



The Global Alliance for  
Humanitarian Innovation

# DESIGNING AID SECTOR INNOVATION LABS FOR MORE COMPLEX INNOVATION

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## Expecting More from Labs

Innovation Labs are one of the favored forms of investment in innovation, both in individual organizations and for the Aid Sector as a whole. Labs have emerged across UN agencies (some on their second and third generations), large NGO's, and within the field as part of a Humanitarian and Development aid effort. One assessment of the creative ecosystem in Jordan identified some 200 in country innovation centers.

Active investment in lab environments should be an encouraging sign, but this would only be true if those labs successfully support innovators that are generating impact at scale. Labs that foster small inconsequential innovations are themselves inconsequential. Even if labs aspire to produce substantial innovations, they will fail to contribute to the need for impactful change if they abandon innovators along the way.

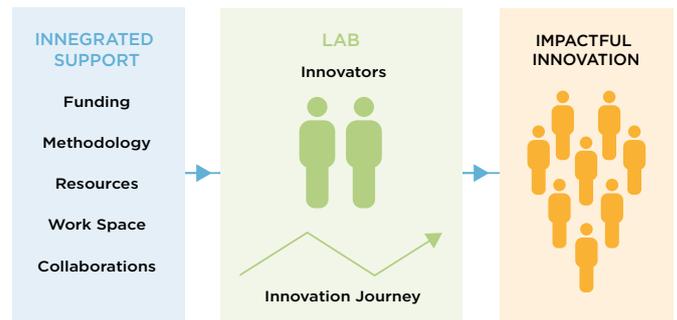
These are serious concerns. As highlighted in the GAHI Journeys to Scale paper and the Humanitarian Innovation Fund's Barriers to Scale paper, there is widespread concern with the sector's inability to bring even proven innovations to scale. The GAHI Innovation 3.0 paper takes this concern further, describing the need to develop more sophisticated systems based innovations.

It should not be enough to simply create a lab, ticking off the innovation investment check box. This briefing paper proposes a way to step back from the adoption of conventional lab models, and instead design labs that fit a growing understanding of complex innovation challenges.

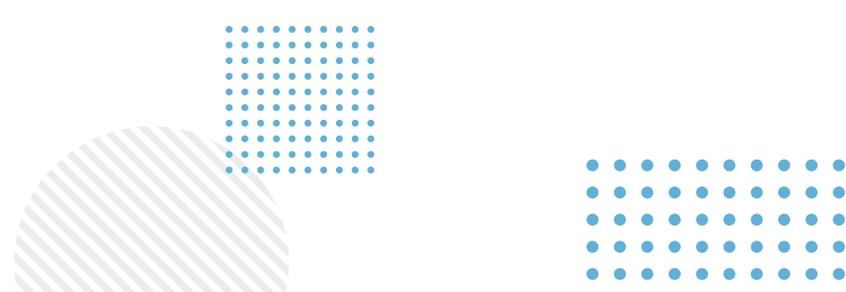
## Labs – A Tool for Innovators

Innovation labs are expensive tools that organizations use to generate more impactful innovations. This is a strategic investment, which many organizations are willing to make, believing that over time those who effectively innovate will be in a position to improve performance, take advantage of new opportunities, and avoid emerging threats.

Yet, while aid organizations and the people in need they serve benefit from impactful innovation, they are not the primary users of a lab. Labs make innovators more successful, addressing challenges and gaps that innovators face when taking an idea from conception to sustainable impact.



During the long journey from idea to implementation a wide range of risks, gaps and barriers can leave innovators stuck or derailed. An innovation lab is a sophisticated tool that addresses this creative challenge. Sponsors and supporters use the lab to increase their influence on an innovator's success and impact. A well designed innovation lab provides innovators with integrated resources and guidance, what they need to envision powerful change and then solve the many unique problems they encounter on their innovator's journey.



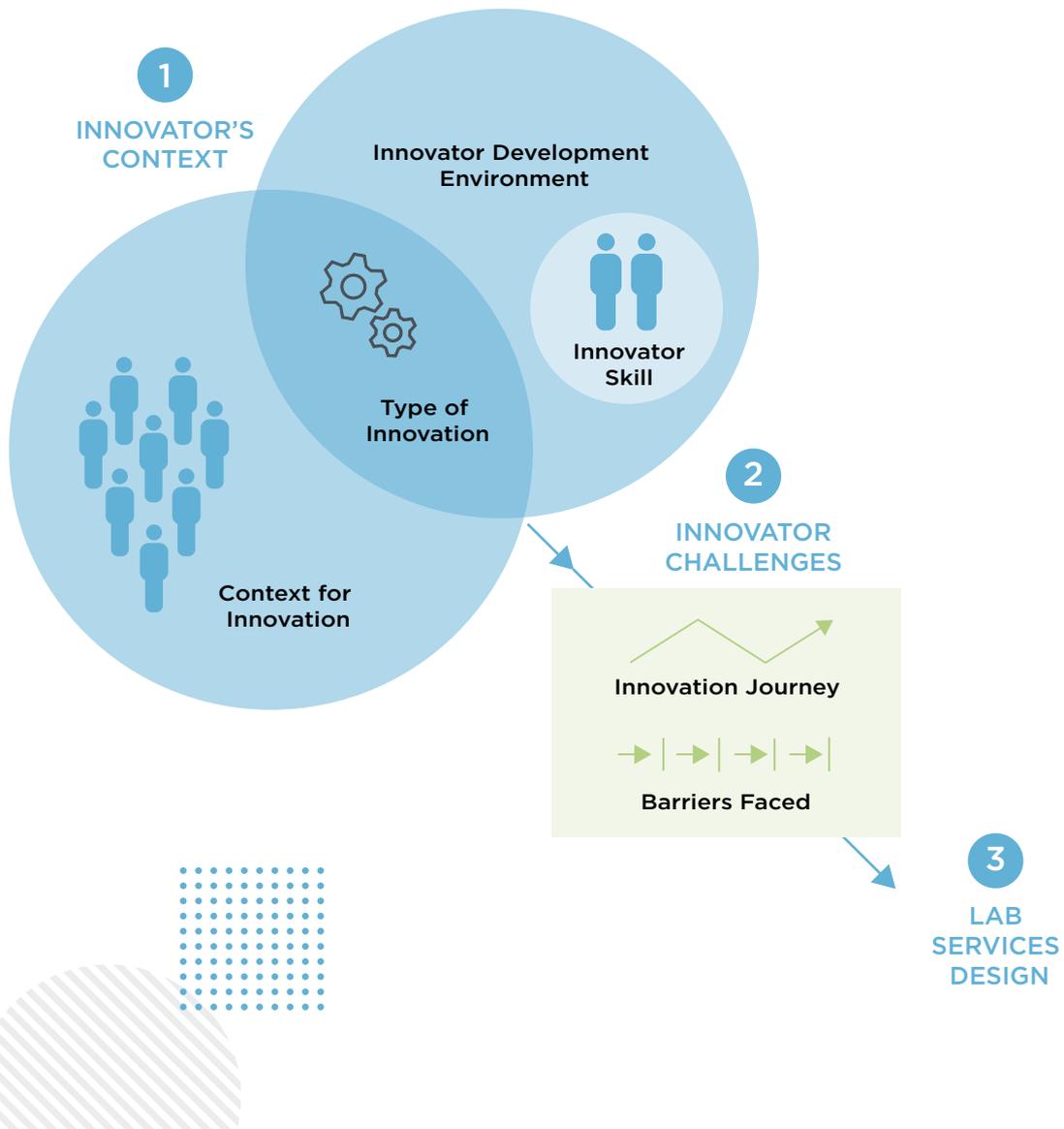
# Building Labs to Purpose

Placing the Innovator at the center of the Lab’s purpose and success allows us to apply the principles of User Centered Design when developing a lab and evaluating its success. The Innovator is the Lab’s user. Lab designers can ask, “What challenges does this Innovator need to overcome on the path from idea to full implementation” and then measure the success of the lab by its ability to enable the innovator as they navigate that journey.

This requires a Lab Designer to clearly understand what challenges an Innovator must overcome to deliver impact at scale. One of the key themes from the GAHI Many Paths to Scale paper is that there is no single ‘right’ way to develop and scale an innovation. Instead, the many different contexts where innovation happens, types of solutions, and innovator capabilities create a wide range of very

different journeys. An innovator with their own path ahead will be unlikely to succeed if they copy the strategies and practices of another innovator facing different challenges.

This implies that lab designs need to be designed around an innovator’s need. Each innovator needs a lab that takes into account the factors creating unique challenges for their innovation journey. What is the context where the innovation will be used? What type of solution is being proposed? Where is the innovation developed? What is the skill of the innovator? Which business models are available? What unique barriers must be overcome? How difficult will it be to adapt the innovation in new locations?



## The Lean Innovation Lab

Over the last decade, the innovation labs deployed across Aid the sector have largely followed a pattern set by commercial technology companies and their venture capital counterparts. A million plus apps in each of the major mobile app stores is proof that this model can work for a particular type of problem and opportunity.

The problem these labs attempt to solve is quickly identifying and developing a product or service (usually leveraging technology as its core feature) that serves a particular need for a particular user. Some innovations may be whole solutions to a narrowly defined problem, while others could simply be feature improvements to existing operations.

Underlying the initial Lean Lab is a Lean Innovation. These methodologies are particularly well suited to products, services and features that are well defined and bounded to address a particular need for a particular user. Economically, an innovator expects to have a commercial market or organization that is willing and able to pay for the added value.

To varying degrees, the current ecosystem of Lean Innovation Labs solves this creative challenge by addressing two major parts of the innovation lifecycle:

- **Pilot Ideation and Testing:** These labs widely practice a Lean Innovation methodology, that is begins with open creative ideation. This is followed by “fail fast” experimentation to test ideas and product a successful “pilot” that validates an idea.
- **Incubating Journeys to Scale:** Either the innovation is deployed by an existing business enterprise or a new business enterprise is built up around it. If not deployed internally, innovators will expand their market and business operation, until they either become a breakout business (IPO) or until they are purchased by another company that can roll their work into an established operation (buyout).

In combination these two labs enable a successful lean product innovator to get their ideas from initial conception through full deployment and adoption. Both lab models and their underlying Lean practices are extensively used in the commercial world. Over the last ten years they have also been the widely copied template for labs addressing aid sector challenges.

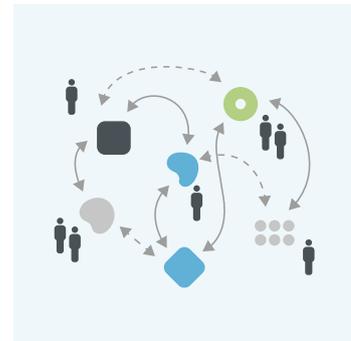
# Harder Problems – More Complex Solutions

Many potentially impactful innovations in the Aid Sector will not follow the relatively clean path of commercial technology development. Instead, there will be systems complexity in both the problem that is addressed and the solution that is developed.

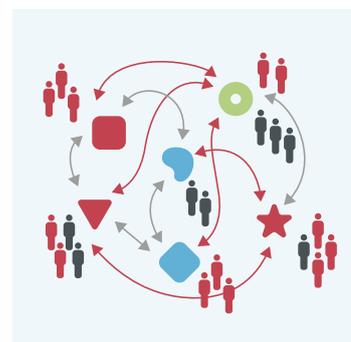
Consider the three innovations outlined below. They each involve a complex solution that leverage systems creation or change to solve a challenging issue with multiple actors in a dynamic and shifting environment. This is the kind of complex systems innovation that was discussed in the GAHI Innovation 3.0 paper.

While technology may be involved in the solutions, none of the innovators working on these challenges would expect a simple technology product like a mobile app to be the whole solution. They would also recognize that a traditional commercial business model is unlikely to be available to them, and so they would be forced to explore other options for sustainable funding. They also face a range of complex messy problems. If a lab is going to be successful in supporting one of these innovators, the mentoring, resources, and creative environment would all need to be built around the unique challenges they face.

## CURRENT SYSTEM



## FUTURE SYSTEM



### Complex Innovation #1

### Complex Innovation #2

### Complex Innovation #3

Type of Innovation:		
<b>System Creation</b> – Health care service network with providers from local communities	<b>System Transformation</b> – Shift of cultural practices that contribute to gender based violence	<b>System Disruption</b> – Regional AI driven aid response enabled by widespread IOT deployment
Context of Use:		
Many low resource communities	Specific urban neighborhoods	Multi-country consortium
Business Model:		
Government implementation with budgeted funding	New organization setup to deliver the program, funded by grants	State and international funding of regional organization
Unique Difficulties:		
<ul style="list-style-type: none"> <li>• Training practitioners</li> <li>• Integrating with other health care</li> <li>• Varied infrastructure and resources</li> <li>• Cultural variations</li> <li>• Distance from support services</li> <li>• Legal liability</li> </ul>	<ul style="list-style-type: none"> <li>• Highly customized program</li> <li>• Long term engagement</li> <li>• Dependent on special skills</li> <li>• Hidden barriers and dynamics</li> <li>• Hard to measure progress</li> <li>• Deep multi-feature problem</li> </ul>	<ul style="list-style-type: none"> <li>• Extensive technology deployment</li> <li>• Complex technology systems</li> <li>• Shift in control over aid response</li> <li>• Coordination of multiple countries</li> <li>• Large scale operations</li> <li>• Disruption in legacy aid orgs.</li> </ul>
Where Developed:		
Local community hospital	University with local testing	Multiple contributors and orgs.
Innovator Skill:		
Medical expertise but limited innovation expertise	Inspirational entrepreneur and but limited management skills	Large numbers of professional experts and consultants

# Designing for Complex Challenges

The widely used features of a Lean Startup innovation (see box) are still useful as a basic lab practices, but they won't be sufficient to meet the varied and complex needs of aid sector innovators working to address hard problems with complex solutions.

## Key Features of Lean Innovation Labs

- **Wide Net:** Encourage broad engagement and inclusion
- **Safe Space:** Provide a safe space to fail fast
- **User Centered Design:** Design and test ideas with users
- **Iterative Experimentation:** Iteratively evolve ideas
- **Move Quickly:** Limit reliance on fixed detailed plans

At this stage of development in Aid Innovation Labs, the big opportunity is to intentionally address deeper difficulties associated with messy complex challenges. To do that the innovation lab designer must avoid common trip falls that come from over simplifying a lab's approach.

- **Wrong Journey / Wrong Services** – Designing the lab to support the challenges faced by an innovator working on a different type of innovation in a different context. This leads to providing inappropriate services for the type of challenges a particular innovator faces.
- **Stopping Too Soon** – In general the complexity of challenges grows as the innovator proceeds through the innovation life cycle. Early testing of an idea is comparatively simple and fast when compared to the long, messy journey of engaging with real world barriers and actors as the innovation goes to skill.
- **Skipping the Hard Part** – The temptation of a lab designer may be to support the most common an easily solved challenges, while leaving innovators to wrestle with the uniquely difficult issues.

# The Lab as a Platform for Services

As the scope and variety of innovator needs grows it is increasingly unlikely that a customized lab can be built for each new combination of support. Instead, the Lab can be viewed as a platform through which a wide range of tailored services and resources can be delivered.

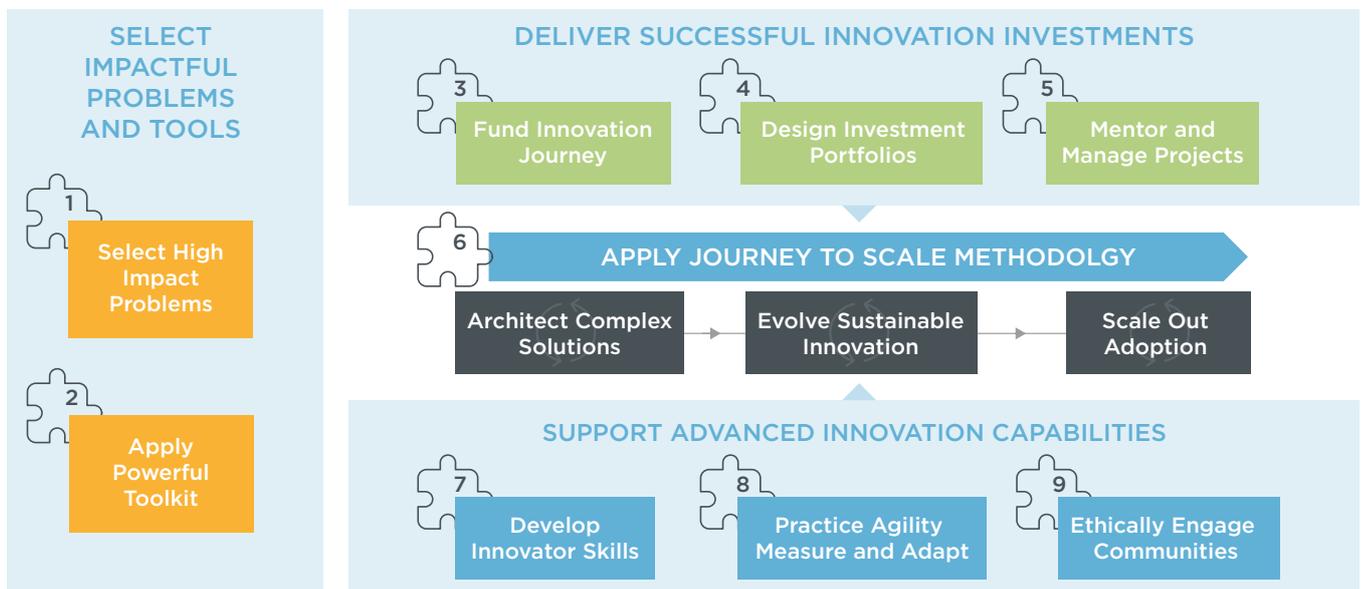
Ideally, with a platform model services and resources can be developed independently of an individual. Then, a specialized innovation service could be deployed to innovators facing particular challenges, even if they are scattered across several labs. A lab acting as a platform for accepting services from different providers could potentially tailor those service to the lab’s surrounding context.

Supporting a wide range of potential innovation journeys is further complicated by the wide range of activities and challenges each innovator must master. There is not simply the matter of developing and testing an idea. Innovators must tap a wide range of skills in areas as diverse as; technology use, financing, fitting within a portfolio, measurement, ethics, and local engagement.

A truly state of the art Lab architecture would integrate an entire ecosystem of services and support (see diagram below). This means that labs must be aware of and responsive to many different aspects of the innovator’s journey. This challenge is particularly pressing for innovators working with complex system innovation, where many tools and practices are still evolving.

There is more on this subject in the other two Briefing Notes from this series. One describes opportunities to reimagine the funding of innovators while the other explores the many challenges associated with developing a practical Innovation 3.0, complex systems innovation methodology.

## Innovation 3.0: Creative Ecosystem



## True Innovation Localization

Looking more broadly, the Aid Sector has struggled to define what is really meant by a localization agenda. There is wide consensus that people affected by crisis, their local communities, and their state governments all should have greater influence on the form and delivery of aid in crisis.

Innovation is not often mentioned as a direct enabler of this strategy, yet it is one potentially one of the most powerful local enablers of Aid strategies. In the report, *Leaving No One Behind, Humanitarian Effectiveness in the Age of Sustainable Development Goals*, Lesley Bourns and team make the case that system change is essential to breaking perpetual cycles of aid and sustainably achieving the SDG's.

Self-directed system change could be one of the most powerful manifestations of this strategy. A local community with its own embedded capacity to innovate could identify, shape, and deliver systems change with impact. Core skills in health, governance, and education are considered essential to effective communities. Could a deeply engrained capacity for innovation within a community be added to that list of social competencies?

If the community is now the Innovator, what should an Innovation Lab designed to serve them look like? Outside support may be helpful in designing and enabling this capability, but a fundamental shift to community led creative change would be the ultimate goal.

The services and resources of a lab might be distributed more broadly and through a greater number of channels. Innovation support could be woven into a number of existing services and institutions. The innovation lab might itself become a complex multi-actor system that grows and evolves.



## This Paper

This paper was authored in May 2019 by Dan McClure as part of a GAHI initiative to highlight actionable steps that would lead to greater impact from innovation.

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