Chief Design Officer" to encourage the use of design thinking.

Create new roles, titles, job descriptions, and career trajectories for people with these skills.

Make it easier to adopt these approaches by reducing the time, cost and complexity of doing so. For example, create contracts and marketplaces that make it easy for organizations to partner with service providers (e.g. firms that specialize in a particular approach such as open innovation, human-centered design, or agile approaches to the development of digital services).

Support research that increases our empirical understanding of different methodologies.

Support vibrant communities of practice.

Promote an "outside in" approach by getting the stakeholders to an organization excited about these ideas.

Create an "innovation council" as a way of getting the entire organization (as opposed to a small skunk-works) interested in these ideas.

Empower employees that are intrinsically motivated to solve a particular problem with small amounts of time, money, mentoring, experiential learning, and access to external expertise. Provide additional resources to the most promising ideas.

# **Examples of useful content**

Elevator pitch for a given tool.

Why and under what circumstances might you use it?

What are the key premises that support the use of this tool (e.g. for open innovation, Joy's Law, which states "no matter who you are, most of the smartest people work for someone else).

How-to: what are the key steps for deploying this approach, organized around (1) the "life cycle" of a project and (2) the members of a cross-functional team that is needed to design, approve, implement, monitor, sustain, improve, scale, etc. these projects (program manager, functional roles like general counsel or procurement)

Case studies of successes and failures.

Policy (e.g. legislation, Executive Order, etc.) that enables or encourages this

Promising practices

Challenges/limitations (what barriers or obstacles do agencies encounter when using this approach)

Future directions (next practices as opposed to best practices)

Glossary of key concepts, online courses, FAQs, annotated bibliography

Communities of Practice and mailing lists, shared calendar of upcoming events

Interviews with practitioners and experts (Gov Innovators podcast)

Templates (e.g. examples of contracts, job descriptions, other documents that are essential for implementation)

Shared calendar of upcoming events

 $Resources-e.g.\ marketplaces\ of\ service\ providers\ and\ providers\ of\ technical\ assistance$