



USAID
FROM THE AMERICAN PEOPLE

SO HOW DO WE CHANGE THE WORLD AND *WHO* IS GOING TO DO IT? Case Studies in New Innovation Approaches

Ticora V. Jones, PhD.

U.S. GLOBAL DEVELOPMENT LAB

UNITED NATIONS COMMISSION
ON SCIENCE AND TECHNOLOGY
FOR DEVELOPMENT

JANUARY 23, 2017













We partner to end extreme poverty while promoting inclusive growth, resilient democratic societies and advancing our security and prosperity.

The Lab is an innovation hub for USAID

- We source and scale innovations, tools and approaches.
- We're transforming the development enterprise.



	Main feature	Details
 Organic growth with selective outsourcing 1	<p>Scale-up led and coordinated by the innovator, selectively outsourcing activities to partners. The innovator often creates a new entity to drive the scale-up</p>	<ul style="list-style-type: none"> ▪ Select functions are outsourced to partners, including any combination of the following: <ul style="list-style-type: none"> – Upstream partners to help facilitate clinical, regulatory and policy requirements – Contract manufacturers and suppliers – Partners to provide logistics/distribution and servicing capacities – Partners to help generate user demand and ensure user adoption (e.g., marketing, user training) – Partners to reach and acquire buyers (e.g., sales, tender response)
 Multi-stakeholder partnership 2	<p>Multiple partners (including the innovator) with common or complementary interests work together to drive scale-up. This often includes private sector partners and can be referred to as public-private partnerships</p>	<ul style="list-style-type: none"> ▪ Partnership provides partners with a platform to work together and pursue a common agenda, sometimes with formally outlined objectives, key policies and principles to guide actions ▪ A project manager (one individual or a team) could be chosen to coordinate activities among the partners. This role is also referred to as an “uptake coordinator” ▪ Innovator retains ownership and some decision-making power, and could handle selected scale-up functions
 Licensing out 3	<p>Licensing rights to parties to drive commercialization and generate a financial payback to the innovator</p>	<ul style="list-style-type: none"> ▪ Licensing can occur at all stages, from early product development to scale-up ▪ Rights that are licensed out could be limited by geography, market segment, and/or “field of use” (with the innovator retaining ownership of the IP) ▪ Innovator’s degree of engagement and control can vary widely, based on the contract’s terms
 Open licensing 4	<p>Replicating the product technology by setting up an open license that allows others to use the IP</p>	<ul style="list-style-type: none"> ▪ IP owner allows others to use the technology through an open license with few or no restrictions. Other organizations can build on the IP to enhance the product ▪ Innovator could choose to remain involved and provide ongoing support to replicators of the technology ▪ This model can be extended to include cases when an innovator does not create any license and simply allows others to freely use the technology (particularly relevant for hardware innovations, which could be more costly and burdensome to establish IP for than software innovations)
 Getting acquired 5	<p>Sale of innovation or business to a buyer</p>	<ul style="list-style-type: none"> ▪ Sale can occur at all stages, from early product development to scale-up ▪ Aspects being sold could be limited to intellectual property (through a full technology transfer, where the innovator loses ownership of the innovation), or include physical assets, part or all of the organization

	Main feature	Details
 Organic growth with selective outsourcing 1	Scale-up led and coordinated by the innovator, selectively outsourcing activities to partners. The innovator often creates a new entity to drive the scale-up	<ul style="list-style-type: none"> ▪ Select functions are outsourced to partners, including any combination of the following: <ul style="list-style-type: none"> – Upstream partners to help facilitate clinical, regulatory and policy requirements – Contract manufacturers and suppliers – Partners to provide logistics/distribution and servicing capacities – Partners to help generate user demand and ensure user adoption (e.g., marketing, user training) – Partners to reach and acquire buyers (e.g., sales, tender response)
 Multi-stakeholder partnership 2	Multiple partners (including the innovator) with	<ul style="list-style-type: none"> ▪ Partnership provides partners with a platform to work together and pursue a common agenda, sometimes with formally outlined objectives, and be chosen to is also referred to as making power, and
 Licensing out 3		<ul style="list-style-type: none"> ▪ Ownership of the IP ▪ Innovator's degree of engagement and control can vary widely, based on the contract's terms
 Open licensing 4	Replicating the product technology by setting up an open license that allows others to use the IP	<ul style="list-style-type: none"> ▪ IP owner allows others to use the technology through an open license with few or no restrictions. Other organizations can build on the IP to enhance the product ▪ Innovator could choose to remain involved and provide ongoing support to replicators of the technology ▪ This model can be extended to include cases when an innovator does not create any license and simply allows others to freely use the technology (particularly relevant for hardware innovations, which could be more costly and burdensome to establish IP for than software innovations)
 Getting acquired 5	Sale of innovation or business to a buyer	<ul style="list-style-type: none"> ▪ Sale can occur at all stages, from early product development to scale-up ▪ Aspects being sold could be limited to intellectual property (through a full technology transfer, where the innovator loses ownership of the innovation), or include physical assets, part or all of the organization

SCALING IS COMPLICATED

What models help us understand the diffusion of innovation thinking?

Where do people fit?

HIGHER EDUCATION SOLUTIONS NETWORK



Berkeley
UNIVERSITY OF CALIFORNIA

MICHIGAN STATE
UNIVERSITY

MIT Massachusetts
Institute of
Technology

ATM | **TEXAS A&M**
UNIVERSITY.

Duke
UNIVERSITY

**WILLIAM
& MARY**

HESN brings together a network of...

- 8 core university programs focused on Science, Technology, Innovation and Partnership for development
- Encompassing **685 partners** in academia, the private sector, civil society, and governments
- Ranging across **80+ countries**
- Leveraging **\$61.3 million** in program support via cash and in-kind donations since 2012

Resulting in...

- **424 innovations** created, developed, or evaluated
- **\$66 million** in external financial support
- **200 data tools**, technologies and approaches created
- **2,000 development professionals** trained in data management

SCALING INTERNATIONAL DEVELOPMENT INNOVATIONS

How do we catalogue to SCALE?

1. WORK WITH SCALE **PARTNER**
2. WHAT DO WE DO WITH THE **KNOWLEDGE**
3. HOW DO YOU WORK WITH **GOVERNMENT**

USAGE
 • COMMERCE
 • GOV
 • NGO

CREATE
 a system

BUILD
 YOUR KNOWLEDGE BASE

SCALEABLE
 Vs
SCALE READY

TEST @ SCALE

PLAN
 for SCALE

UNDERSTAND WHY YOUR PROGRAM WORKS in **CONTEXT**

How do we look at the LEARNINGS?



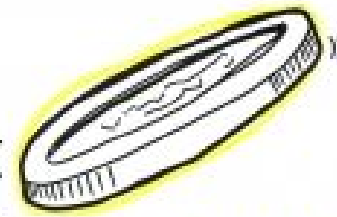
DESIGN
 for BEHAVIOR

How do you SEPARATE the PRODUCT from the PROCESS?

EASIER TO GET GOV TO SCALE AT A SMALLER SCALE

IT IS HARD

• YOU NEED A **CHAMPION** in GOV. & **COMMUNITY ADVOCATES**

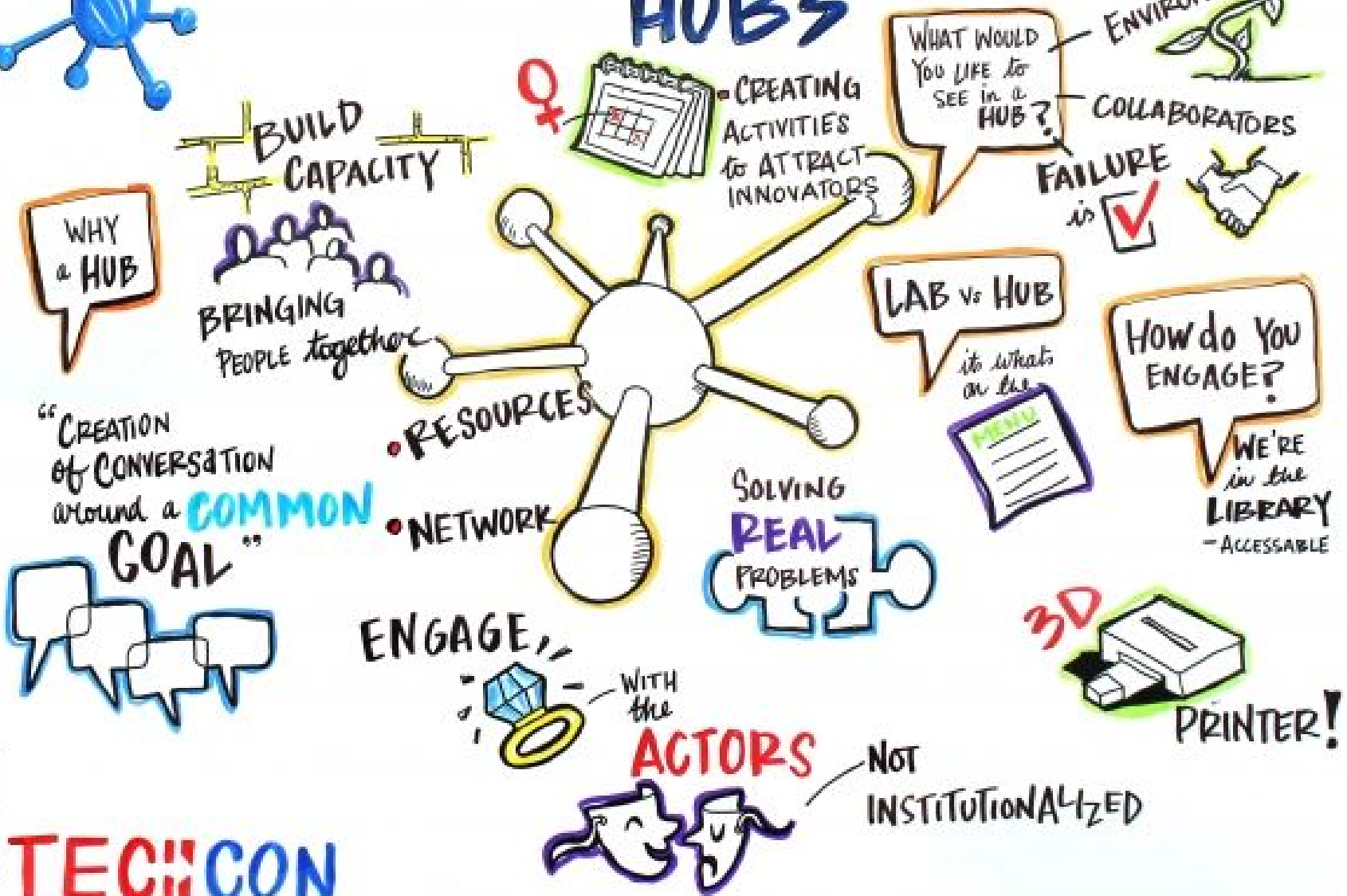


SUSTAINABILITY
SCALEABILITY

TWO SIDES of the SAME COIN.



DEVELOPING INNOVATION HUBS





**Ideas &
Agency**

**Push to
Prototype**

**Trial By
Community**

**University
Experts &
Evidence**

**Startup
Investment
& Social
Impact**



**Ideas &
Agency**

**Push to
Prototype**

**Trial by
Community**

**University
Experts &
Evidence**

**Startup
Investment
& Social
Impact**

**Ideas &
Agency**

**Trial by
Community**

**Push to
Prototype**



**Massachusetts
Institute of
Technology**



**International Development
Innovation Network**



IDIN's Theory of Change

If we introduce people around the world to a **collaborative design approach**, then connect them to a **network of innovators** and an **ecosystem of support**, then they will **generate solutions to development challenges** and **spread the approach** of collaborative design.

Introduction

Introduce people to a collaborative design approach through **summits, CCBs, classes** and other **design trainings**.

4 summits
36 CCB trainings
17 university classes
450+ Network members
2000+ participants

Ecosystem

Support projects through **grants, tools, workshop space**, and **advising**.

Connect innovators through **local chapters, platforms** and links to **opportunities** in HESN and beyond.

56 project grants
3 innovation centers + 5 maker spaces
11 consortium partners
7 local chapters
10+ virtual platforms

Outcomes

More people **generate solutions** to development challenges.

90+ innovations reaching 120,000+ beneficiaries

More people **spread the approach** of collaborative design.

88 IDIN-inspired classes and trainings

Avocado Press



**Ideas &
Agency**

**Push to
Prototype**

**Trial by
Community**

**University
Experts &
Evidence**

**Startup
Investment
& Social
Impact**

**Ideas &
Agency**

Push to Prototype

**University
Experts &
Experience**

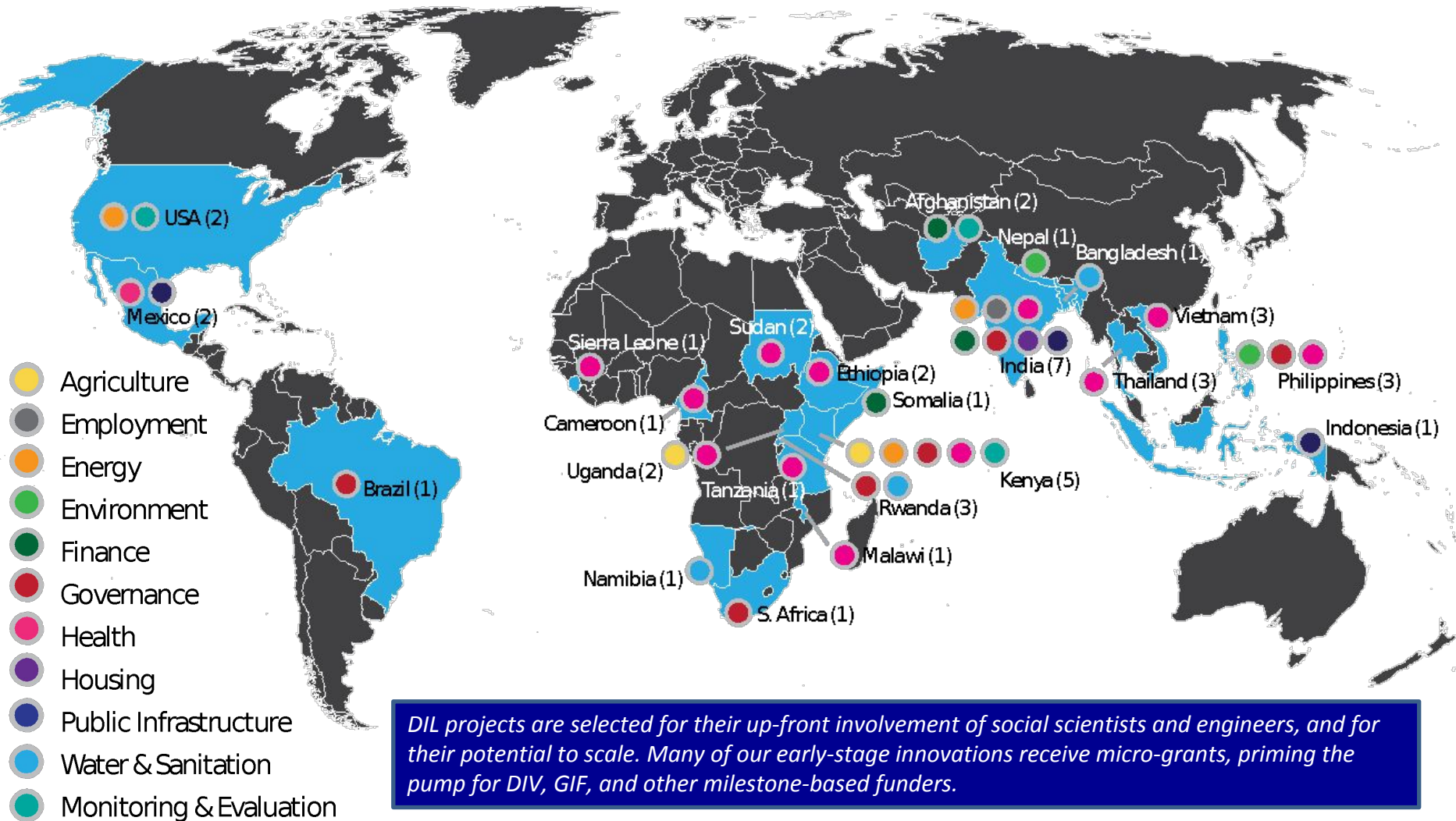
**Trial by
Community**

The Development Impact Lab (DIL) at UC Berkeley designs technologies for scale and impact by:

- **Integrating insights from development economics into engineering innovation; then evaluating at scale.**
(Ex: Launching the field of Development Engineering)
- **Developing real-time data solutions to revolutionize the way data are used in international development.**
(Ex: Mezuri: a cloud-based platform for development analytics)
- **Generating impact at scale through research.**
(Ex: Will reach 1M+ Kenyans through the Rural Electrification Project)

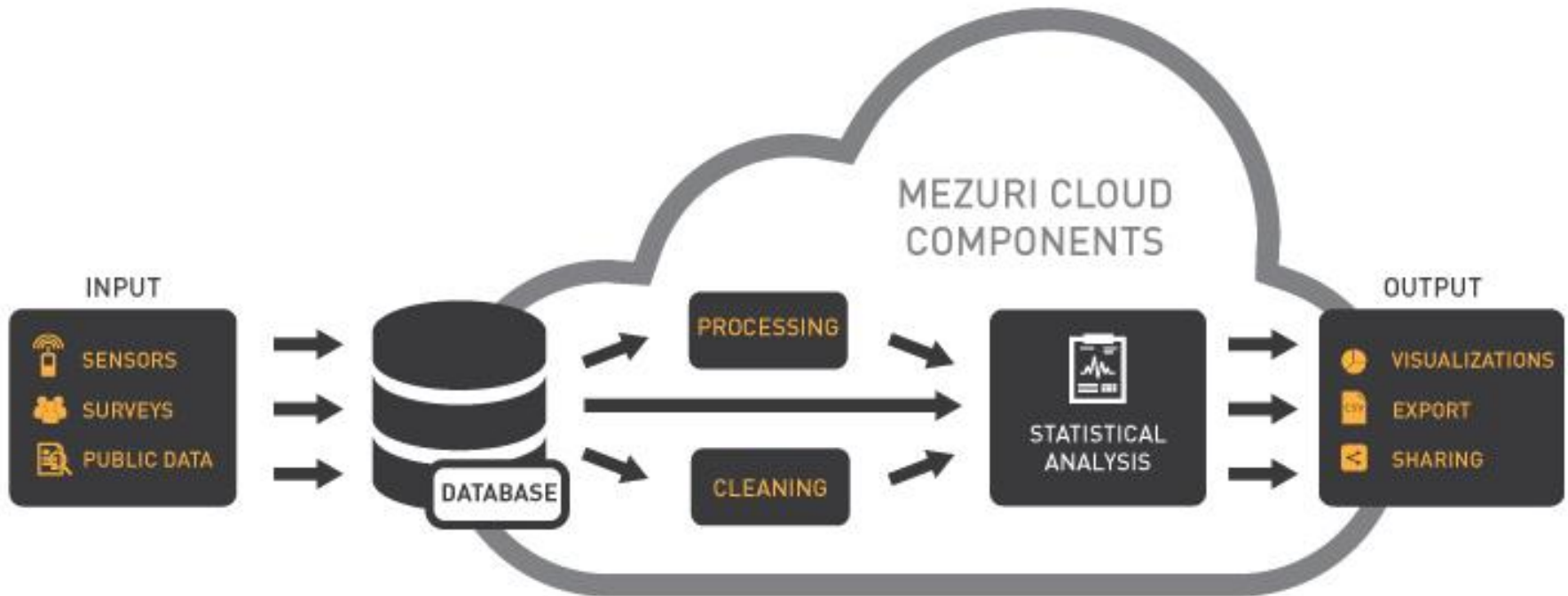
Build scale into the design process.

... by bringing economics into engineering



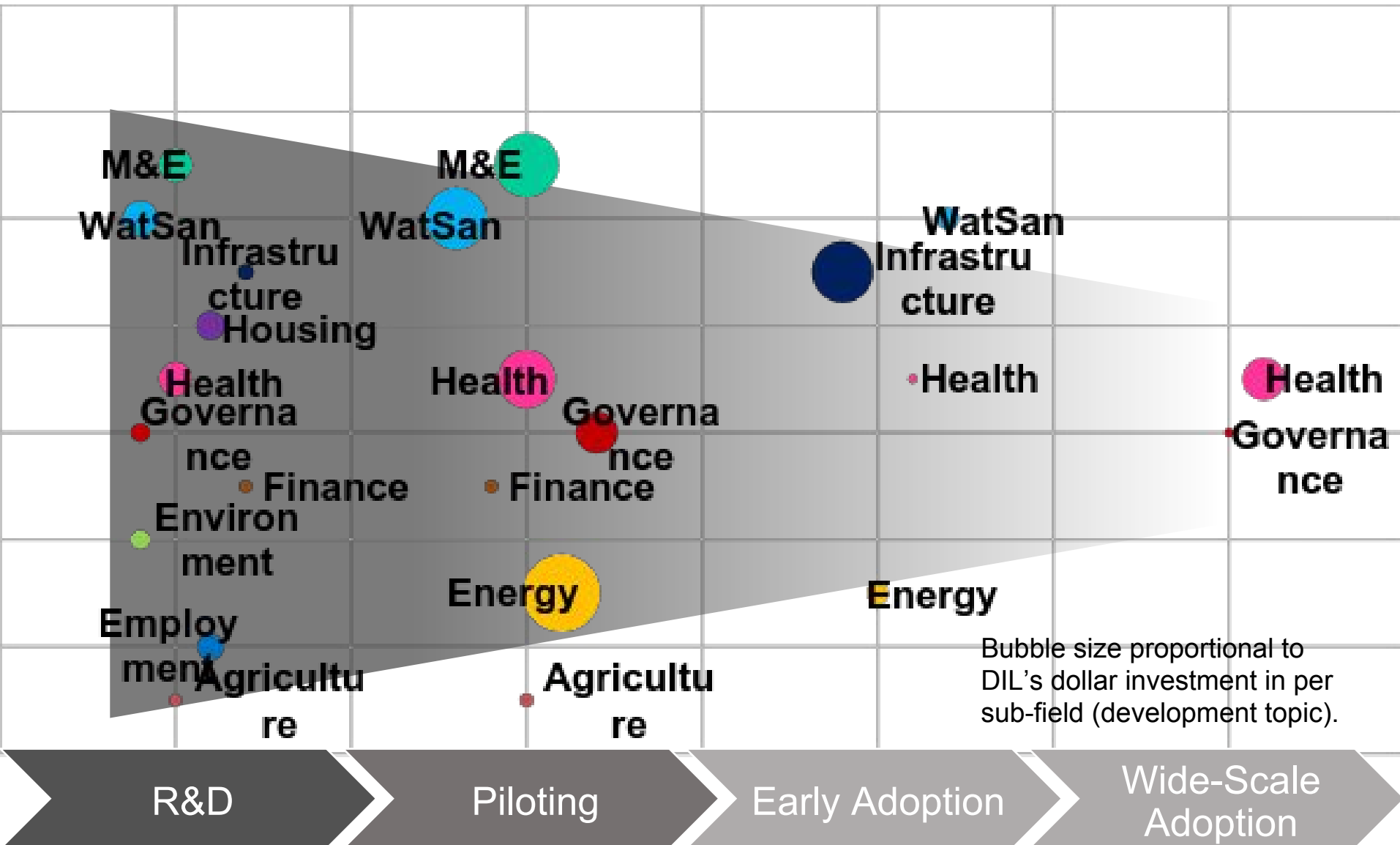
DIL projects are selected for their up-front involvement of social scientists and engineers, and for their potential to scale. Many of our early-stage innovations receive micro-grants, priming the pump for DIV, GIF, and other milestone-based funders.

Measure Impact



*The **Mezuri Platform** embodies the principles of the Global Development Lab. It uses technology to achieve open network effects in development and creates systematic approaches that can go beyond the immediate group of researchers or implementers.*

Experiment at all stages.



Institutionalize change.



DESIGNATED EMPHASIS

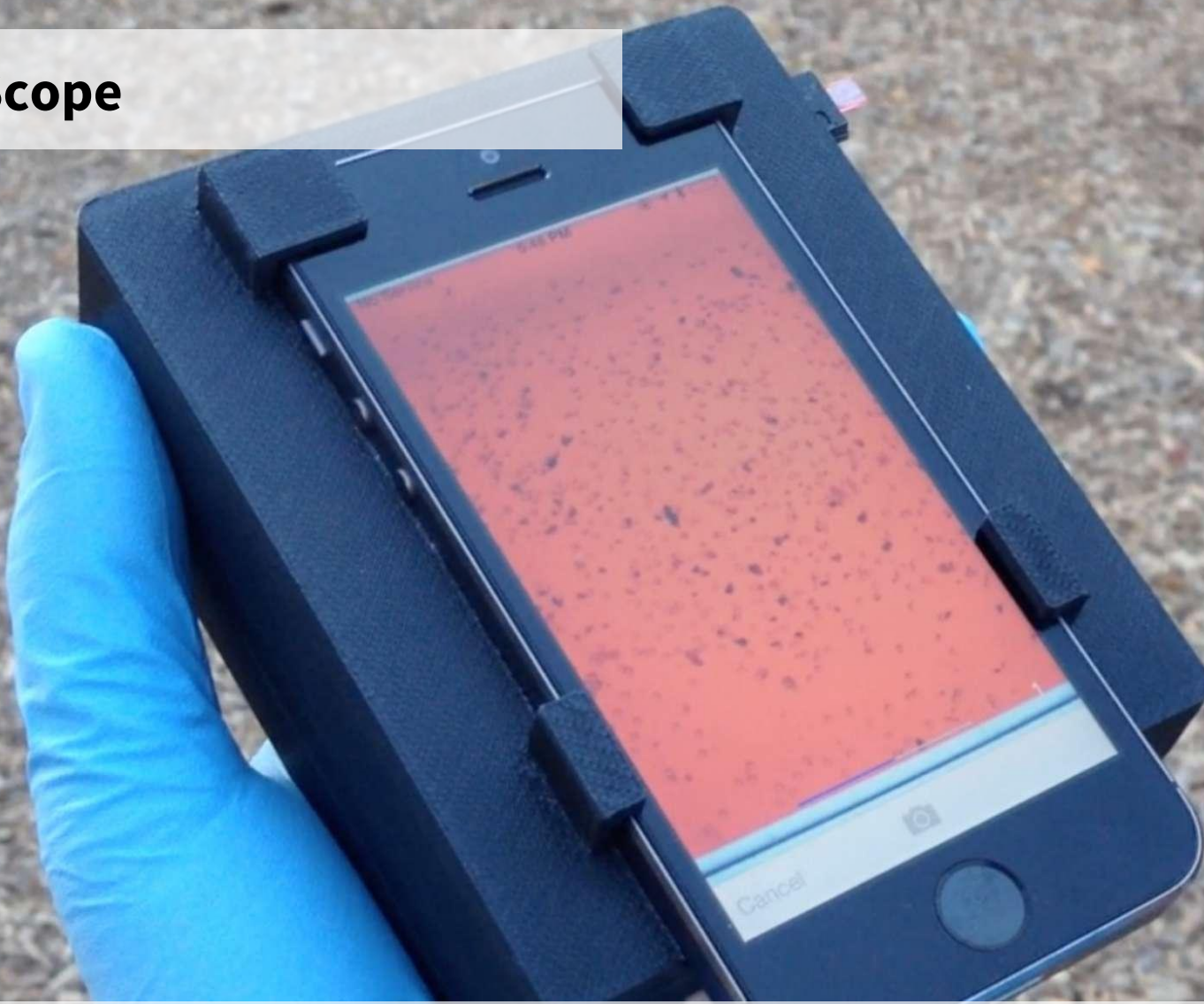
DEVELOPMENT ENGINEERING

UNIVERSITY OF CALIFORNIA, BERKELEY



- **57%** of teams are working with one or more developing country implementing partner.
- **52%** of teams include student researchers.
- **57%** of DILs teams are interdisciplinary.

CellScope



Berkeley
UNIVERSITY OF CALIFORNIA

Development Impact Lab

**Ideas &
Agency**

**Push to
Prototype**

**Trial by
Community**

**University
Experts &
Evidence**

**Startup
Investment
& Social
Impact**

**Push to
Prototype**

**Trial by
Community**



ResilientAfrica Network



•**Objective 1:** Design and operationalize a resilience framework for Sub-Saharan Africa

•**Objective 2:** Strengthen resilience at the individual, household and community levels through innovative technologies and approaches to development, which will be identified, incubated, tested and scaled through the RAN in collaboration with its partners

•**Objective 3:** Enhance resilience-related knowledge and share it globally, engaging students, faculty, staff, and development experts from around the world to collaborate on solving resilience related problems



RootIO / FruitiCycle/TIFF



ResilientAfrica Network

**Ideas &
Agency**

**Push to
Prototype**

**Trial by
Community**

**University
Experts &
Evidence**

**Startup
Investment
& Social
Impact**

**University
Experts &
Evidence**

**Startup
Investment
& Social
Impact**

SOCIAL ENTREPRENEURSHIP ACCELERATOR AT DUKE



- Established in 2012 as part of USAID Higher Education Solutions Network, as a Duke-wide program
- Led by the Center for the Advancement of Social Entrepreneurship at the Fuqua School of Business and Innovations in Healthcare, both at Duke University
- A learning incubator serving 25 mid-stage innovators in East Africa, India, and Mexico
- >\$52 million in funding raised by innovators since joining the accelerator; >29 million beneficiaries with improved health outcomes.
- Reports on Ecosystem in East Africa, Landscape for Global Health Investors in Africa and India, peer research.
- Producing and licensing Smart Impact Capital Modules to incubators, accelerators, and learning networks reaching hundreds of entrepreneurs globally

Ayzh



Duke Social Entrepreneurship
UNIVERSITY Accelerator at Duke

Matibabu



Follow the Lab!

Newletter: bit.ly/LabInsiders

Website: usaid.gov/GlobalDevLab

Facebook:

facebook.com/GlobalDevLab

Twitter: [@GlobalDevLab](https://twitter.com/GlobalDevLab)

Office of Engagement and
Communications
thelab@usaid.gov



USAID
FROM THE AMERICAN PEOPLE