**PPP**

**Quote:**

[N/A]

**Intro:**

Lean Startup represents a framework for developing solutions through small scale tests, regular end-user engagement, and continuous iterations. This approach can be adapted and applied to bring tangible impact on a broad array of missions and agency-specific contexts. Pioneered by educator and serial entrepreneur Steve Blank, Lean Startup is both a structured process and a conceptual framework for improving the effectiveness and efficiency of problem-solving.

The idea of a “blueprint for innovation” might sound paradoxical at first. But those most familiar with Lean Startup have called it the “**scientific method for evidence-based innovation**” because of its structured, testable principles. [Andrea Kates, “[Evidence Based Innovation](http://videos.ypoinnovationweek.com/entrepreneurship-and-innovation-summit-evidence-based-innovation),” Innovation Summit, online video.] Philosophically, the concepts are deeply aligned with and central to the various approaches to evidence-based decision-making, including the tiered approach of testing, piloting, and scaling up promising solutions. [crosslink tiered evidence grantmaking / evidence based policy content]]

With an emphasis on extensive customer feedback and iterative prototyping, the Lean Startup principles promote a deeper understanding of the problem at hand and the challenges of deploying a solution. The value of this approach is broadly and deeply useful for Federal work, regardless of mission focus. “Despite the methodology’s name, in the long term some of its biggest payoffs may be gained by the *large* [entities] that embrace it,” observed Steve Blank. [Blank, S., “[Why the Lean Startup Changes Everything](https://hbr.org/2013/05/why-the-lean-start-up-changes-everything/ar/1)”[,](https://hbr.org/2013/05/why-the-lean-start-up-changes-everything/ar/1) Harvard Business Review, May 2013.] By prototyping approaches that are responsive to stakeholder needs and incorporate feedback from user experiences, agencies can “fail small, and fail fast” when experimenting with new programs and scale-up only the strongest and most effective idea [Chopra, A., “[Open Innovator’s Toolkit](https://www.whitehouse.gov/sites/default/files/microsites/ostp/openinnovatortoolkit_nstcmemo.pdf),” NSTC, February 8 2012].

**Why:**

Built from Toyota’s Lean approach to manufacturing, some of Lean Startup’s language reflects its origins in the private sector – but the core principles translate to public sector work. This is not about merely adopting Silicon Valley buzzwords; the term “startup” is used as a shorthand descriptor for a way of working that uses hypothesis-driven, incremental steps with “build, measure, learn” feedback loops to continually create improvements. [[crosslink OODA content below]] By emphasizing flexibility, pragmatism, and experimentation, “the method allows organizations to learn as quickly as they can about what works, so that they can build and scale successful programs while avoiding huge up-front investments that might lead in the wrong direction.” [Blank, S. et al, “[Lean Experimentation for the Social Sector](https://ssir.org/podcasts/entry/lean_experimentation_for_the_social_sector_build_smart_to_learn_fast),” Stanford Social Innovation Review, August 22, 2016.] Lean Startup offers a genuine framework for understanding the problems and needs of beneficiaries and stakeholders. By understanding their stakeholders, deployment issues, costs, resources, and ultimate mission value, agencies can rapidly iterate on solutions that best align to stakeholder needs.

Adopting effective Lean Startup techniques can:

* Break the status quo and overcome obstacles with effective change management processes
* Build an entrepreneurial mindset and agency culture that’s responsive to stakeholders by design
* Generate new ideas for improvement and build capacity for translating ideas into action.

**How:**

At their core, Lean Startup methods are about applying a collaborative, team-based approach team-based approach to accelerated problem solving. The mindset stresses the importance of challenging assumptions and reacting quickly to new information, using hypothesis development and testing as part of “customer discovery.” With its emphasis on the end-user, it has considerable overlap with human centered-design principles, which stress empathy, iteration, collaboration, nonlinearity, making, and a bias toward action. [crosslink HCD content]] Lean Startup seeks a deep understanding of a problem, then builds and iterates a solution. Lean Startup can be brought to bear on a range from activities, including program creation and management, procurement, and grant making. [crosslink further elaboration in D3: Use cases]

**Lean Startup’s Four Steps: [**[**2 min video overview**](https://videos.files.wordpress.com/6f5VMvrR/what-is-customer-discovery_dvd.mp4)**]**

* Step 1: Break down your grand vision into component parts, and sketch out your hypothesis
* Step 2: Test the problem
* Step 3: Test the solution
* Step 4: Verify or pivot
* (Step 5: Iterate the loop as necessary)

**Case Study:**

**Foundation for the National Institutes of Health**

[James, S., Personal communications and phone interview with Policy Design Lab, August 12th, 2016]

**Summary:** [The Foundation for the National Institutes of Health](http://www.fnih.org/) (FNIH) is a non-governmental, non-profit 501(c)3 organization that procures funding for and manages public-private biomedical research collaborations that support the mission of NIH. As established by the U.S. Congress, the Foundation operates as a separate entity with its own independent Board of Directors and management. The Foundation’s independent status enables it to act as a trusted third party, implementer and an effective broker for partnerships that support both government and private sector interests, and that include NIH, FDA, other government agencies, pharmaceutical and technology companies, philanthropic organizations and other non-profits. FNIH activities include organizing and administering large-scale research partnership programs, supporting education and training of new researchers, organizing educational events and symposia, and administering funds to support a broad spectrum of health challenges. As an independent organization, FNIH is authorized to raise private funds and create P3s that benefit the NIH’s mission.

**Key accomplishments (Impact):** The FNIH has created hundreds of cross-disciplinary partnerships that have generated or tested novel approaches to overcome challenges in biomedical research for the prevention and treatment of disease and disability, and provided significant supplementary support for NIH initiatives. The organization stands at the center of a broad portfolio of initiatives that support the mission of the NIH to advance biomedical science and improve lives. Some of the key results of FNIH efforts include:

* [**Research Partnerships**](http://www.fnih.org/what-we-do/current-research-programs/all): Convening scientific experts from government, industry, academia and the not-for-profit sector to collaborate on common goals. Examples include:
  + **Portfolio Supporting NIH Research** — Supporting and raising funds for multiple projects initiated by the NIH, while also convening the right partners within and outside of the NIH.
  + **Global Health** — Coordinating and operating collaborative projects in more than 25 countries.
  + [**Biomarkers Consortium**](http://www.fnih.org/what-we-do/biomarkers-consortium) — Initiating and managing over 20 projects funded with more than $60 million in private dollars, designed to develop and validate biological markers to support new drug development and patient care.
* **Symposia, Events and Exhibits:** Hosting more than 50 events each year are organized to create forums for innovative thinkers in biomedical sciences to share ideas and engage the public in disease and health awareness. [“[What We Do](http://www.fnih.org/what-we-do)”, FNIH]

**How they do it:**

To tackle the human health challenges that face the world today, the FNIH applies its power to draw the right partners into an initiative. The Foundation develops collaborations with top experts from government, industry, academia and the not-for-profit sector and provides an environment where it can work productively toward common goals and solve common problems. Novel partnership or project concepts may be proposed through NIH or by any of FNIH’s network of public or private sector partners, and are further developed and vetted by FNIH staff. While partnerships vary considerably in their goals, scope, and structure, they share the common principle of combining the collective expertise of multiple partners to achieve results that any single entity cannot achieve as effectively on its own.

The NIH Office of the Director provides a final bar of review for ideas generated by NIH. Upon receiving any new project proposal, FNIH staff consults its Board of Directors for a determination as to whether the Foundation should enter into the partnership. FNIH then works with the originator of the concept to come to a better understanding of what they would like to accomplish. [James, S., Personal communications and phone interview with Policy Design Lab, August 12th, 2016]

FNIH’s role and capabilities include project design and management, fundraising, contracting and grant making, intellectual property management, and monitoring and evaluation of project results. In general, partnership development entails:

* *Crafting a common agenda and engaging partners who can support the mission:* Ensuring everyone is in agreement about what they are trying to accomplish. The first step is to define the problem and build consensus around that definition, explains FNIH Science Director Stephanie James. [James, S., Personal communications and phone interview with Policy Design Lab, August 12th, 2016]
* *Determining the type of resources that are required to achieve the solution:* FNIH involves its partnership community to understand collectively what human, technical and financial resources are required to solve the problem.
* *Building an appropriate structure that can be effective in solving the problem*: FNIH does not have a set prescription or blueprint for its partnerships. Activities and structure are designed and tailored to the specific agenda and project. A key requirement is the establishment of a mutually agreed upon governance structure.
* *Creating multiple touch points for project oversight and cultivation of relationships*: FNIH convenes its partners regularly at events, symposia and other activities to allow partners to engage and grow their individual relationships. FNIH-managed projects are subject to ongoing project management, including regular reviews of technical progress and finances.

**Key learning insights:**

* **Facilitate collaboration amongst partnering organizations**
* **Flexible approach to formulating partnerships**
* **Stewardship is critical for successful and sustained partnerships**
* **Creative problem solving**

**Facilitate collaboration amongst partnering organizations**

The FNIH is mission-driven to create a nexus between discovery and collaboration. [ “[What We Do](http://www.fnih.org/what-we-do)”, FNIH] According to Director of Science Dr. Stephanie James, discoveries that advance human health are not simply a matter of bringing together the best minds from government, industry, academia and not-for-profits. Facilitating breakthroughs means helping partner organizations collaborate in ways that harness their full power and potential. [James, S., Personal communications and phone interview with Policy Design Lab, August 12th, 2016]

**Flexible approach to formulating partnerships**

Sitting outside government is central to the success of FNIH, as it provides the ability to act as a bridge between the NIH, the research community, and potential funders. Because FNIH is an external entity, it has increased flexibility for making independent decisions, so long as the decisions align with its role in supporting the mission of the NIH. According to Director of Science Dr. Stephanie James, the bottom line for building partnerships is flexibility: “Typically a potential partner approaches FNIH and explains what it is they’re trying to get accomplished [...] Our role is to try to help them figure out how to make that happen, both structurally and financially.” [James, S., Personal communications and phone interview with Policy Design Lab, August 12th, 2016]

**Stewardship is critical for successful and sustained partnerships**

Bringing people together to facilitate the construction of partnerships, and then serving as a steward and manager to support the continued success of the collaboration, drives much of FNIH’s work. One of the key functions FNIH plays is providing expectation management and coaching to partners from the beginning to the end of the collaboration, according to Julie Wolf-Rodda, FNIH’s Director of Development. [Rodda-Wolf, J., Personal communications and phone interview with Policy Design Lab, August 12th, 2016]

**Creative problem solving**

One of the Foundation’s main roles is to understand what NIH can and cannot do, and structure its efforts accordingly -- supporting collaboration operations, ensuring funding is available, and operating within legal boundaries and frameworks. “A lot of times we end up having to talk to the Office of General Counsel about what can be done and what can’t be done, and then once we have the information, we have to come back and try to think creatively about making it work,” explained Dr. James. [James, S., Personal communications and phone interview with Policy Design Lab, August 12th, 2016]

**To learn more:**

* Review the FNIH [website](http://www.fnih.org/) and discover the various projects it has initiated through collaboration
* FNIH’s interactive [annual report](http://2015-annual-report.fnih.org/) conveys its impact through partnerships

**Next Steps/Checklist:**

**Relevant Policies:**

**Additional Resources:**