GAHI

The Global Alliance for Humanitarian Innovation

CREATING MORE IMPACTFUL INNOVATION CAPABILITIES IN THE AID SECTOR

The sector has reached a plateau in its application of innovation, stranding Aid's innovators, leaving them unprepared to address many of the most challenging and important problems.

Stalled Progress to Impact

Over the last decade the Aid Sector as developed new skills in innovation. The creative toolkit now includes the mindset to fail fast, a practice of continuously measuring impact, and recognition of the need to actively engage users in the design process.

With this progress, it may be tempting to step back and focus on innovation initiatives that promise operational benefits in aid delivery and community well-being. Unfortunately, this overstates the progress that has been made. The sector has reached a plateau in its application of innovation, stranding Aid's innovators and leaving them unprepared to address many of the most challenging and important problems.

Scaling is still a rare achievement, so that even 'successful' pilot programs fail to deliver impact at scale. Of even greater concern is the ability of current innovation practices to address big complex challenges and drive systemic shifts capable of driving a step change in aid.

Current innovation practices clearly work to design and test new technology based tools. Today, there are a more than million 'apps' on each mobile phone platform. Yet, it is unlikely that another mobile app or targeted technical invention will be capable of transforming complex systems problems such as fragile ecologies, urban poverty, aid in conflict, and gender based violence. Over the last year, the Humanitarian Innovation Fund (HIF) and the Global Alliance for Humanitarian Innovation (GAHI) released a series of three papers that outlined the need to move beyond the current innovation plateau. The HIF paper *Too Tough to Scale* described a range of systemic challenges that block innovators from bringing even well designed projects to scale.

GAHI's *Pathways to Scale* created a framework that could organize the many challenges innovators were facing on their journey to scale. The final paper, GAHI's Innovation 3.0 proposed an approach for moving off the plateau, creating a new generation of innovation skills and methodologies that leverage complex system change.

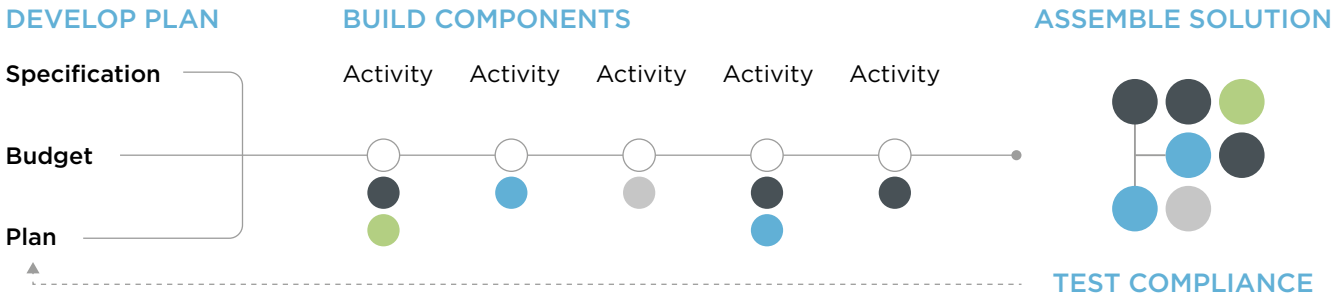
Systems Innovation is particularly relevant for the Aid Sector, where so many aspects of both the capabilities and challenges are entwined in dynamic multi-actor networks. These complex systems are difficult working tools, but they provide a powerful creative foundation where sophisticated innovation practices can be bought to bear on difficult problems.

This is part of a series of three short papers that proposes ways to build out this next generation of innovation practice. The focus is on concrete steps, which initiatives sponsors of innovative change could support to move innovation practices off the current plateau. This paper addresses a range of opportunities in five different areas of system innovation. The remaining two papers look more deeply at the possibilities in innovation labs and innovation funding.

Success Mastering Tame Innovation Techniques

Two generations of innovation methodologies have already contributed tools to the Aid Sector's creative toolkit. First generation innovators developed formal systems for decomposing big complicated projects into distinct parts which could then each be designed and built independently. First generation innovation techniques were well suited to big well understood engineering efforts, like building a road or constructing a hundred school buildings.

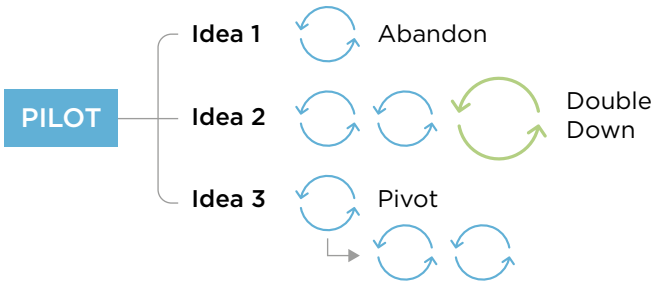
Generation 1: Reductionist Engineered Innovation



The second generation innovators focus on a very different problem, seeking to quickly and explore new ideas in unfamiliar domains. Using their "lean innovation" techniques they can fail fast, quickly evolving their initial pilot projects based on new insights from users with specific needs. This kind of innovation is particularly well suited to developing technology based innovations like a mobile app.

In both cases the Aid sector lagged behind, adopting Innovation 1.0 and 2.0 techniques only after they were fully formed and implemented in commercial market environments. While the Aid Sector has now widely adopted these practices as its own, the underlying commercial history of the methodologies can easily be seen in their assumptions and limitations.

Generation 2: Exploratory 'Lean' Innovation



... and an Innovation Capability Gap

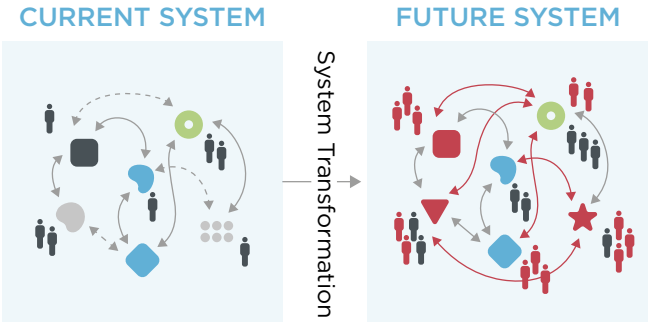
Even with this progress, there remains an innovation capability gap. Relying on the existing first and second generation toolkit has not been enough to deliver the desired impact on Aid Sector performance and the lives of people enmeshed in crisis. Aid Sector innovators have been hard pressed to scale innovations based on successful second generation pilots. Even more disturbing, big intransigent problems like persistent poverty, ecological fragility, and culturally driven conflict and violence are beyond the reach of conventional innovation techniques.

These problems may seem to be quite different from one another, yet they are all grounded in the same underlying forms of system complexity (see box). They are all "wicked problems" and the Aid Sector is dominated by their tangled webs of actors and dynamic shifting environments.

Commercial businesses work hard to avoid these complexities. This helps explain why the innovation methodologies the Aid Sector has borrowed from industrialists and Silicon Valley are often a poor fit for the messy reality of fragile environments and aid in the field.

Confronting Complex System Innovation Challenges

Complex systems innovation is a new third generation of innovation practices. Innovation 3.0 offers a potentially huge field of opportunity since systems are present in every aspect of an Aid organization's work. Local economic, social, and physical systems either create resilience or fragility for communities. Systems are also needed to complete and sustain pilot innovations. Systems even exist around the innovator, either helping or hindering their work. And finally, systems define the elements of the Aid Sector itself.



Generation 3: Complex System Innovation

Creating a third generation of innovation can proceed by addressing work across any or all of these system forms. While the work needed to create systems around a new pilot innovation may be different from the efforts that would transform the Aid Sector's organizational structure, these are all rooted in the core skills of systems innovation. Creating skills and tools in one area should provide a foundation for expanded work in other areas of system change.

#1 - Understand complex problems

Establish practices to develop integrated system views for complex problem domains. Enable innovators to target high impact levers of change within systems. Also, make it possible for grant program managers to target projects that provide more sophisticated solutions to complex problems.

This is an area where systems thinking can be directly integrated within existing innovation challenge grant programs. Three interrelated activities could support a long-term adoption of third generation systems innovation, by providing a foundation of complex system based problem analysis (ecosystem model areas #1 and #4).

a) **Problem space models:** Develop and share models of humanitarian problem spaces reflecting interconnected issues and challenges as seen from a systems perspective. Establish a cross sector library of system models for different challenges.

b) **Problem space methodologies:** Formalize the approach(es) for analyzing and representing complex system problem spaces.

c) **Grant program portfolio development:** Modify the process by which projects are selected within grant programs. Create integrated project portfolios that deliver system solutions for complex problems.

#2 - Consistently scale pilot innovations

Develop and fund complete, sustainable solutions from a validated pilot and adapt to varied contexts. For example: help pilot innovators develop a supply chain, support network and sustainable business model around a proven idea and then tailor the entire solution to the needs of other local contexts.

This is another area where systems innovation can be applied to existing programs. A basic framework for structuring paths to scale in the Aid Sector was provided in the GAHI Journey's to Scale paper. The present challenge is to leverage this framework to create useful support and guidance for innovators.

1) **Create assessment tools** – Leveraging the Scaling framework, create guidance on doing scaling assessments for use in determining readiness and progress.

2) **Define journeys to scale** – Conduct research on non-commercial paths to scale in the Aid Sector. Identify key steps and factors for success which can be leveraged as a methodology for that journey.

3) **Create patient funding** – Expand the options for funding the journey to scale, including patient funding that evaluates progress based on evolving systems development. Expand funding options for both scaling and long term operation (see briefing paper).

#3– New system innovation methodologies

Create a foundational methodology for Complex System Innovation (e.g. Innovation 3.0). Enable innovators to transform systems, improving their underlying resilience, fairness, or effectiveness. For example, creatively alter the social, legal and economic systems that drive gender based violence.

This ambitious form of change pushes into the areas where commercial innovation methodologies have feared to tread. This leaves complex system innovators to discover and develop methodologies that can engage the rich messiness of humanitarian challenges.

a) **Establish integrated methodology framework** – A key turning point in prior innovation methodologies occurred when scattered observations and practices were brought together in an end to end framework. A shared framework for a complete systems innovation methodology should be established.

b) **Fill out the methodology** – Extend and complete a system innovation methodology framework adding end to end resources, processes and tools.

c) **Evidence of effectiveness** – As a new innovation methodology, there will need to be an ongoing effort to test, validate, and evolve techniques.

#4– Radically localize innovation capacity

Extend localization to include meaningful access to the tools of innovation and creative change. Respect for the power of innovation to alter fundamental circumstances that drive crisis, need, and resilience would provide the ability to drive sophisticated change to communities themselves.

Much of the work on localization has focused on "inclusion" within the innovation process. As more complex forms of community based systems are placed at the core of innovation there will be a need to expand the ownership of change to those who are actually part of the systems transformation.

a) **Evolve and extend lab models** – Pioneering work on locally based innovations has been done by programs like Response Innovation Labs (RIL) and DEPP Labs. Leverage these handson experiences to significantly expand local engagement in complex systems innovation. *(see the briefing note on Lab Models)*

b) **Expand local innovator's toolkit** – Continue the development of tools intentionally designed for local innovators in low resource, fragile, and crisis contexts.

c) **Revamp grant program access** – Access to funding, labs, and mentoring is often mediated by grant processes that consistently exclude local applicants.

#5 - Disrupt conventional Aid Sector systems

Foster fundamental system changes in the Aid Sectors institutions and operations. For example: the emergence of cash programming strategies has the potential to drive consolidation in the number of Humanitarian NGO's.

The HIF scaling report which cited the lack of incentives for making deep reforms was cited as a key barrier to adoption of structural change. Few organizations are anxious to put themselves out of business. Yet, this is not the only challenge. Complex system innovation capabilities need to be developed and supported to drive this kind of disruption.

a) **Architect collaborative organizations** – Networks of collaborative organizations based on dynamic systems are well positioned to solve hard problems while remaining flexible. However, there is still a great deal that needs to be done to define how to architect and operate these new structures work under real life conditions.

b) **Support disruptive actors** – In other sectors disruption has been achieved by new actors entering the field with new models for delivering value. Direct innovation support to organizations that undercut and compete with sector.

c) **Unbundle with digital technology** – Digital transformation in other sectors indicates digital transformation is particularly well suited to unbundle status quo offerings and enable new system models. Intentionally exploring how Fourth Industrial Revolutions (IOT, AI, big data, robotics, block chain, cloud computing) can be used to break apart existing systems in the sector, rather than simply optimizing legacy operations.

Building a Whole Ecosystem

It should be clear from the prior inventory of opportunities that building a systems innovation capacity is a narrow task focused around one set of skills or resources. As described in the Innovation 3.0 paper, there is a need to create an entire ecosystem to support innovators working with the new approach.

This ecosystem will require diverse elements ranging from technical tools, funding models, portfolio design, mentoring, methodology, roles, and measurement (see diagram). These must each be tailored to the nature of the new complex innovation challenge. As a result, much of the work needed to create Innovation 3.0 capabilities will be original and require ground breaking thinking.

The initiatives associated with each of the five types of systems innovation contribute to different parts of this overall ecosystem. While each of these elements of the overall innovation ecosystem can be built up individually, ultimately there will be a need to integrate these efforts to produce a complete end to end system.

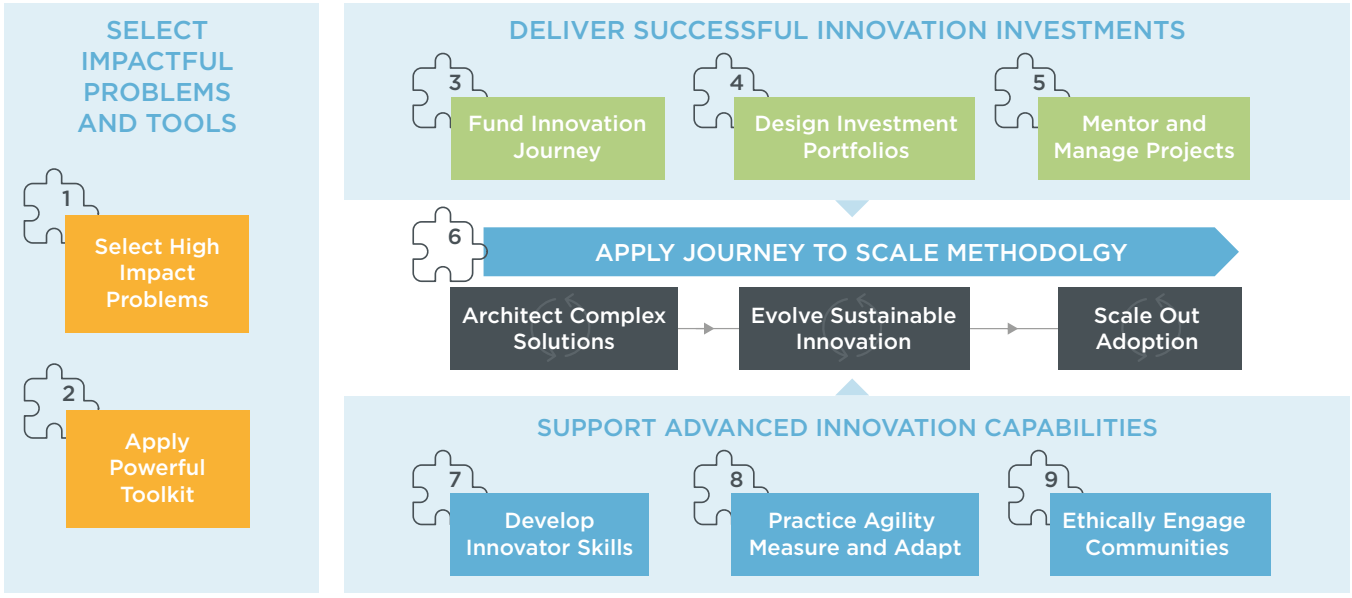
This does not imply that the innovation ecosystem must be owned or controlled by one organization, a far more loosely configured architecture would be appropriate. However, to be effective in this complex space there must be ongoing collaboration and shared thinking as the new ecosystem evolves.

The Aid Sector's Leading Role

The Aid Sector has a unique role in developing this new generation of innovation capabilities. The Aid Sector, with its focus on rights and well-being and its deep daily immersion in complex shifting challenges, is unique positioned to be a leader in this re-invention of innovation. While commercial organizations will continue to be a key part, contributing to actual solutions on the ground, they will not arrive bearing the next generation of innovation techniques to solve these wicked problems.

That doesn't mean the sector must work alone. Aid's new partners in the pioneering development of next generation techniques are likely to be in fields like environmentalism and urban transformation, which are also wrestling with big system change.

Innovation 3.0: Creative Ecosystem



This Paper

This paper was authored in May 2018 by Dan McClure as part of a GAHI initiative to highlight actionable steps that would lead to greater impact from innovation.

Global Alliance for Humanitarian Innovation (GAHI) is hosted by Elrha. Registered office 1 St John's Lane, Farringdon, London, EC1M 4AR

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This report was made possible with direct support from the following donors including: The Government of Denmark, The Ministry of Foreign Affairs of the Netherlands, Australian Aid and The Department of the International Development (DFID) - United Kingdom.

We would also like to thank our host Elrha for making this report possible.

This report is published by the Global Alliance for Humanitarian Innovation and does not reflect the direct views of our donors.