HIF-ALNAP
WORKING PAPER

Monitoring Humanitarian Innovation

Written by Alexandra T. Warner

With contributions from Alice Obrecht

HIF Humanitarian innovation fund | elrha

ALNAP

Elrha's **Humanitarian Innovation Fund (HIF)** supports organisations and individuals to identify, nurture, and share innovative and scalable solutions to the challenges facing effective humanitarian assistance. The HIF is an Elrha programme and is supported by funding from the UK Department for International Development (DFID), the Swedish International Development Cooperation Agency (SIDA) and the Netherlands Ministry of Foreign Affairs (MFA). **www.elrha.org/hif**

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Contents

About HIF-ALNAP's research on innovation in humanitarian action

Over 2015-6 ALNAP - in partnership with Elrha's Humanitarian Innovation Fund (HIF) - looked at how to define innovation in humanitarian action, and what successful innovation looks like. 15 innovations in the humanitarian sector were chosen as case studies to provide an empirical evidence base for the final research study **'More than just luck: innovation in humanitarian action'**.

Following on from these foundations, ALNAP and the HIF developed the implications of their research findings for monitoring and evaluating humanitarian innovation processes, producing two working papers on these topics.

The ultimate aim of the research is to improve humanitarian actors' understanding of how to undertake and support innovative programming in practice. This research partnership builds on ALNAP's long-running work on innovation in the humanitarian system, beginning with its 2009 study, Innovations in International Humanitarian Action, and draws on the experience of the HIF grantees, which offer a realistic picture of how innovation actually happens in humanitarian settings.

About the case studies

15 case studies, were undertaken by ALNAP in partnership with Elrha's Humanitarian Innovation Fund (HIF), exploring the dynamics of successful innovation processes in humanitarian action. They examine what good practice in humanitarian innovation looks like, what approaches and tools organisations have used to innovate in the humanitarian system, what the barriers to innovation are for individual organisations, and how they can be overcome.

The case study subjects were chosen to reflect innovation practice in the humanitarian system. They covered information communication technology (ICT) innovations and non-ICT innovations, and offered a balance between innovations that have reached a diffusion stage and those that had not. They also reflected the wide geographic range of the areas where innovations are being trialled and implemented.

About 'More than just luck: innovation in humanitarian action' research paper

'More than just luck: innovation in humanitarian action' presented the synthesised findings from the 15 case studies, focusing on three main questions:

- What is innovation in humanitarian action?
- What does success in humanitarian innovation look like?
- What can humanitarians do to achieve success?

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1. Introduction

Monitoring is critical to humanitarian action. Broadly, monitoring is the 'systematic and continuous assessment of the progress of a piece of work over time' (ALNAP, 2003: 81). It provides humanitarian actors with the information they need to make timely and appropriate decisions, so that programme implementation can be adjusted or adapted to improve performance. High quality monitoring data that is analysed and used appropriately can aid in increasing programme accountability and effectiveness.

In the context of humanitarian innovation, monitoring is particularly important due to the uncertain nature of the work. This uncertainty means that humanitarian innovators need to keep a constant eye on their process and the wider environment so as to respond or adapt appropriately. Current monitoring approaches have significant value in the day-to-day of innovation processes, yet they are rarely tailored for innovation contexts. They are therefore often inadequate for monitoring the progress of an innovation process or its likelihood of achieving success.

The aim of this Working Paper is to propose a new framework that can aid innovation managers and teams in the monitoring of their innovation's progress towards success. This framework is called the ALNAP Innovation Milestones. It draws from the analysis of 15 initiatives funded by the Humanitarian Innovation Fund (HIF), and **the Elrha-ALNAP research** on what factors contribute to successful innovation processes (Obrecht and Warner, 2016).

This paper brings together the ALNAP research team's thinking on what to look for when trying to assess if an innovation is likely to be a success, and should be treated as an initial proposal for further discussion. It is complemented by a paper on evaluating innovation processes (Obrecht, 2017).

We begin by considering why monitoring is important for innovation, as well as why it can be challenging. This paper will then propose a model for monitoring humanitarian innovation with ALNAP's Innovation Milestones. These have been established by addressing three key questions:

- Is this innovation process moving forward?
- Is this innovation process of sufficient quality to lead to success?
- Is this innovation worth continuing at the moment or at all?

2. What is innovation in humanitarian action? And what are we monitoring?

Humanitarian innovation is an iterative process that identifies, adjusts and diffuses ideas for improving humanitarian action. There are three defining features of innovation in humanitarian action:

- Doing something different at a sector/system level
- Seeking improvement for the sector/system
- Requiring an iterative process to understand whether the idea works, as well as why and how.

Humanitarian innovation processes seek to develop products, processes, positions or paradigms (Francis and Bessant, 2005) that offer an improvement over those currently in use in the humanitarian system or a particular humanitarian sector. Innovators attempt to find different ways to solve humanitarian problems or improve humanitarian practice; as a result, their processes feature a high degree of uncertainty. Although good innovation management practices exist and careful planning may reduce to a degree this uncertainty, teams still only have hypotheses of how their idea will work. Thus, innovation is a process of virtuous ignorance that relies on an explicit emphasis on learning and readjustment because so little is known about whether, how and why an idea for improvement might work.

The monitoring data can serve a number of different purposes. For instance, teams use monitoring data to aid with designing, refining and adapting their innovation.[1] This can involve using monitoring data to better understand the issue at hand, make the innovation more relevant to users and make sure the innovation is meeting or exceeding current performance standards.[2] Innovation teams also need to monitor the wider environment to gauge users' receptiveness to the innovation. And, of course, monitoring data may be collected to report back to donors on the use of resources. Some may also use monitoring data for formative or summative evaluations.[3] By being aware of this range of purposes, innovating teams can better understand their particular monitoring needs and assess what tools and approaches might be most appropriate.

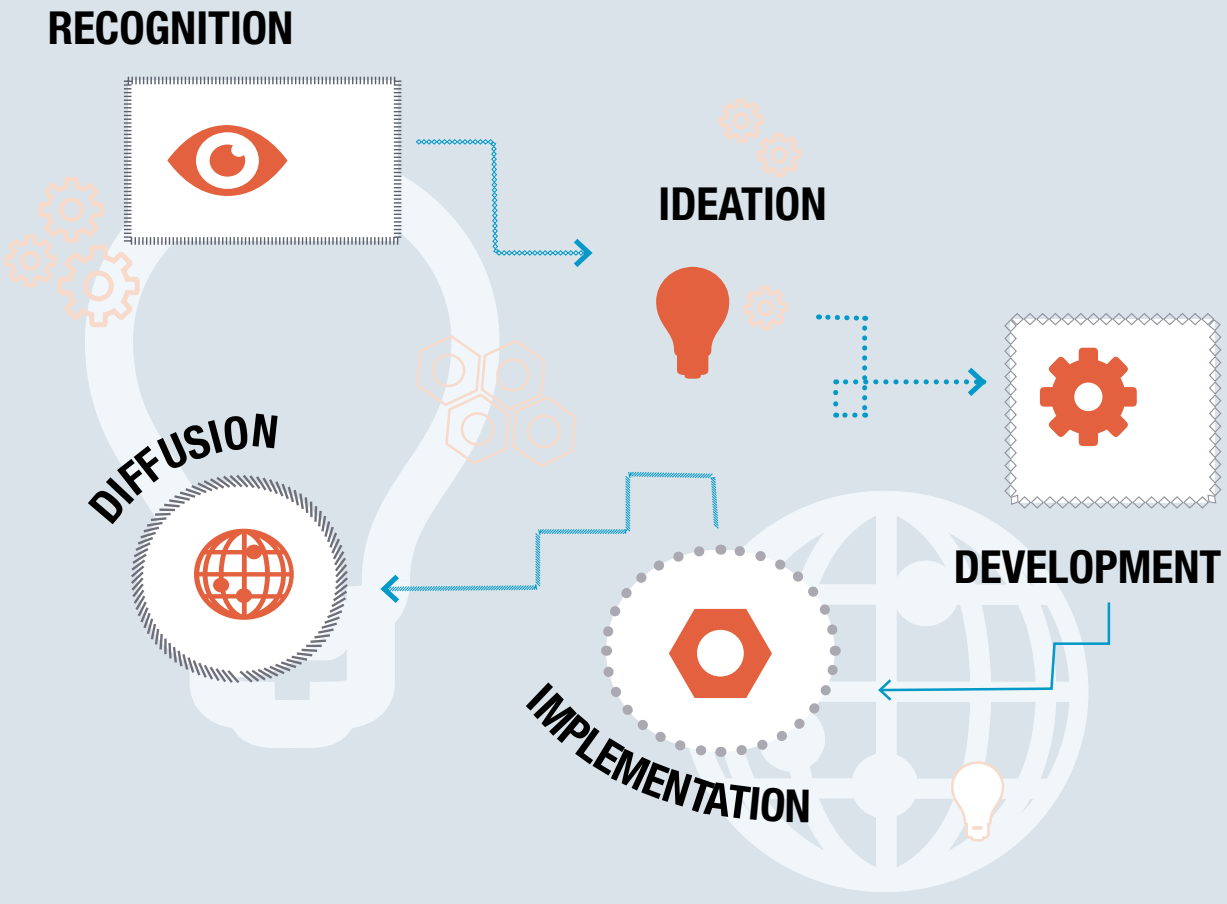
This paper focuses on monitoring the progress of an innovation process and assessing its likelihood of success. There is much guidance on developing monitoring systems, approaches and tools that could prove useful for humanitarian innovators. Yet, how do teams gauge whether the innovation process is moving in the right direction and how likely it is to be successful (See **Box 2**)? The aim of this paper is to delve into these questions around what we call 'monitoring progress towards success'. This goes beyond the day-to-day tasks of an innovation, getting to whether an innovation process is of good quality and if this initiative is worth continuing.

Box 1: The HIF five-stage model of innovation processes

As the HIF explains, despite its complexity and unpredictability, a successful innovation process is usually seen as proactive rather than reactive, and can be said to include some or all of five key elements.

- **Recognition** of a specific problem, challenge, or opportunity to be seized, in relation to the provision of humanitarian aid.
- **Invention** of a creative solution, or novel idea, which helps address a problem or seize an opportunity.
- **Development** of an innovation by creating practical, actionable plans and guidelines.
- **Implementation** of an innovation to produce real examples of changed practice, testing the innovation to see how it compares to existing solutions.
- **Diffusion** of successful innovations – taking them to scale and leading to wider adoption outside the original setting.

Figure 1: The innovation process



Box 2: What does success look like in humanitarian innovation?

What do we mean by successful innovation? Based on the analysis and synthesis of 15 humanitarian innovation case studies, ALNAP and Elrha presented the following possible innovation outcomes or success criteria. For more details on these, see **More than just luck** (Obrecht and Warner, 2016).

Table 1. Types of innovation outcomes matched to Elrha-ALNAP success criteria

Innovation Outcomes		Satisfies the Elrha-ALNAP success criteria of:
Successful innovation	Innovation is widely adopted, leading to significant improvements in humanitarian action.	**Adoption:** The innovation is taken to scale and used by others to improve humanitarian performance.
	Innovation is 'successful' in the pilot stage but not successfully diffused.	**Improved Solution:** The innovation offers a measurable, comparative improvement in effectiveness, quality or efficiency over current approaches to the problem addressed by the innovation.
Good fail	Innovation 'fails' at the pilot stage but serves as an important part of the process that will lead to an eventual improvement in the sector.	**Consolidated Learning and Evidence:** New knowledge generated or the evidence base enhanced around the area the innovation is intended to address or performance of the innovation itself.
Bad fail	Innovation 'fails' and does not contribute to greater learning or evidence because of a lack of appropriate learning systems.	

2.1. Why is monitoring humanitarian innovation challenging?

Innovation processes are inherently difficult to monitor because of their iterative and uncertain nature. Innovation responds to problems and capitalises on opportunities for improvement. Understanding of the opportunity being seized or problem being resolved may shift as the nature of the context and user needs are clarified. The fundamental focus of the innovation may change as the team understands that the problem at hand has a number of components and that these need to be prioritised to best meet users' needs.

This makes monitoring against standards planning documents, such as theories of change or log frames, difficult. Moreover, typical programme monitoring often refers back to organisational or sectorial standards (e.g. Sphere Standards), or a baseline. Nonetheless, innovation teams may be broaching problems or opportunities where these do not exist, or where it is unclear which standards best apply.

Iteration should be seen as valuable, constructive and necessary. It is fundamental to learning and how innovations improve previous performance. That said, innovation in humanitarian action uses resources (time, money, capacities) that could have otherwise been spent directly on saving lives or alleviating suffering. Innovation is an investment in better humanitarian action. Yet, this investment[4] must be made wisely in order for it to bear fruit.

Thus, how can innovation managers and teams see through this continuous iteration and make a true assessment of an innovation's progress without simplifying or dismissing the value of this (seeming) messiness?

3. Monitoring progress towards success: a new model for monitoring humanitarian innovation

During the analysis of the **15 Elrha-ALNAP case studies**, the research team broadly found that most innovation processes engaged in five discrete sets of activities, which corresponded to the HIF five-stage model of an innovation process (see **Box 1**). The five-stage model captures the day-to-day activities of an innovation process. It helps innovation teams map the flow of their initiative and, at the most basic level, design task lists. Yet, individual innovation processes can often engage in a single 'stage' for a considerable period of time: some innovating teams reflected that they returned to ideation activities repeatedly throughout the process (e.g. activities like brainstorming or discussing ideas with potential users), while other teams engaged in many successive rounds of development and implementation. Given the iterative nature of innovation, in which the activities of each stage of innovation are returned to repeatedly, how can innovating teams and senior management outside the innovation project understand if progress is being made? How can the innovation process be monitored to check if it is on the right path and will reach its ultimate goal of contributing to the improvement of humanitarian action?

During the analysis of grantee interviews, it was found that the humanitarian innovation teams and managers often struggled to find clear ways of answering three crucial questions:

- **Is this innovation process moving forward?**
- **Is this innovation process of sufficient quality to lead to success?**
- **Is this innovation worth continuing at the moment or at all?**

The following sub-sections will delve deeper into these three questions, proposing a model for monitoring to complement the HIF's five stages of the innovation process. This new model is called the ALNAP Innovation Milestones. These three crucial questions will be used to build up an image of the milestones and their use in terms of monitoring.

3.1 Is the innovation process moving forward?

Although these five stages of innovation are non-linear and can take place concurrently, from an external perspective, an innovation may appear stuck in a single stage for months on end. How does an innovation manager or member of senior leadership determine that it is worth continuing work on an innovation when, at least at face value, it has stalled? Similarly, a manager may find it challenging to parse through the level of iteration that has taken place in the innovation process. The process may resemble more of a scribble – with

feedback loops and actions going backwards and forwards between the five stages – than a straight line advancing towards improved practice.

Additionally, as highlighted in the challenges to monitoring, iteration is indeed central to innovation, yet some iteration is superfluous or outright avoidable. Armed with the right knowledge and experience, an innovation team can know what questions to ask early on to avoid large steps backwards in the design process or having to go back to the drawing board all together. Managers need a frame of reference to be able to monitor what progress has been made and if this progress is constructive.

When describing their innovation processes and its management, interviewees from case studies referred to key markers on their path to a successful innovation and the activities that contributed to these. Across the successful and less successful case studies, there was considerable consistency in what moments were considered and observed to be most important. These markers can be seen as the 'milestones' of an innovation process. The achievement of these milestones indicated progression towards the end of an innovation project, which typically occurs at a proof of concept (fast fails), at the end of a pilot, or at some point in the maturity of the diffusion activities.

ALNAP proposes six milestones. **These are the key markers of progress towards a successful innovation that are achieved through sets of activities within the control of the innovation team**. These are progress markers for humanitarian innovation processes that were identified across the case studies examined during the Elrha-ALNAP research. These six milestones should only be considered as an initial proposal. More investigation is necessary to test their generalisability. Moreover, the maturity of the case studies available limited the research teams' ability to pinpoint further milestones in diffusion activities.

Each of the proposed milestones requires its own form of planning and is achieved through activities from across the HIF's five stages. Based on the research, if an innovation process has milestones of sufficient quality, it is more likely to achieve the highest level of success: adoption.

Below are the six milestones and their proposed definitions.

- **Value Proposition**: a statement of the innovation's planned contribution. It explains both the need that the innovation is addressing and why the innovation is the best approach to addressing this.
- **Practical Plan**: an outline of what the innovation team aims to achieve and how. This is much more extensive than what may have been included in funding proposals. In this document the innovation team lays out elements such as design objectives, quality standards, roles and responsibilities.
- **Proof of Concept**: the body of evidence that demonstrates the viability of the value proposition. It 'proves' that the value proposition can plausibly be achieved and is not physically or financially impossible.
- Functional Prototype: a prototype of the innovation is shown to meet design criteria during testing in a controlled environment (e.g. laboratory or field location comparable to the intended humanitarian setting) or field testing in a humanitarian context.
- **Field Test:** the testing of an advanced prototype or close to final innovation in a humanitarian context so as to identify further possible adjustments.
- **Diffusion Strategy**: a plan of activities aimed at achieving the adoption of the innovation by the intended users.

ALNAP proposes that an innovation process is more likely to be successful if the innovation team bears in mind that the milestones are cumulative but successive.[5] They are cumulative because the learning gained from working towards one milestone contributes to another. Yet, they are also successive as the team should reach a certain level of learning and/or quality under each milestone before moving its focus to the subsequent milestone.

Failure to do this can lead to the team having to complete avoidable or less fruitful iterative loops, potentially significantly extending the innovation process and spending resources unnecessarily. Fundamental to the milestones framework is an understanding that humanitarian innovation comes at a cost, as such initiatives do not happen in a vacuum. A balance must be struck between iteration and effectiveness.

Learning is central to innovation. But, ALNAP did not find one fixed point in the innovation process where learning products should be delivered. Learning happens throughout the innovation process. That there is no milestone that points to the materialisation of the success criteria of consolidated learning and evidence **should be taken to show how innovation cannot be detached from learning**. An innovation team's[6] willingness to step back, reflect and aggregate learning to share with others is crucial to an innovation process contributing to the improvement of humanitarian performance.

Each innovation process is unique; a milestone does not require a set amount of time or effort. Some milestones might be easier or more straightforward for certain innovation teams due to their deeper understanding of the humanitarian context and/or the intended users.

The milestones offer a series of 'signposts' to help see through the numerous iterations and feedback loops to determine if the innovation is indeed moving forward as a process. They can be conceived of as a general set of outputs ('the products, goods, and services which result from an intervention' (ALNAP, 2016: 27) common across all innovation processes. More discussions are necessary to determine if the milestones should be seen as part of a general humanitarian innovation results chain or theory of change. However, these logic models may overly rely (in theory or practice) on a linearity that should be avoided in innovation. For the time being, seeing milestones as outputs may only serve as a useful comparator for monitoring and evaluation practitioners.

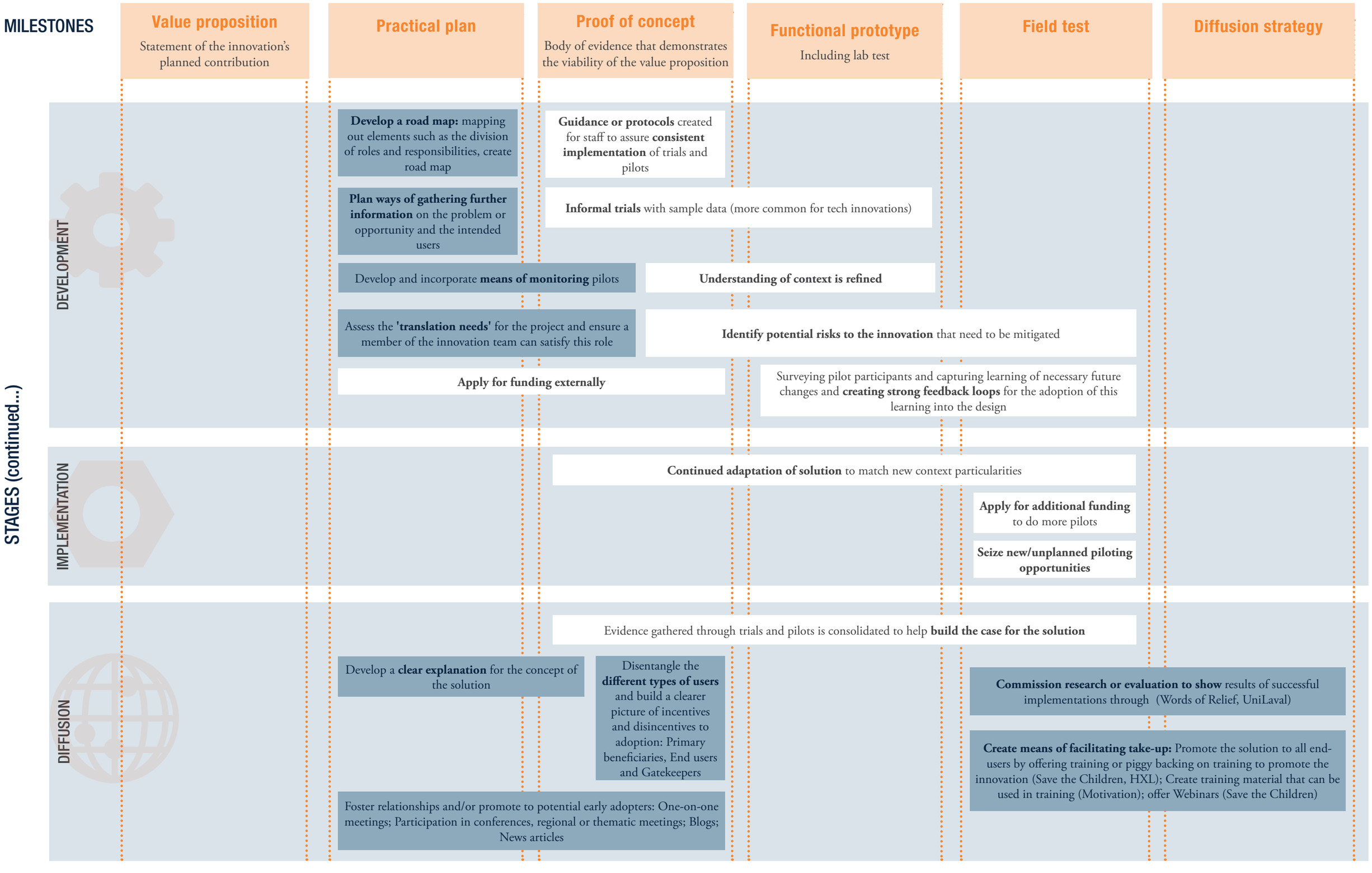
3.2. Is this innovation process of sufficient quality to lead to success?

Armed with the milestones, innovation teams and managers are able to attest if an innovation is actually moving forward, rather than simply back and forth between the stages. It is also important for teams to be able to assess the quality of their milestones in order to be able to gauge if they are likely to achieve *success*: that is, is it going to produce or achieve Consolidated Learning & Evidence, an Improved Solution, and/or Adoption?

During the synthesis work, ALNAP compared innovation process activities from across the 15 cases studies. The case studies ranged significantly in terms of context, type, maturity and level of success but there was considerable consistency in what activities were done and when (in terms of the stages). A particular set of activities was highlighted which correlated to higher levels of success; many of these activities had also been identified by interviewees as making a positive contribution to the likelihood of success. All activities were then mapped against the stages (e.g. what were they doing?) and milestones (e.g. why were they doing this?). See **"Matrix 1: Innovation Milestones and their indicators of quality"**, where those activities that were commonly seen are in white, and those that were identified as making a positive contribution to the likelihood of success are in blue.

Matrix 1: Innovation Milestones and their indicators of quality

MILESTONES	Value proposition Statement of the innovation's planned contribution	Practical plan	Proof of concept Body of evidence that demonstrates the viability of the value proposition	Functional prototype Including lab test	Field test	Diffusion strategy
STAGES						
RECOGNITION STAGE – Problem recognition	**Develop a further understanding of the problem** by having discussions with individuals who have experienced the problem					
	Identify components of the problem and/or user needs. These can become design features or criteria for prototype testing					
	Carry out research or identify evaluations that **evidence the problem**					
RECOGNITION STAGE – Opportunity recognition	**Identify relevant existing practice** through: discussions with other organisations or individuals experienced in the problem; using their network to exchange ideas; reaching out to academics; or a combination of these					
		The problem or solution is **seen as a strategic opportunity by senior management**				
		Gain **understanding of the new context** and its unique constraints				
IDEATION STAGE – Adaptation of existing solution		**Choose solution** to be adapted (very quick process for opportunity-driven)				
			Apply for **funding** internally or externally (have already achieved a level of proof of concept because the solution has already been done elsewhere)			
			Contract partners: hire partner with expertise in solution to be adapted, natural division of tasks			
IDEATION STAGE – Invention	**Identification of relevant existing practice** through literature review; discussions with other organisations or individuals experienced in the problem	**Conceptualise solution** so that it is presentable: create concept note or draft design brief	Create first complete **prototype**			
	Brainstorming of possible solutions and selection of solution to pursue	Apply for **funding** internally				
		Formalise Partnerships: including division of tasks. MoUs, etc.				


MILESTONES
Value proposition
Statement of the innovation's planned contribution
Practical plan
Proof of concept
Body of evidence that demonstrates the viability of the value proposition
Functional prototype
Including lab test
Field test
Diffusion strategy
STAGES (continued...)
DEVELOPMENT
Develop a road map: mapping out elements such as the division of roles and responsibilities, create road map
Guidance or protocols created for staff to assure consistent implementation of trials and pilots
Plan ways of gathering further information on the problem or opportunity and the intended users
Informal trials with sample data (more common for tech innovations)
Develop and incorporate means of monitoring pilots
Understanding of context is refined
Assess the 'translation needs' for the project and ensure a member of the innovation team can satisfy this role
Identify potential risks to the innovation that need to be mitigated
Apply for funding externally
Surveying pilot participants and capturing learning of necessary future changes and creating strong feedback loops for the adoption of this learning into the design
IMPLEMENTATION
Continued adaptation of solution to match new context particularities
Apply for additional funding to do more pilots
Seize new/unplanned piloting opportunities
DIFFUSION
Evidence gathered through trials and pilots is consolidated to help build the case for the solution
Develop a clear explanation for the concept of the solution
Disentangle the different types of users and build a clearer picture of incentives and disincentives to adoption: Primary beneficiaries, End users and Gatekeepers
Commission research or evaluation to show results of successful implementations through (Words of Relief, UniLaval)
Create means of facilitating take-up: Promote the solution to all end-users by offering training or piggy backing on training to promote the innovation (Save the Children, HXL); Create training material that can be used in training (Motivation); offer Webinars (Save the Children)
Foster relationships and/or promote to potential early adopters: One-on-one meetings; Participation in conferences, regional or thematic meetings; Blogs; News articles

These latter activities, highlighted in blue, will be referred to as **indicators of quality.**[7] These are activities or behaviours that point to the innovation team investing in the milestones – that the milestones are not simply being 'checked off the list', but are of a high quality. These are loose indicators that apply regardless of the specific sector or area of activity in which the innovation is being undertaken. They should be adapted to the specific innovation. Their presence in an innovation process indicates that the innovation team is not only moving through the milestones but doing so in a constructive, learning-oriented way that is likely to lead to the overall success of the innovation.

In a practical sense, these are activities, behaviours or deliverables that managers 'like to see', as they are found to contribute to success. They go beyond expected day-to-day tasks and show that the team is thinking of the initiative as an innovation rather than in terms of standard project management. These indicators of quality could also be taken to show that the innovation team has reached a 'good enough' understanding of one milestone so as to be able to constructively progress to the following milestone.

The indicators of quality are presented below by milestone.[8] The last milestone, *diffusion strategy*, has more indicators of quality to consider and is built up progressively through the other milestones; it is therefore discussed separately on page 16.

It is important to note that not one of the innovation processes studied completed all of the following indicators of quality. Innovation teams had unique processes suited to the product or process they were developing. Nor can it be said that the list is complete.[9]

Indicators of a quality value proposition:

- The **components of the problem** and **users' needs are accurately identified**. It is important for innovation teams to break down the problem that they are aiming to tackle. Does the innovation team see the different facets of the problem at hand? Success also depends at a fundamental level on the innovation meeting the needs of beneficiaries and end users.[10] The innovation team should have developed an understanding of how their perception of the problem and that of potential users differs, and why.
- There is quality **evidence to support the value proposition's statement** of the problem/opportunity area and the solution offered by the innovation. As was found in a number of the Elrha-ALNAP case studies, it can be difficult for innovating teams to explain to others why this particular problem should be prioritised or addressed. It can be important to back up perceptions of a problem with evidence through research or evaluations.[11] Has the team identified or commissioned research or evaluations that demonstrate the impact (e.g. cost, time) on operations of not resolving this issue?

Indicators of a quality practical plan:[12]

- The solution was conceptualised into a **concept note** or **design brief**. For some case study interviewees, this is when an innovation really starts. In their opinion, it is easy to discuss the problem and brainstorm ideas, but this is the first concrete action: putting the idea to paper. This activity is important as it enables the innovation team to discuss the idea more concretely, making it into something that can be presented to management or potential funders.

  Implicit in this activity are two very important thought exercises: the scoping of the problem or opportunity, and the prioritisation of different components of the problem or users' needs. A good design

brief or concept note- should explain which design criteria are most important and why. Remember, some criteria may become mutually exclusive. For instance, which is most important: that a water filtration system is easy to transport, that it is collapsible or that it has a high treatment capacity? (See Obrecht, 2015, **Improving water quality and quantity in emergencies: The Inclined Plate Settler water treatment system**). Does the prioritisation resonate with potential users and, if not, why? Also, it may become clear that the team is actually attempting to resolve two problems or that certain aspects of the problem are not as important or impactful to humanitarians' work. At this point in the innovation process, it is an indicator of quality that the team has scoped less urgent or detrimental parts of the problem.

- The team has laid out a **road map** for the development of the solution. Many of the innovation teams studied benefited from this arguably self-evident activity. Road maps included a division of roles and responsibilities, and a breakdown of how the innovation team would get to its end goals, sometimes defining targets.

  This document may also include further details on how further information will be gathered throughout the innovation process on the problem or opportunity and the intended users, as well as how the performance of the innovation will be tested. A team's understanding of its problem or opportunity as well as the potential users of the solution should be continuously re-examined. Knowingly or unknowingly, the team has made certain assumptions. At this point in the innovation, it was also found to be useful to consider how trials and feedback loops would be structured. How will information from these tests be incorporated into the design of the innovation?

  Furthermore, does the innovation want to be able to seize unforeseen testing opportunities when and if they arise? This has implications on the setup of the innovation team and the resources that are to be in place.

- The '**translation needs**' for the project have been assessed and team member is able to act as translator: A large contributor to the success or failure of an innovation process was if the team acknowledged what 'worlds' or 'cultures' needed to be bridged. For instance, database or app designers think very differently to humanitarian field staff,[13] just as there are large distinctions between the private companies and humanitarian organisations. Does the team have an understanding of what areas of the project may require a 'translator'? Innovations proved to be more successful, if this translator was an active member of the team as they could help other team members understand processes and could help temper expectations of individuals participating in trials or field tests.

Indicators of a quality proof of concept:

- **Clear design criteria** have been identified based on the team's understanding of the problem and current or previous practices for addressing that problem. This understanding should be informed by an awareness of end user needs and preferences, but should also include reference to any relevant technical standards. It should be clear which design criteria the proof of concept is testing or addressing, and which it is not, so that those unaddressed design criteria can be tested early on in the piloting phase.
- The team has considered **means for the monitoring of pilots and using feedback received:** Evidently, it is important to capture feedback from early development and implementation activities and to be able to incorporate this back into the solution. However, this should be considered very early on in

the innovation process. In addition, a team is more likely to be successful if they also consider if the pilot itself was good or not. Teams must clarify what makes for a good pilot location and what makes pilot data representative and generalisable. This type of information helps teams gauge if the roll-out of their innovation (e.g. doing more and bigger pilots) is reasonable.

No unique indicators of quality were identified in this research for the milestones of functional prototype and field test. Rather, a number of the indicators noted in prior milestones were found to naturally progress or come to fruition. Take for instance the last indicator of quality discussed, here, the planned capturing and using feedback are successfully implemented.

Diffusion Strategy

Remember, the milestones are key markers of progress that are within the control of the innovation team. Thus, an innovation is not guaranteed the highest level of success, adoption, by meeting all of the stages and milestones discussed thus far as these do not capture the crucial factor of the external environment. Impactful innovations do not happen in a vacuum. Achieving the most desirable level of success means navigating and negotiating numerous external factors.

There are a number of tools that can be used to map the external environment. Based on the resulting analysis, teams should be able to develop a set of activities to influence the external environment and/or better position their innovation. This is the final milestone: diffusion strategy.

The diffusion strategy is composed of:

- An assessment of the particular configuration of end users, primary beneficiaries and gate keepers
- An assessment of the incentives or disincentives to change placed on these three actors
- A proposed set of activities to increase acceptance of value proposition.

While Diffusion Strategies are a key milestone towards the end of a mature innovation process, they are only the first milestone in the long process of diffusion or scale-up. In the Elrha-ALNAP research, much of the sample of humanitarian innovations reviewed had only just begun the diffusion stage. Given the amount of time required to diffuse or scale up an innovation, the research was unable to fully capture the further milestones of a mature diffusion or scaling process. Preliminary research by the HIF, Ian Gray and Dan McClure does indicate that there may be additional milestones for scaling activities after an initial diffusion strategy has been developed.[14]

Indicators of a quality diffusion strategy:

In building up to a diffusion strategy, managers would like to see the following type of activities, behaviours and deliverables. These relate more directly to building relationships and communicating with intended users. These indicators of quality are in a way progressions of earlier indicators.[15] Feedback loops between the milestones help build towards these and thus a better quality diffusion strategy.

- The team has developed a **clear explanation for the concept** of the solution. It is one thing to be able to present the innovation idea to a manager or potential funder, as the innovation team would aim to do through the creation of a concept note or design brief. It is another to be able to pitch the idea to a potential user in a way that resonates with their circumstances, preferences and needs. This requires using the detailed understanding of the users to make a change in behaviour (e.g. adoption of new product, incorporation of new paradigm) seem reasonable or desirable.

Box 3: Example of subcategories of users

The Humanitarian eXchange Language – which aimed to resolve the lack of a common operational picture of humanitarian crises – involved at least two main types of actor: information management officers (IMOs) and data entry specialists. While IMOs are the primary beneficiaries for addressing this problem (they are the primary users of a common operational picture), the innovation required behaviour changes from data entry specialists who would be the end users of the new technology. As end users, and not beneficiaries, therefore they were not initially incentivised to support the innovation.

- The team has disentangled the **different types of users** and built a clearer picture of incentives and disincentives to adoption. During the Elrha-ALNAP synthesis work, three types of actors were identified: Primary beneficiaries, those who benefit directly from the solution; End users, those who will need to use the innovation; and Gatekeepers, those who can create incentives or disincentives to the take-up of the innovation by the two other actors. Understanding these different types of users and how they relate to each other through their work and incentives is crucial to the development of a quality diffusion strategy. See example in Box 3.
- The diffusion strategy identifies opportunities for the right level of engagement for **early adopters**: Potential users of an innovation idea are not all the same. Some are much more open to change or have a high level of awareness (or pent-up frustration) towards the targeted problem. These are early adopters. Innovation teams can promote to these users by doing blogs or news articles, having one-on-one meetings and participating in conferences or regional/thematic meetings. However, these are rather passive modes of engagement. Depending on the innovation, early adopters may want (or even expect) an opportunity to engage more actively.

  In the case studies examined it was found that innovations could garner greater success if they fostered relationships with early adopters and created opportunities for them to engage. This was at least in part due to these users becoming committed to the success of the initiative. For instance, it is one thing to maintain open one-on-one communication, and another to have a transparent innovation process by involving early adopters in an advisory or working group. In some cases, engaged early adopters became champions for the innovation – invaluable advocates for the innovation during the diffusion stage — not only within their own organisations but beyond.

- There is **a plan to produce quality evidence of the value of the solution**. Some potential users will not require much convincing before adopting the innovation; they see the value in the innovation innately. Others, on the other hand, will require much more evidence of the value of the innovation and why it is worth changing their behaviour. Such evidence should be gathered throughout the innovation process but especially during the development of the functional prototype and field testing. However, this may not be enough. In some innovation case studies, especially where there was low recognition of the problem being addressed, an independent research study or evaluation showing the benefits of the innovation was what made the difference.
- The team has developed **ways of facilitating uptake**. It is important for innovation teams to recognise that even if their innovation is freely available, its adoption does not come without a cost. There is a cost to behaviour change for users. If teams do not develop ways of facilitating adoption or reducing this cost, they are likely to struggle with the missing middle, the leap between an improved solution and adoption. In the Elrha-ALNAP case studies a number of ways of facilitating uptake were identified: offer free

training to end-users, piggy-back on organisational training, create free training material to supplement organisational trainings, offer webinars or have a 'help desk' function.

It is also crucial that innovation teams do not see the innovation (product, process, position or paradigm) as final, even when such uptake-facilitating activities begin. Throughout diffusion activities, feedback can be captured that can help further improve the innovation and increase its overall adoption.

3.3. Is this innovation worth continuing at the moment or at all?

The final crucial question for an innovation manager or member of senior leadership is: should we keep going? It is important for managers to be able to recognise what is missing for continued meaningful advancement. They also need to be able to identify when an innovation is unlikely to get what it needs and the team should switch gears to make sure the innovation is a good fail.

Especially in humanitarian contexts, it can be necessary to temporarily pause some or all activities of the innovation process so as to maintain overall progress. As Sarah Sheldon from Motivation explained, the project would have benefited from having negotiated a break clause or no-cost extension from the start. It was important for the team to test and monitor performance of Motivation's emergency wheelchairs in a crisis response, but the right context was not presenting itself. As she explained, 'we were in this ridiculous situation of half hoping for an earthquake. I think we should have planned to break up the project, [starting] up again, maybe six months later, when something actually happened' – in other words, when the context was right to go forward with trials (for more on Motivation see: Thomas and Obrecht, 2015).

However, innovation teams may not be able to get what they need, in a reasonable period of time, for the innovation to be successful. For example, the Danish Demining Group (DDG) faced difficult choices when their partnership with the Ukrainian government – which was crucial to their innovation – was affected by a changing political climate. After facing significant delays to the project, DDG undertook a scenario analysis in order to identify how they might capitalise on the learning from their innovation process and move on, if piloting of the prototype became unfeasible due to political conditions (Obrecht, 2016).

Accepting this sunk cost is difficult and often runs against the intuitions of humanitarian staff. Yet it highlights the importance of the success criteria of *consolidated learning and evidence*. In order to step away from an innovation process, innovation teams must be able to feel they have made a valuable contribution to the humanitarian sector. The sector's tendency to place a high value on action has led it to undervalue other important components to good humanitarian action, such as learning. In addition to the milestones and quality indicators, it is crucial that managers and senior leadership 'check in' on how the innovation team is capturing, gathering, analysing, synthesising and disseminating learning so that it is contributing to the improvement of the sector as a whole. An innovation can fail at any point in the innovation process, so it needs to continuously think of what learning and evidence may be valuable to others, and start sharing this right away. Otherwise it will be difficult to ensure that the innovation is a good fail.

So how does a manager or senior leader make this judgement call? ALNAP proposes that they look for **indicators of success**.

- **Indicators of success:** These are activities, behaviours that indicate that the innovation process is achieving one or more of the success criteria. As discussed, indicators of quality point to how well the innovation team has done each of these milestones, while the milestones themselves show that the innovation process

is moving towards completing a pilot or advancing into diffusion activities. Indicators of success go a step further by pointing directly to the innovation team's work having paid off and the innovation starting to reap the rewards. Put more pragmatically, these are activities, behaviours or deliverables that managers 'love to see' as they show success. These are specific to each innovation based on the area of work, sector, types of use, initial level of recognition for the problem, etc.

Some general examples may be: early adopters become so supportive of the innovation process that they actively engage in its development; or that an early adopter writes a formal letter of support for the innovation; or that a thought-leader publicly endorses the innovation. These examples point to the innovation achieving adoption. Such success cannot be achieved without the innovation team having done the milestones well by investing in the right places and having had strong feedback loops.

Box 4: Outcome Mapping

Outcome Mapping provides a set of tools to design and gather information on the outcomes, defined as behavioural changes, of the change process. OM helps a project or program learn about its influence on the progression of change in their direct partners, and therefore helps those in the assessment process think more systematically and pragmatically about what they are doing and to adaptively manage variations in strategies to bring about desired outcomes' (IDRC Evaluation Unit et al., 2012).

Indicators of success are unique to each innovation. Teams can think through what might be potential indicators of quality. A tool that may help with this is Outcome Mapping (OM). OM is a planning, monitoring and evaluation methodology focused on behaviour change. One of its underlying assumptions is that there are limits to the influence that any intervention can expect to exert (OM Lab, 2012: 2-3), making this methodology very relevant to innovation, particularly during the design of a diffusion strategy. Also see the **RAPID Outcome Mapping Approach** (ROMA), which offers specific guidance to the development of a communications strategy (ODI RAPID, 2014).

How many indicators of success does an innovation need for it to be worth continuing? This will depend on the innovation and the type of indicator found, as some indicators may carry more weight. These need to be assessed by leadership. Take for example, if the innovation is adopted by only one organisation; this may be a significant win and a positive sign that the innovation can still go further, yet:

- What is the size of the organisation? Is it one of the Big Five international NGOs[16]?
- Was the innovation rolled out across the organisation or only to certain countries?
- How difficult is the adoption of new practices/services for the organisation? How likely would the organisation have been to settle for the status quo?
- Is this organisation paying for the innovation or are they using it for free? Is this arrangement sustainable over the long term?

These are only some of the questions a manager may ask.

Managers also have to ask what the indicator means for the broader innovation process. Some indicators of success relating to adoption, such as early adopters becoming champions, may show that the innovation team will soon be able to shift their focus to scaling up the innovation.

4. Conclusion

The purpose behind the ALNAP working papers, Evaluating Humanitarian Innovation and Monitoring Humanitarian Innovation, is to explore how we might approach monitoring and evaluation practices for iterative processes like innovation. There have been other early attempts to explore these themes (ODI RAPID 2017; Gray 2016), but further thinking and trialling of M&E of iterative, learning-intensive processes is needed. This is important not only for the increasing arena of humanitarian innovation, but also for so-called 'standard programming', where concepts from innovation practice, such as iterative learning, adaptiveness and 'testing' of ideas, are beginning to influence the way humanitarians think about programme management (IRC and Mercy Corps, 2016).

Endnotes

1. It is important to note that innovation teams may be required to be equally innovative in their monitoring because the existing monitoring tools do not help answer those questions most important to the improvement and refinement of their solution.

2. Where performance standards exist, that is. Cases were found of innovations helping establish baselines and standards (see Obrecht and Warner, 2016).

3. The evaluation of innovation processes is discussed in HIF-ALNAP Working Paper: Evaluating humanitarian innovation: **http://www.alnap.org/resource/23903**

4. It is important to recognise that it is not only challenging for managers to estimate how much of an investment will be necessary, but also how long it will be necessary.

5. It is currently uncertain if teams that actively worked towards certain or all milestones earlier in their innovation process were more likely to be successful. Further research would be needed to determine by when certain milestones must be considered by innovation managers so as to avoid negative effects on the success of the innovation. Until such research is undertaken, ALNAP would propose that all milestones should be considered from the beginning of the innovation process.

6. Creating learning documents may naturally be seen as a task for monitoring and evaluation practitioners, but this should be seen as a responsibility for the whole team.

7. The levels of indicators presented in this paper were informed by Outcome Mapping's Graduated Progress Markers: 'expect to see', 'like to see' and 'love to see' (Earl, Carden and Smutylo, 2001; ODI RAPID, 2014).

8. The placement of these indicators is based on the 15 case studies examined. It is not possible to determine if the positioning of these would shift if new or non-HIF case studies were added to the sample.

9. More research is needed in this area to determine which set of activities should be considered good practice specifically for innovation in the humanitarian sector.

10. Innovation teams should also 'disentangle' the different types of users of an innovation. This indicator of quality is explained under diffusion strategy below.

11. This may be particularly difficult in cases where the innovation is addressing an unrecognised need. Think of Henry Ford's iconic quote: 'If I had asked people what they wanted, they would have said faster horses.'

12. That there are more quality indicators for this milestone than for others should not be taken to mean that the milestone is more difficult. This milestone is actually rather straightforward, which may point to why its value and importance was downplayed by some of the innovation teams studied. In the case studies, those innovation teams that invested in this milestones were more successful in the long term.

13. See Speed Evidence Example: Gray and Hettiarachchi (2014).

14. See McClure and Gray's paper series on scaling and scaled innovation in the humanitarian and development sector: **https://www.thoughtworks.com/insights/blog/scaling-assessment-map-evolving-tool-supporting-innovation-scale**

15. The following five indicators fall under the diffusion stage and contribute to the milestone of diffusion strategy. See Matrix 1 for visual.

16. MSF, Save the Children, Oxfam, World Vision, International Rescue Committee (IRC)

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