JUNE 2017

INSIGHTS ON

Measuring the Impact of Innovation

The International Development Innovation Alliance (IDIA)

Australian Aid
unicef
USAID FROM THE AMERICAN PEOPLE
UKaid from the British people | Department for International Development
Canada
WORLD BANK GROUP
The ROCKEFELLER FOUNDATION
BILL & MELINDA GATES foundation
Sida
Grand Challenges Canada® Grands Défis Canada BOLD IDEAS WITH BIG IMPACT®
GLOBAL INNOVATION FUND
RESULTS FOR DEVELOPMENT

About the International Development Innovation Alliance (IDIA)

The International Development Alliance (IDIA) is an informal platform for knowledge exchange and collaboration around development innovation. Established in 2015 with a shared mission of "actively promoting and advancing innovation as a means to help achieve sustainable development", including through the UN's 2030 Sustainable Development Agenda, it currently comprises the following entities investing resources in the development innovation space:

A key contribution IDIA seeks to make is to enhance the global evidence base and build understanding of the role of innovation within international development. To do this, IDIA establishes Working Groups that bring together experts from within and beyond IDIA member agencies to collaboratively develop common platforms for supporting innovation from idea to scale, shared learning and improved impact measurement. The insights on measuring the impact of innovation captured in this paper represent the culmination of a year-long review and synthesis of learning by the IDIA Working Group on Measuring Impact, and this is one of the global public goods produced through the IDIA platform that is intended to further build the learning and experience of development agencies both within and beyond IDIA.

This document presents the insights and lessons learned that have been collected through a multi-disciplinary and collaborative process led by the IDIA Working Group on Measuring Impact. It does not represent the official policies, approaches or opinions of any single contributing agency or IDIA member, nor reflect their institutional endorsement or implementation of the approaches contained herein.

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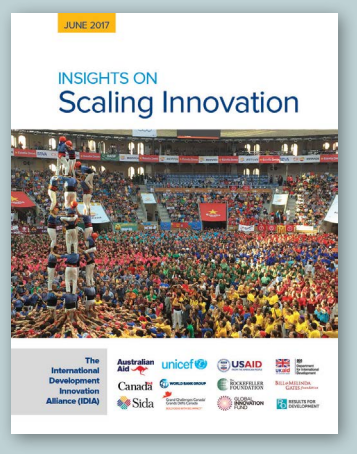
INSIGHTS ON

Measuring the Impact of Innovation

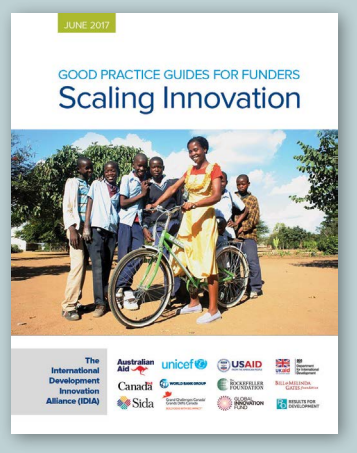
International Development Innovation Alliance (IDIA)



ASSOCIATED PRODUCTS

Insights on SCALING INNOVATION

This companion paper to the *Insights on Measuring the Impact of Innovation* has also been created by an IDIA Working Group, and looks at the key challenges for funders around scaling innovation. It presents a high-level architecture comprising six scaling stages, eight good practices and a matrix of influencing factors to help guide funders through the long and complex process of scaling innovation.



SCALING INNOVATION Good Practice Guides for Funders

This supporting document explores the eight Good Practices identified in the *Insights on Scaling Innovation* in more detail, and provides funders with further guidance on tools and knowledge products that can help them start to operationalize these Good Practices within the context of their own agencies.

About this document

This paper in the IDIA Insights series focuses on various challenges and lessons learned of funders seeking to measure the impact of development innovations they support. It draws on the experience and learning of a wide range of bilateral, multilateral, philanthropic and civil society actors who came together in a Working Group on Measuring Impact facilitated by the International Development Innovation Alliance (IDIA). While it does not represent the formal strategy or approach of any one single agency in the Working Group or IDIA itself, it does reflect areas of overlapping interest and terminology that can be used as a point of reference for interested stakeholders in reflecting on, and enhancing, their own approaches to measuring the impact of development innovations.

Tools and approaches to measuring impact continue to emerge and evolve at a rapid pace. The insights contained herein will therefore benefit from regular review and iteration to accurately capture continuing advances in knowledge and practice. In its current form, this document provides a broad architecture of impact domains and indicator sets intended to help funders in measure and predict the outcomes of the innovations they support. The insights collected in this paper are also likely to be valuable in helping innovators themselves and other partner organizations develop their own impact measurement approaches, thereby acting as a potential catalyst for deeper and more productive partnerships.

The members of IDIA are committed to supporting the co-creation of tools and knowledge products such as these Insights papers to inform and enhance their own innovation-related work and that of others in the global innovation community. The exchange of knowledge, learning and expertise that has characterized the development of this paper is an essential part of ensuring innovations intended to help accelerate achievement of the 2030 Sustainable Development Goals can be pursued and supported.

Acknowledgments

The insights outlined in this paper have been contributed through a collaborative process from countless individuals too many to name here. Special thanks go to all of the members of the IDIA Working Group on Measuring Impact for their insights and expertise; to the IDIA Principal Representatives for their guidance; to Peter Singer at Grand Challenges Canada for his leadership; and to Thomas Feeny at Results for Development for the creation of this report.

CONTENTS

Executive Summary

This paper presents a collection of insights that may be helpful for funders who are interested in measuring the impact of innovation. It is built on the experience of experts from a wide range of agencies who came together in a Working Group on Measuring Impact facilitated by the Results for Development Institute under the **International Development Innovation Alliance (IDIA)**. IDIA is an informal platform for knowledge exchange and collaboration among the following development innovation funders:

- Australian Aid
- Bill & Melinda Gates Foundation
- Global Affairs Canada
- Global Innovation Fund
- Grand Challenges Canada
- Results for Development
- Sida
- The Rockefeller Foundation
- UKAID — Department for International Development
- Unicef
- USAID
- World Bank Group

When IDIA was created in early 2015, a key objective was for its members to begin promoting shared understandings around the complex practice of development innovation, and where possible collaboratively develop *'common platforms for supporting innovation from idea to scale, shared learning and improved impact measurement'*. The insights on measuring the impact of innovation presented here are one of a number of implementable, global public goods resulting from this process, and have been collated from the extensive learning and experience of development agencies both within and beyond IDIA.

Together, they provide a broad architecture to help guide funders in navigating the long and complex process of impact measurement, while also offering guidance to help innovators and partner organizations develop/enhance their own impact measurement approaches.

These insights have been synthesized to create a high-level architecture for measuring the impact of innovation that is built around a minimal set of 'core' indicators, with **'lives saved and improved'** being the ultimate measures of success. These indicators are organized in terms of three key impact *domains:* (1) **'Impact on Beneficiaries'**, **'Scale'** and **'Sustainability'**, with additional guidance on what to measure when assessing the potential impact of an innovation (the **'Leading' Indicators**) and what to measure when assessing the actual, achieved impact (the **'Outcome' Indicators**). Although it is hoped that this high-level architecture will facilitate closer alignment and collaboration among agencies involved in measuring the impact of development innovation, it is not designed to suggest that all innovation funders should therefore adopt exactly the same approach, or measuring only those indicators highlighted in this paper. Different agencies have their own missions and capacities that will shape the kind of data and impact they are looking for, and with a wide range of influencing factors[1] in play within the broader social, political, cultural and economic environments in which innovations exist, it will also be necessary for funders to be flexible and agile in collecting different datasets at different times in order to understand why certain impacts are not achieved. The collectively articulated impact measurement architecture that has been created by the IDIA Working Group is therefore one that funders should reflect upon in the context of their own institutional environments and approaches.

CONTINUED

Recognizing that the impact of innovation typically emerges many years into the future, many of the indicators included in this architecture are predictive, and designed to help agencies project and model potential impacts in order to improve their decision-making capacity at key points along the journey from proof of concept through to sustainable scale. To this end, the architecture presented here is informed by an additional stream of work conducted by Results for Development and Grand Challenges Canada that has developed a predictive modelling methodology that agencies can use in tandem with this approach (see the *Case Study* at the end of this paper for more details).

Finally, it is important to note that this paper is closely linked (and designed to be read in conjunction with) the accompanying *Insights on Scaling Innovation* that have been collated in parallel by an additional IDIA Working Group, which defines six key Scaling Stages, a range of Good Practices for funders to follow, and a matrix of Influencing Factors to monitor in understanding what is shaping an innovation's pathway to impact. Together, these Insights papers represent an exciting opportunity for funders to further enhance their support in using development innovation to accelerate achievement of the 2030 Sustainable Development Goals.

A High-Level Architecture for Measuring the Impact of Innovation

(denoting the central importance of 'lives saved and improved' in **RED**)

LEADING INDICATORS	OUTCOME INDICATORS
DOMAIN: Impact on Beneficiaries Indicators: ■ **Expected lives saved & improved** ■ **Projected lives saved & improved** ■ Available evidence supporting effectiveness ■ Potential to impact the most vulnerable / in need and target equity / gender groups ■ Adherence to 'Do No Harm' principle	**DOMAIN: Impact on Beneficiaries** Indicators: ■ **Actual lives saved & improved** ■ **Projected lives saved & improved** ■ Direct measurement, 'use of evidence-based interventions' and new knowledge gained ■ Equity measures and disaggregated data by gender and vulnerable / high-need target populations impacted ■ Externalities and unintended effects
DOMAIN: Scale Indicators: ■ Viable Business model (including IP if applicable) ■ Expected demand / market readiness	**DOMAIN: Scale** Indicators: ■ Replication of business model in different geographies ■ Actual and projected market demand
DOMAIN: Sustainability Indicators: ■ Smart partners (especially from country governments and companies/investors) willing to co-fund ■ Expected revenue generated ■ Potential to influence policy / systems change ■ Proven entrepreneurial success of the team	**DOMAIN: Sustainability** Indicators: ■ External funding or support attracted (especially from country governments and companies/investors) ■ Actual and projected revenue generated ■ Policy / systems change ■ Improvements in innovator capacity

Context, Concepts and Challenges

1.1 Formation of the IDIA Measuring Impact Working Group

When the International Development Innovation Alliance (IDIA) was created in early 2015, a key objective for the group was to develop *'common platforms for supporting innovation from idea to scale, shared learning and improved impact measurement'*.[2] In light of this, one of the first actions taken after IDIA's formation was to convene a dedicated 'Measuring Impact' Working Group to focus and lead collaboration around this issue. At different times over the course of this process, the Working Group has drawn on the expertise of participants from the agencies in listed here:

- Australian Aid – Department of Foreign Affairs & Trade
- Bill & Melinda Gates Foundation
- Every Woman Every Child - Innovation Marketplace
- Fluxx Labs
- Global Affairs Canada
- Global Innovation Fund
- Grand Challenges Canada
- Results for Development
- Sida
- The Rockefeller Foundation
- UKAID – Department for International Development
- United Nations Children's Fund
- United Nations Development Programme
- USAID
- World Bank Group

1.2 Aligning Terminology

One of the underlying challenges to developing common platforms for supporting innovation has been the different terminology used by development agencies when describing their respective innovation approaches, both in terms of using different words to describe the same thing, or understanding the same word in sometimes completely different ways.

For any architecture around impact measurement to be valuable and effective across multiple agencies, a common vocabulary of key terms will therefore be important. As a first step towards this, the Working Group pooled a range of formal and informal materials describing how they managed, financed and/or evaluated innovation at present, recognizing that these approaches were at very different levels of maturity across the group and sometimes related only to a particular innovation program rather than an agency-wide framework.

Despite significant variation in their level of development, a number of commonalities began to emerge from this analysis upon which to start building a high-level architecture for impact measurement. For example, although they employ different terminology, innovation funders tend to conceptualise and manage their innovation investments around three broad stages: *'Proof of Concept'*, *'Transition to Scale'* and *'Scaling'*, as illustrated in Figure 1.

FIGURE 1

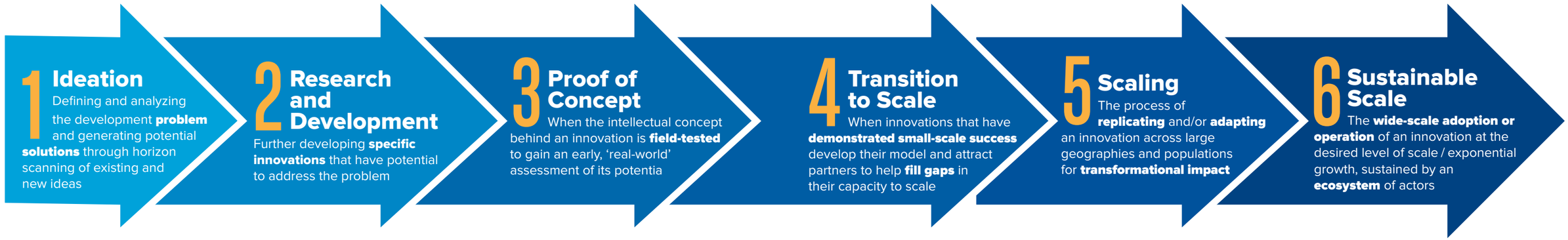
Common terminology used to define the investment stages of scaling

	DESCRIPTION		
AGENCY	When the intellectual concept behind an innovation is field-tested to gain an early, 'real-world' assessment of its potential	When innovations that have demonstrated small-scale success develop their model and attract partners to help fill gaps in their capacity to scale.	The process of replicating and/or adapting an innovation across large geographies and populations for transformational impact.
Bill & Melinda Gates Foundation	Proof of Concept	Transition to Development	New Product / Knowledge dissemination
Global Affairs Canada	Testing / Pilots	Implementation and Scale Up	
Global Innovation Fund	Pilot	Test & Transition	Scaling
Grand Challenges Canada	Proof of Concept / Seed	Transition to Scale	Scaling
UNICEF (Product Innovation)	Proof of Concept	Field Trial	Scale
UNICEF (Office for Innovation)	Futures/Ventures	Ventures	Scale
USAID (Development Innovation Ventures)	Proof of Concept	Testing Impact and Delivery	Transitioning to Scale
World Bank Group (Development Marketplace)	Proof of Concept / Seed	Capacity Building	Scale and Replication
SHARED CONCEPT	**PROOF OF CONCEPT**	**TRANSITION TO SCALE**	**SCALING**

These three stages reflect the key *investment phases* of many innovation funders, but are not representative of the entire end-to-end process of scaling innovation. As noted in the accompanying *Insights on Scaling Innovation* developed in parallel by another IDIA Working Group, there are two stages that directly precede the 'Proof of Concept' stage which encompass analysis of the problem and the scanning, sourcing and development of possible solutions. These are referred to in the *Insights on Scaling Innovation* paper as **'Ideation'** and **'Research & Development'.** Also, when innovations have passed beyond the fifth 'Scaling' stage, there are still longer-term questions that arise regarding how to manage the process while it operates at scale, whether it is sustainable (financially, politically, etc.), and whether there is a time when scaling back maybe required, since other newer

FIGURE 2

Scaling Stages



technologies or processes may replace the old, scaled one.[3] For this reason, the *Insights on Scaling Innovation* includes a sixth and final '**Sustainable Scale'** stage relating to the sustainable operation of an innovation at the desired level of scale / exponential growth. These six scaling stages are displayed in Figure 2 above.

These six stages have been intentionally defined from the perspective of general support rather than financing, in order to emphasize that scaling typically requires more than the injection of capital alone. Funders should be encouraged to consider a range of advisory, influencing, convening and/or brokering roles that they and other stakeholders can play to accelerate the scaling process. Together, these six stages provide the first component of the scaling architecture outline in the *Insights on Scaling* paper, and a common reference point to help funders categorize, compare and align their investments across the scaling process. However, it is important to recognize that distinguishing between these phases does not mean that they always cleanly follow one another in a linear fashion, as (for example) modifications that may occur during the 'Transition to Scale' phase may require further 'Proof of Concept' testing before the innovation progresses to ' Scaling' and beyond. Similarly, the boundaries between these stages are porous will often overlap in practice. For more on this, see *Insights on Scaling Innovation*.

1.3 Impact-Related Challenges

Using these six scaling stages as their backdrop, members of the Measuring Impact Working Group then identified a range of challenges that innovation funders typically confront when seeking to assess the impact of innovations as they moved across the different stages:

- **Measuring systems-level changes.** Though innovations can have impact beyond the beneficiaries or customers they serve directly, it can be difficult to measure systems-level changes (such as policy change, crowding-in effects, and replication or adaptation of an innovation by others).
- **Balancing quantitative and qualitative data collection.** Quantitative data facilitates easier comparison between innovations, but it may not provide the full picture of an innovation's (or innovation platform's) impact. Newer, more 'agile' methods of innovation development can also make it difficult to apply traditionally more 'stable' evaluation mechanisms such as control groups. How can, and should, qualitative data (e.g. case studies, anecdotes) be incorporated into standardized impact measurement approaches? Could we use quantitative data collected under impact measurement domains such as 'Impact on Beneficiaries' or 'Sustainability' to be presented as evidence points in a broader qualitative story?
- **Predicting future impact.** It is acknowledged that the impacts of innovation are often unseen until a number of years in the future. However, modeling future impact in dynamic and complex environments is difficult, making it challenging to predict the size of those impacts, even when knowledge of the impact can be important for decision making and accountability.
- **Balancing innovation-specific v. standardized metrics.** While having agencies develop metrics of their choice to track the innovations they support may be more closely aligned with the impact they achieve, it can make it difficult to aggregate data at the portfolio level. What is the correct balance between individualized (e.g. bottom-up) vs. standardized (top-down) metrics that would enable more aggregate / collective impact data?

Finally, it is recognized that many of the key terms used in impact measurement (such as 'indicator', 'target' and 'metric') have different meanings and uses among the innovation funders, and that agencies looking to operationalize this kind of high-level architecture would need to do some internal analysis and comparison of the vocabulary they use around impact measurement to understand how it might translate within their own institutional environment. The *Glossary* at the end of this paper provides an indication of some of the key terms and definitions put forward through the course of developing this architecture, with this list expected to grow and develop as agencies experiment with its application.

An Architecture for Measuring the Impact of Innovation

2.1 Shared 'Points of Departure' Around Measuring the Impact of innovation

Before commencing the design and construction of a high-level architecture for measuring the impact of innovation, members of the Working Group felt it was important to first establish a set of principles that would help inform and provide structure to the process of sifting through the assortment of good practices, learnings and impact tools used by innovation funders. To this end, the following **points of departure** were articulated by the Working Group to help ensure the resulting architecture would bring value to an environment characterized by complex and competing approaches.

Working Group 'Points of Departure' around Measuring the Impact of Innovation

- **M&E is a critical function of innovation, and is important for both measuring the impact of individual innovations as well as the *platform* itself (by aggregating these)**. More closely aligning approaches to M&E among and within agencies will facilitate learning across innovation platforms and enable comparisons of return on investment.

- **M&E approaches should be as *simple as possible.*** Many of those currently in operation were viewed by Working Group members as being overly cluttered with indicators that in some instances actually obscured the impact of innovations. However, neither quantitative or qualitative frameworks alone will capture the success of innovation; multi-method combinations of quantitative and qualitative data are needed.

- **The core of all innovation M&E is the ultimate success of the innovations in terms of their impact on beneficiaries, at the heart of which is a measure of *lives saved and improved*.** However, because the impact of innovation is in the future, data around lives saved and improved will need to be both measured and modeled. In addition, the funder will also need to be cognizant when measuring indicators such as 'policy / systems change' that these will often be the result of a multiple innovations working together, rather a single innovation alone.

- **In addition to impact on beneficiaries, other core domains that need to be addressed in the M&E of innovation include *scale and sustainability.*** The latter two in particular are deeply intertwined and will in practice share many overlapping indicators.

- **Impact can and should be measured early in the scaling process (to predict success) and after actual outcomes have been achieved (to determine the overall success of the innovation or platform)**. These two kinds of impact could be measured using correlated sets of 'Leading' and 'Outcome' indicators.

These common points of departure provided some key parameters for the Working Group in collating and organizing the learning and best practices from different agencies.

2.2 Identifying Common 'Domains' for Individual and Collective Impact Measurement

The preliminary analysis of materials collated through the Measuring Impact Working Group suggested that when evaluating innovation, funders are typically interested in two things:

1. Optimizing their ability to initially select and then progressively measure the impact of ***individual*** innovations they support; and
2. Capturing and communicating the ***collective impact*** of their investments at a ***portfolio / platform*** level, i.e. across the many different innovations they may have supported through a particular platform (e.g. the Global Innovation Fund) or initiative (e.g. the Zika Grand Challenge).

These two are obviously closely connected, given that the collective impact of a platform can to some extent be measured by rolling-up and aggregating the impact data from individual innovations. However, as noted by the Working Group members, a key challenge in trying to 'roll-up' impact data in this way is that different kinds of innovations typically require different kinds of indicators, just as innovations that are targeted for scaling through the public sector will require different indicators to those seeking scale through a more commercial, private sector route. The diversity of indicators that may be present even within a small portfolio of innovations can therefore make an aggregated assessment of collective impact very difficult.

This impact measurement architecture seeks to overcome this tension between individual and collective impact by defining a small set of common indicators to which all innovations should be contributing to in one way or another. It does not attempt to be an inventory for all of the potential indicators available for measuring an individual innovation, as this is neither feasible nor useful in simplifying what is already a very complicated process of evaluation. Rather, it is based on the notion that there are certain areas or 'domains' of desired impact that development agencies are typically working towards in funding innovation. Three of these core 'domains' were identified by the Working Group that appeared fundamental to their innovation investments and of shared interest across all of the agencies represented, namely:

- **'Impact on Beneficiaries'**
- **'Scale' and**
- **'Sustainability'**

In combination, these three impact domains suggest that generating 'sustained beneficiary impact at scale' could be positioned as the highest-level goal of funders in supporting innovation, regardless of the innovation type, context or pathway to scale of the individual innovations in question. Ideally, a shared commitment by agencies to measuring these domains would therefore enable a smoother aggregation of individual into collective data, as well as open up the possibility to share and compare impact data between agencies at the level of both individual innovations and platforms, in the process contributing to a stronger, more coherent evidence base around 'what works'.

2.3 Identifying 'Leading' and 'Outcome' Indicators

Although Working Group members coalesced around the central importance of 'Impact on Beneficiaries', 'Scale' and 'Sustainability', it was recognized that these concepts were still typically interpreted in different ways between (and sometimes within) each agency. Agreeing appropriate indicators for each of these was therefore an important next step in further aligning agency approaches.

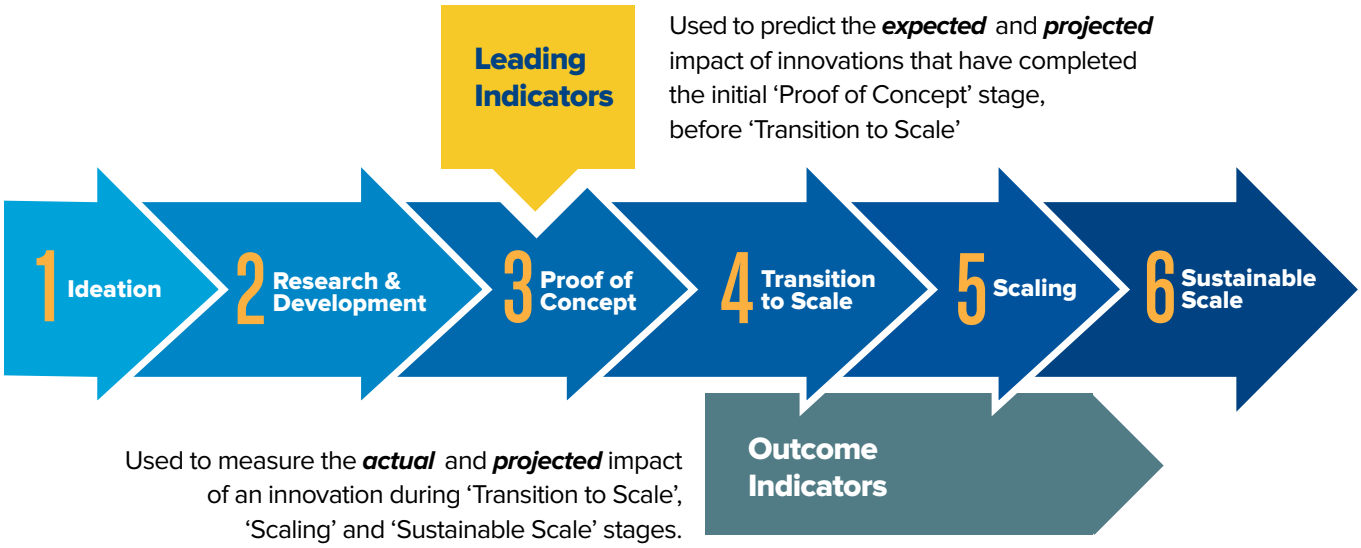
To this end, the Working Group identified two sets of indicators - 'Leading' and 'Outcome' indicators — as being important when measuring the impact of innovation, the distinction relating to where across the six scaling stages they are meaningfully deployed. These two sets of indicators are defined as follows:

- **'Leading'** indicators are used to predict the ***expected***[4] and ***projected***[5] impact of innovations that have completed the initial 'Proof of concept' stage, before 'Transition to Scale';
- 'Outcome' indicators are used to measure the ***actual***[6] and ***projected*** impact of an innovation during 'Transition to Scale', 'Scaling' and beyond.

The deployment of these indicators across the scaling stages is illustrated in Figure 3 below.

FIGURE 3

Deployment of Leading and Outcome Indicators Across the Scaling stages



To determine appropriate indicators for each of the 'Impact on Beneficiaries', 'Scale' and 'Sustainability' domains, the members looked first at the range of 'Outcome' indicators that would be relevant for each. These included a mix of both indicators already used by members (e.g. 'lives saved / improved' as an indicator of 'Impact on Beneficiaries') and those that were viewed as desirable, but which would need further development in order to be actionable (e.g. 'policy and systems change' as an indicator of 'Scale'). In an attempt to protect the simplicity of the architecture, the Working Group chose to identify what they saw to be the most appropriate, reliable or important indicators for each, rather than an exhaustive list.

The Working Group members then followed a similar process and identified a number of related 'Leading' indicators which, when presented alongside the 'Outcome' indicators, constitute the full architecture for measuring the impact of innovation shown in Figure 4.

It is recognized that the indicators listed above do not go so far as to tell a funder what *kind(s)* of data to collect — for this, a funder will need to identify the quantitative or qualitative metrics appropriate to the innovation they are supporting. For example, the indicators 'lives saved' and 'lives improved' could have metrics disaggregating the data by factors such as gender, age etc. as relevant to the innovation and the agency's interests. Similarly, funders may choose to group some of these indicators together to help them determine (for example) a higher level measure of the broader social return on their investment — which would also require a measure of outcomes divided by inputs. Also, it is important to note that not all of the indicators included in the architecture above may be applicable to the many different kinds of innovation that funders support. This is partly because the architecture focuses principally, although not exclusively, on the social impact of innovation rather than economic impacts such as job creation and inclusive growth.

FIGURE 4

A High-Level Architecture for Measuring the Impact of Innovation

(denoting the central importance of 'lives saved and improved' in **RED**)

LEADING INDICATORS	OUTCOME INDICATORS
DOMAIN: Impact on Beneficiaries Indicators: ■ **Expected lives saved & improved** ■ **Projected lives saved & improved** ■ Available evidence supporting effectiveness ■ Potential to impact the most vulnerable / in need and target equity / gender groups ■ Adherence to 'Do No Harm' principle	**DOMAIN: Impact on Beneficiaries** Indicators: ■ **Actual lives saved & improved** ■ **Projected lives saved & improved** ■ Direct measurement, 'use of evidence-based interventions' and new knowledge gained ■ Equity measures and disaggregated data by gender and vulnerable / high-need target populations impacted ■ Externalities and unintended effects
DOMAIN: Scale Indicators: ■ Viable Business model (including IP if applicable) ■ Expected demand / market readiness	**DOMAIN: Scale** Indicators: ■ Replication of business model in different geographies ■ Actual and projected market demand
DOMAIN: Sustainability Indicators: ■ Smart partners (especially from country governments and companies/investors) willing to co-fund ■ Expected revenue generated ■ Potential to influence policy / systems change ■ Proven entrepreneurial success of the team	**DOMAIN: Sustainability** Indicators: ■ External funding or support attracted (especially from country governments and companies/investors) ■ Actual and projected revenue generated ■ Policy / systems change ■ Improvements in innovator capacity

Finally, while this architecture may be helpful in capturing and standardizing the ultimate impact of innovation at the individual and platform levels, it does not address the question of why the observed impact came about, or the contextual factors that influenced the outcomes. To help funders understand the latter, the parallel architecture outlined in *Insights on Scaling Innovation* provides guidance for funders on predicting, capturing and analyzing the role of contextual enablers and constraints that are influential along the scaling pathway.

CASE STUDY

Grand Challenges Canada

How We Assess the Potential Impact of the Innovations We Support

Grand Challenges Canada®
Grands Défis Canada
BOLD IDEAS WITH BIG IMPACT®

For senior policy makers responsible for making important decisions, knowing which of the options available to them will yield the best value for money is crucial. Determining which innovation initiatives to support and which not can have major implications for whether taxpayers' money is used effectively and efficiently. Policy makers often cannot do that well now, given the limitations of the information provided to them. This is the problem we have tried to solve.

Assessing the impact of innovation confronts a paradox: how do we measure outcomes which occur in the future? As a result, traditionally innovation funders have attempted to measure impact by looking at inputs (such as how many innovations attract additional funding) or outputs (such as publications or patents) rather than outcomes (such as lives saved or improved). Those approaches are inadequate because changes in inputs or outputs do not necessarily assure that certain outcomes will be achieved, and may provide little insight on the nature or magnitude of possible outcomes. Also, innovation funders' stakeholders understandably need to know about outcomes as they think about the value for money of their stake; and they want to be able to compare different options using similar metrics (e.g., lives saved).

At Grand Challenges Canada (GCC), we are seeking to overcome these weaknesses and get a better and more accurate sense of potential impact. We are doing so in consultation with: our Board of Directors; our Scientific Advisory Board; our counterparts in the Canadian government (our funder); and through connections and partnerships with other organizations and experts around the world including the Grand Challenges Network, the International Development Innovation Alliance (IDIA), and the Results for Development Institute (R4D).[7] Measuring impact is an essential part of our core mission, which is to seek out and fund the most promising and impactful of innovative ventures meeting the criteria in our focus areas, which include saving lives at birth, saving brains (child development), and mental health, among others.[8] We are committed for the long term, building on the validating findings from two recent evaluations[9] of our first five years' results.[10]

Our approach to impact measurement has the following core features.

1. We focus mainly on impacts related to lives saved and lives improved. But we get there by first thinking about the broad range of potential impacts that the innovations we invest in might have.

We start from the high-level architecture for measuring the impact of innovation (see below) that has been developed by the International Development Innovation Alliance (IDIA), whose members include representatives from Australia, Canada, Sweden, the United Kingdom, the United States, UNICEF, the World Bank, The Rockefeller Foundation, the Global Innovation Fund, The Bill and Melinda Gates Foundation's Grand Challenges program, and ourselves, GCC.

This short note concentrates on the work we do to measure the impacts noted at the top of this list — lives saved and lives improved. In other documentation we describe how our assessments of innovations — and of the effectiveness of our GCC platform as a whole — consider the other impacts identified in the IDIA architecture, as well as further potential impacts (e.g., on economic outcomes) as well.[11]

A High-Level Architecture for Measuring the Impact of Innovation

(denoting the central importance of 'lives saved and improved' in RED)

LEADING INDICATORS	OUTCOME INDICATORS
DOMAIN: Impact on Beneficiaries Indicators: ■ **Expected lives saved & improved**[12] ■ **Projected lives saved & improved**[13] ■ Available evidence supporting effectiveness ■ Potential to impact the most vulnerable / in need and target equity / gender groups ■ Adherence to 'Do No Harm' principle	**DOMAIN: Impact on Beneficiaries** Indicators: ■ **Actual lives saved & improved** ■ **Projected lives saved & improved** ■ Direct measurement, 'use of evidence-based interventions' and new knowledge gained ■ Equity measures and disaggregated data by gender and vulnerable / high-need target populations impacted ■ Externalities and unintended effects
DOMAIN: Scale Indicators: ■ Viable Business model (including IP if applicable) ■ Expected demand / market readiness	**DOMAIN: Scale** Indicators: ■ Replication of business model in different geographies ■ Actual and projected market demand
DOMAIN: Sustainability Indicators: □ Smart partners (especially from country governments and companies/investors) willing to co-fund □ Expected revenue generated[9] □ Potential to influence policy / systems change □ Proven entrepreneurial success of the team	**DOMAIN: Sustainability** Indicators: □ External funding or support attracted (especially from country governments and companies/investors) □ Actual and projected revenue generated[9] □ Policy / systems change □ Improvements in innovator capacity

2. Our approach to assessing lives saved and lives improved begins with careful consideration of how those impacts will happen (i.e., the pathways through which they will materialize).

For lives saved, we trace the multiple steps that need to be successfully completed in order for an innovation to result ultimately in preventing deaths. We pull together the pertinent evidence and lessons from research and the relevant literature and do our own analysis of how — and by how much — a change brought on by the innovation in question might yield a reduction in mortality rates.

On lives improved, we do the same. In addition, we distinguish between different kinds of improvements (see graphic below). For example, the benefits from an artificial leg (for individuals who need one and otherwise would have very restricted mobility and ability to work) are not

the same as the benefits from effective mental health care or from cleaner, healthier sanitation facilities. We calculate different kinds of improvement separately, and make all our work available and transparent for public consumption. Since many audiences also want to see figures for categories of improvements (e.g., all ways of enhancing ability to work) and an aggregated total across all improvements, we calculate those figures as well. See graphic below for examples.

3. Next, we estimate impacts that have already occurred or are clearly on track to occur within the next few years.

We do these calculations for innovations individually. Then we roll up the results into overall totals for our entire program.

Quantifying the near-term (one to three years) impacts provides a good basis for later assessing the probable (and more difficult to estimate) longer-term impacts. Evidence on the near-term is available from the innovators, who provide it as a condition for funding. Their submissions include business plan data and other material from which they and we can assess how they are progressing.

Our investment team specialists also do their own independent assessments and revise the innovators' estimates when needed, scaling back excessive claims where warranted. In addition, our staff draw on supplementary sources whenever possible, such as third party evaluations, research results (e.g., randomized controlled trials) and reviews of the literature; evidence from these sources on key parameters in the chain of causation validates or leads to revisions in the data obtainable from innovators.

Our estimates focus on the 10% of our investments that are transitioning to scale. As the "seed investing" we're doing for the other 90% leads to new candidates ready to transition to scale, we will do more analysis on them as well to help inform investment decisions.

Grand Challenges Canada: Lives Improved

Up to **42 million lives** estimated to be improved by Grand Challenges Canada-funded innovations by 2030, with more than **1.2 million lives** improved to date, including:

MARCH 2017

4. We then project the beyond-the-short-term impacts.

Because the first few years of impacts capture only the beginning of a longer trajectory, we project the potential impacts of innovations up to the year 2030, the date targeted by the Sustainable Development Goals (SDGs) as agreed by countries globally through the United Nations process in 2015.

The most significant ramifications of innovations often need time to germinate and grow. While some can realize their full impacts within five years, other innovations take longer. Innovations involving "discovery science", where products have to be invented, tested, and moved from lab to scale-up to market, tend to need more than ten years — e.g., fifteen or longer. Innovations where the basic science is already done but technological invention and development are necessary, can sometimes have major impacts in about ten years. Innovations that entail changes in social or business systems or processes — where no scientific or technological breakthroughs are called for — can attain maturity more quickly, often within five years or less. See graphic above for examples.

5. We use all available evidence and tried-and-true modeling methods.

For both the estimating of the near-term effects and the projecting of the longer-term impacts, we rigorously collect and examine all the data we can find.

We construct analytic tools (straightforward spreadsheet models) to help us understand how an innovation might save or improve lives based on its theory of change (i.e., the chain of causal steps leading to impacts). An example of the models we develop (looking at inhaled oxytocin) is included at the end of this case study.

We perform scenario analyses, using these analytic tools, to illuminate how many lives would be saved and improved under different assumptions about the effectiveness of an innovation and the importance of other factors.

Where we have a program supporting innovations with the same theory of change, we can gain efficiency by using a common base model for the innovations supported by the program. That is, not every single innovation requires its own unique model.

We consider whether more methodologically advanced tools (such as disability-adjusted-life-years (DALYs) lead to more and better information for decision makers. Our experience so far suggests that the more advanced methods don't alter materially the main conclusions from our models or add significantly to what decision makers want to know; and they require substantial extra time, data, and assumptions.

6. We are relentless about ensuring that our conclusions do not overstate the potential impacts.

We design our analyses so that they provide conservative estimates of impacts — in the sense that they are much more likely to understate rather than overstate the effect of the innovation. Our aim is to ensure that users of our results can be confident that our findings are not exaggerating the effects of our investments.

We assure that if there is any bias in the results we derive, they are much more likely to understate than to overstate reality. We lean so far in that direction, in fact, that our conclusions probably do understate the impacts from the innovation we invest in, possibly significantly; and we do so in order to be extremely confident that we have not claimed more for any innovation than is justified.

Because some innovations fail — and thus their intended impact is never achieved — we introduce discount factors into our models reflecting the best information available on the probability that the innovation will fail.

When we add up the estimates and projections of lives saved and lives improved across all of the innovations we're supporting, there is still another reason why our conclusions understate the total impact we are having. Namely, we count only the impacts of our more advanced projects (those that are transitioning to scale) and ignore the much larger number of our earlier-stage investments (where we're making seed investments to test proof of concept). A portion of the hundreds of those early-stage projects will one day possibly have significant impacts. But our calculations implicitly assume they have zero impact until such time as there is evidence they are ready to transition to scale.

7. We distinguish assiduously between actual, expected, and projected impacts, including when we aggregate results across all the individual innovations we invest in.

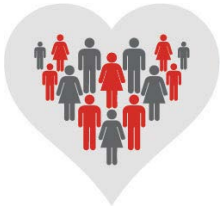
For example, the table 'Grand Challenges Canada Ultimate Outcomes' (right) summarizes our results for two groups of innovations we have invested in. For the "Transitioning to Scale" group, the figures shown are the totals as of March 17, 2017 from 85 projects, based on the 51 models we have developed for analyzing them. For the "Testing Proof of Concept" group, the figures shown are for the much larger number of early-stage (or "seed") investments we are making.

The data in the columns marked "Actual" refer to outcomes that have already occurred, according to the evidence available. The "Expected" columns refer to outcomes that, given the data, are likely to emerge in the near-term (i.e., during the remainder of the period when we're investing, which is usually another few years). The "Projected" columns refer to the longer-term outcomes where we have used the methods described earlier for conservatively considering the potential ultimate impacts. Differentiating between "Actuals", "Expected" and "Projected" gives users transparent handles for interpreting the findings.

As the table indicates, our current projections suggest that the transitioning-to-scale innovations have the potential to save approximately 500K-1.6M lives, and improve approximately 15 to 42 million lives, depending on the assumptions applied to each model, including allowing for likelihood that some innovations will not succeed fully. We use 2030 as the time horizon of our projections, since this correlates with the time frame of the Sustainable Development Goals. The testing-proof-of-concept innovations have blanks under "Projected" because, as previously explained, we feel those potential impacts are too uncertain to model adequately; in the end some of those innovations may have significant impacts but ignoring that possibility helps us ensure we are not overestimating our total effect.[14]

Grand Challenges Canada Ultimate Outcomes

Current as of March 17, 2017



	LIVES SAVED		
	Actual	Expected	Potential
Transition to Scale	9,812	25,083	520,000 – 1,600,000
Proof of Concept	1,454	1,454	—
	11,266	26,537	520,000 – 42,000,000

	LIVES IMPROVED		
	Actual	Expected	Potential
Transition to Scale	1,240,169	1,705,863	15,000,000 – 42,000,000
Proof of Concept	86,549	86,549	—
	1,326,718	1,792,412	15,000,000 – 42,000,000

8. We compare the projected impacts of an innovation with the funds invested in it, so as to get insights on value for money.

As noted at the outset, policy makers who are responsible for making important decisions involving taxpayers' money need to know which of the options available to them will yield the best value for money. One metric that can be helpful to them for that purpose is "the magnitude of impact achieved divided by the amount of money invested", or, more simply, impact per dollar. We calculate that figure for innovations individually, using (i) the projections we have derived for lives saved and lives improved and (ii) the information we have from our own records on how much we have invested in each innovation.

When these figures are aggregated, it is possible to say, for instance, that $X million that we have provided in investment support has resulted in Y lives saved and Z lives improved. Alternatively, lives saved and lives improved can be combined into one total using the disability-adjusted-life-years (DALYs) methodology.[15] We do acknowledge that the approach is more geared towards social (lives saved, improved) than economic (jobs created, GDP growth) returns.

Ultimately, this approach should make it possible to compare the value for money of different innovation platforms and potentially to optimize the allocation between programs with immediate effect and innovations with future effect in a given budget envelope. Although this approach has been developed in the context of international development, it could be applied to any innovation platform. So it should be useful for the senior policy maker mentioned in the first line of this note who wishes to make resource allocation decisions based on value for money, which traditionally is very difficult to do in the context of innovation.

In sum

The core features of our approach as outlined above include: starting from a broad architecture, homing in on two key impacts (lives saved and lives improved), using all available evidence to elucidate the near-term impacts, projecting the longer-term impacts as well, using tried-and-true methods, ensuring that the potential impacts are not overstated, and examining value-for-money. Doing these things systematically all together can yield — we are finding — an understanding of the potential impacts of innovations that has not been possible using other approaches. Clearly, this method is also useful for adaptive management and selection of projects. Further details on each step — and the art and science of doing them well in practice — is spelled out more in the technical documentation underpinning this case study.

The Case of Inhaled Oxytocin

An example of modelling the projected impact of an innovation

Issue that the innovator (Monash University) addressed: An estimated 300,000 women die each year due to preventable pregnancy-related causes, overwhelmingly in the poorest countries of the world.[16] Hemorrhage is the leading cause of maternal mortality, linked to about one-third of these deaths; postpartum hemorrhage (PPH) in particular is linked to almost 20% of the deaths. Oxytocin is the World Health Organization's (WHO) recommended 'gold standard' therapy for PPH, reducing the incidence of PPH by ~50% when administered immediately after birth. Currently, oxytocin is administered mainly by injection; however, the injectable form of this drug requires a cold chain for delivery which limits the coverage of this lifesaving drug particularly in low-resource countries.

What they did: Grand Challenges Canada, under the *Saving Lives at Birth* partnership, supported a 2011 seed grant to scientists at Monash University to eliminate the need for the costly cold chain for delivery by developing a heat-stable dry oxytocin powder that can be delivered through an inhaler, similar to asthma medication.

What they achieved: The team's pre-clinical work indicated that oxytocin can be successfully administered to the lungs to deliver a response comparable to what is seen when the recommended dose of oxytocin is given by intramuscular injection. In addition, a heat stable formulation was developed that demonstrated robust stability in short-term studies up to 50C.

What happens next: GlaxoSmithKline, Grand Challenges Canada, McCall MacBain Foundation, Planet Wheeler Foundation and Monash University are working together to co-develop, register and distribute the product in regions of high maternal mortality. A $16.6M USD early-phase development program — catalyzed by an additional $1M investment by Grand Challenges Canada — is in progress to fast-track the development of the product for market entry in a span of 4–6 years, compared to the traditional length of development of 10+ years.

Projecting impact (see chart below, which summarizes the model used): Despite the accelerated development path described above, the impact of Grand Challenges Canada's investment in inhaled oxytocin will not be realized for several years beyond the investment period. However, if the inhaled oxytocin were to become widely available in the future, it has the potential to save the lives of nearly 3,000 pregnant women per year (Row 7). Grand Challenges Canada is taking a rigorous, realistic yet conservative approach to projecting this potential impact including, for example, applying conservative assumptions for the initial ramp-up period post-approval.[17] Using these conservative assumptions, we estimate that inhaled oxytocin could have the potential save more than 27,000 lives by 2030 (Row 8).

	INDICATOR	NUMBER	ASSUMPTIONS
1	**Maternal mortality**	**257,000**	The WHO estimates that in 2015 ~303,000 women died of preventable causes during pregnancy or delivery. 99% of these women were in developing countries. Worldwide, maternal mortality is slowly and steadily decreasing and in our model we apply a 3.0% reduction in maternal mortality per year to account for this decline. If this trend continues, maternal mortality will be approximately 257,000 in 2020. *(WHO GHO Fact Sheet on Maternal Mortality No 348, November 2015)*
2	**Mortality due to PPH**	**20%**	~20% of maternal deaths are the result of post-partum hemorrhage (this does not take into account whether Oxytocin was available/ used in cases of maternal death) *(Global causes of maternal death: a WHO systematic analysis. (2014). Say, Lale et al. The Lancet Global Health, Volume 2, Issue 6)*
3	**% of PPH deaths among women WITHOUT ACCESS to oxytocin/ other uterotonics**	**71%**	To determine the proportion of PPH deaths that occur among women who don't have access to oxytocin or another uterotonic (UT) we calculated the following: deaths NO UT/(deaths NO UT + deaths WITH UT) = ~71% *(WHO Multi-country study on maternal and newborn health, 2010 - 2012)*
4	**Inhaled oxytocin coverage**	**20%**	Based on the assumption that Inhaled Oxytocin distribution will begin as early as 2020, and that coverage among women without access to other uterotonics will reach a maximum of 20% by 2023, and then remain constant (based on estimates reported in the Innovation Countdown 2030, led by PATH). *(Innovation Countdown Report, 2030)*
5	**Access/use per year**	**~5,700**	The estimated average number of women who would have access to inhaled oxytocin per year is ~5,700.
6	**Oxytocin efficacy**	**47%**	If oxytocin is administered in time, and there is active management of third stage labour, efficacy is 47% *(Cochrane Review)*
7	**Lives saved due to Inhaled Oxytocin**	**~2,700**	The estimated average number of women whose lives are saved by inhaled oxytocin per year is ~2,700.
8	**Total lives saved 2020-2030**	**~27,000**	The estimated number of lives saved by inhaled oxytocin from 2020 to 2030 is ~27,000, assuming it hits the market sometime in 2020.

APPENDIX

Related Initiatives

Synthesizing insights to inform a high-level architecture for measuring the impact of innovation is one of a number of initiatives that the IDIA group and its individual members are pursuing to help funders working in this space. They include:

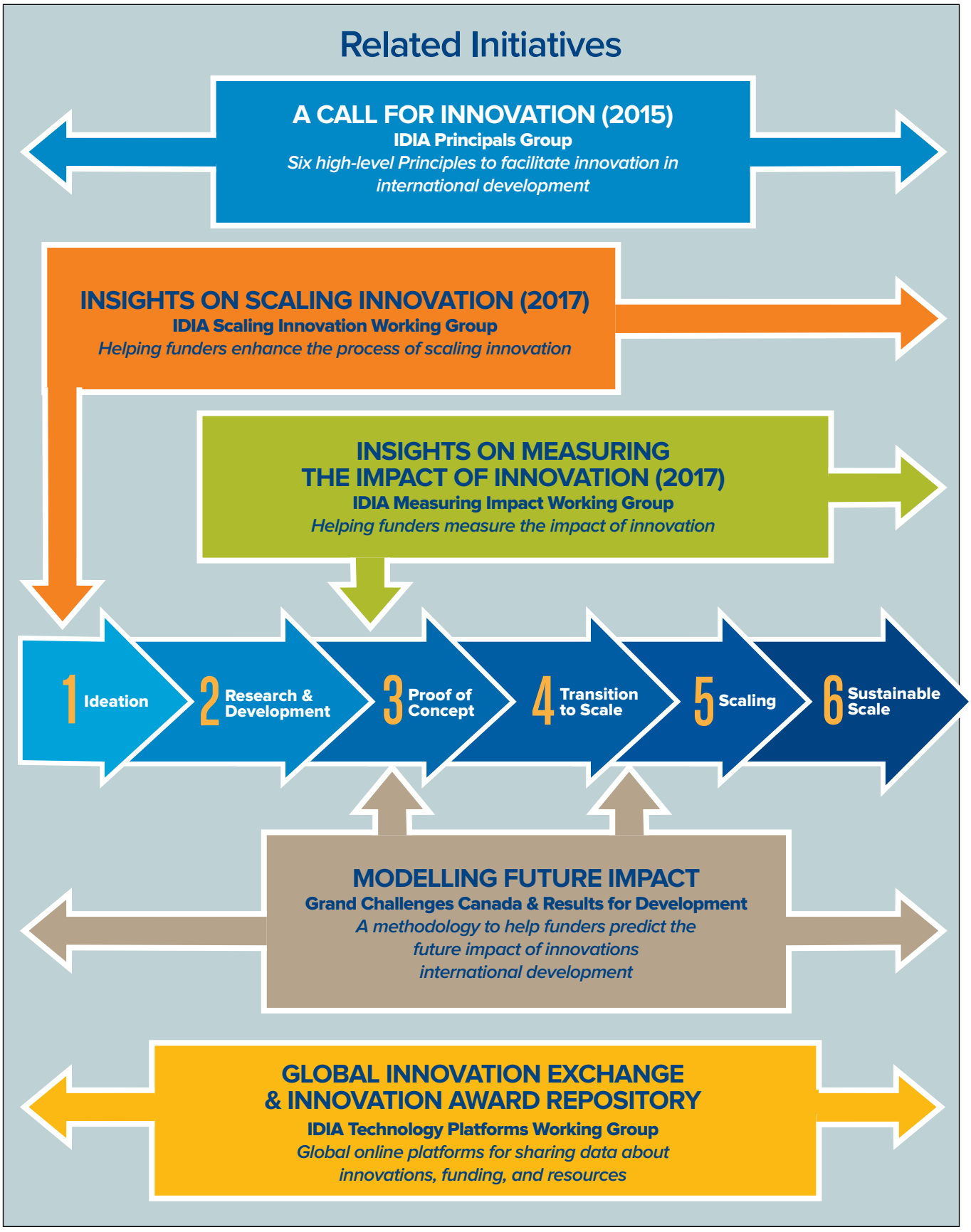
A set of six **Principles to Facilitate Innovation in International Development**.[18] These were agreed by the IDIA group in mid-2015, and represent high-level areas of consensus around the way funders should approach the practice of sourcing and scaling innovation.

Insights on Scaling Innovation. This companion piece to the Insights on Measuring the Impact of Innovation has been led by the IDIA Scaling Innovation Working Group, and is built around a common understanding of the scaling process as comprising six overlapping Stages (including early ideation and R&D), across which eight Good Practices for funders in optimizing the scaling process have been identified. A matrix of Influencing Factors that will either accelerate or constrain the scaling process then completes the scaling architecture, with guidance on how funders can use these to initially assess (and then continually monitor) the scalability of an innovation over time.

Development of a **Methodology for Modelling Future Impact** (through a collaborative project between Results for Development and Grand Challenges Canada) that can be used as a specific tool to help funders model the *expected* and *projected* impact of an innovation, as proposed by the 'Leading' and 'Outcome' indicators of the architecture for impact measurement presented in this paper.

Development of an **Innovation Award Repository** supporting the intake, storage, and basic reporting functionality for commonly collected award metadata across Grand Challenge partner organizations. The Repository is not intended to be a public-facing application or website for users besides funders and innovators themselves, but rather an enabling tool for other applications that would be powered by the information provided in the repository. It is also integrated with the Global Innovation Exchange, a public information clearinghouse and proactive engine on development related innovation that provides resources, assistance and access to information to progress innovations through the innovation ecosystem.

For reference, the relative contribution of these different projects is mapped overleaf according to where they focus across the various stages of scaling innovation.


Related Initiatives
A CALL FOR INNOVATION (2015)
IDIA Principals Group
Six high-level Principles to facilitate innovation in international development
INSIGHTS ON SCALING INNOVATION (2017)
IDIA Scaling Innovation Working Group
Helping funders enhance the process of scaling innovation
INSIGHTS ON MEASURING THE IMPACT OF INNOVATION (2017)
IDIA Measuring Impact Working Group
Helping funders measure the impact of innovation
1 Ideation
2 Research & Development
3 Proof of Concept
4 Transition to Scale
5 Scaling
6 Sustainable Scale
MODELLING FUTURE IMPACT
Grand Challenges Canada & Results for Development
A methodology to help funders predict the future impact of innovations international development
GLOBAL INNOVATION EXCHANGE & INNOVATION AWARD REPOSITORY
IDIA Technology Platforms Working Group
Global online platforms for sharing data about innovations, funding, and resources

Glossary of Key Terms

DOMAIN
A key dimension of success (e.g. 'Sustainability'), measured by one or more indicators

FUNDERS
Leaders and decision-makers from both innovation units and more general program delivery/operational teams within development agencies, who seek to support the scale up of solutions to development problems.

IDEATION (Scaling Stage 1)
Defining and analyzing the development problem and generating potential solutions through horizon scanning of existing and new ideas

IMPACT
The overall effect or influence of an innovation on a population or environment. From a funder's perspective, there are typically three types of impact important to measure:

(a) Expected impact — The anticipated impact of an innovation during the period of funder support;

(b) Actual impact — The measured impact of an innovation during the period of funder support; and

(c) Projected impact — the likely impact of an innovation to a specific point in the future beyond the period of funder support (e.g. the year 2030).

INDICATOR
A quantitative or qualitative expression of an innovation's performance that offers a consistent way to measure progress towards agreed targets or goals. From a funder's perspective, there are typically two types of indicator important for measuring the impact of innovation:

(a) Leading indicators — used to measure the expected, actual and projected impact of an innovation during the Test & Pilot stage;

(b) Outcome indicators — used to measure the actual performance of an innovation during the Transition to Scale, Scaling and Sustainable Scale stages, as well as its projected performance further into the future

METRIC
A specific type of data to be collected in support of a particular indicator

PLATFORM
A program / initiative through which funders source and invest in multiple innovations

PROOF OF CONCEPT (Scaling Stage 3)
When the intellectual concept behind an innovation is tested to gain an early, 'real-world' assessment of its potential.

R&D (Scaling Stage 2)
Further developing specific innovations that have potential to address the problem

SCALING (Scaling Stage 5)
The process of replicating and/or adapting an innovation across large geographies and populations for transformational impact

SUSTAINABLE SCALE (Scaling Stage 6)
The sustainable wide-scale adoption or operation of an innovation at the desired level of scale / exponential growth

TRANSITION TO SCALE (Scaling Stage 4)
When innovations that have demonstrated small-scale success develop their model and attract partners to assist in filling gaps (technical, financial) in their capacity to scale

FOOTNOTES

[1] For a matrix of the main factors influencing the scaling and sustainability of innovations, see IDIA (2017)

[2] *'IDIA Mission & Purpose'* paper, adopted by IDIA members in September 2015.

[3] An example of this is malaria eradication — if the malaria control effort is not maintained, malaria may return.

[4] *'Expected'* impact relates to the anticipated impact of an innovation during the period of funder support.

[5] *'Projected'* impact relates to the likely impact of an innovation to a specific point in the future beyond the period of funder support (e.g. the year 2030).

[6] *'Actual'* impact relates to the measured impact of an innovation during the period of funder support.

[7] The Grand Challenges Network is a consortium of a dozen GC programs around the world. The International Development Innovation Alliance (IDIA) is a coalition of 11 leading funder organizations, including GCC, that prioritize innovation.

[8] For more on our mission, strategy, and programs, see our Annual Reports, CEO's Annual Letters, and other materials available on our website, grandchallenges.ca.

[9] The "Summative Evaluation of the Development Innovation Fund in Health" (2015) noted that: "It is our independent assessment, that the Government of Canada (by action of IDRC, CIHR, and GCC) has demonstrated international leadership in the use of science and human creativity to improve the health of those who need it most." The "International Expert Panel Review of Grand Challenges Canada" (2015) stated that "Grand Challenges Canada is making tangible, measurable differences in some of the greatest areas of inequity in the world, especially in the maternal and child health space, and also in mental health."

[10] For more on what we do and who we are, see our website.

[11] See, for example, GCC's Annual Reports, especially the latest, which is for April 2015 to March 2016. Also, "Portfolio Review", an April 2016 PowerPoint presentation by GCC.

[12] "Expected" refers to "during the project period", which is different from "projected", which refers to after that period and specifically in our analysis, to 2030, the end date for the Sustainable Development Goals.

[13] "Projected" refers to after the project period and specifically in our analysis, to 2030, the end date for the Sustainable Development Goals.

[14] "Actuals" are derived from interim and final reports from GCC innovators (i.e. results from the project's Results-Based Measurement and Accountability Framework) and validated by GCC Programs staff. The "Expected" numbers are based on estimates provided by innovators at the time of funding of their impact during the funding period, validated and revised as warranted by GCC. "Projected" are for the period from now through 2030.

[15] The value-for-money estimates that are described in this section provide insights on return on investment. For a more comprehensive indicator of cost-effectiveness, more cost data would be needed, including not only the amount we invested but also all the other costs required for fully implementing the innovation. For example, the costs to a health system for having the personnel, facilities, and equipment on hand to support the innovation would have to be considered.

[16] WHO GHO maternal mortality data and fact sheet N 348 (updated November 2015). Retrieved December 15, 2015 from http://www.who.int/gho/maternal_health/mortality/maternal_mortality_text/en/

[17] GCC is in the midst of developing projections for all of its transition-to-scale (TTS) investments. As such, in our pan-portfolio 'roll-up' of estimates, each is further discounted to account for the possibility of failure, in acknowledgment of the likelihood that some of these innovations will fail to scale and achieve the projected impact. For example, in the case of inhaled oxytocin, we include in our 'roll-up' an expert-validated estimate of a 60% likelihood that the drug will succeed in reaching the market.

[18] For the full list of six Principles, see IDIA (2015) *A Call for Innovation in International Development*.

The International Development Innovation Alliance (IDIA)

INSIGHTS ON

Measuring the Impact of Innovation