DESIGN
IMPACT
GROUP

MAKING THE CASE FOR DESIGN IN THE DEVELOPMENT SECTOR

"Human-centered design: meeting people where they are and really taking their needs and feedback into account. When you let people participate in the design process, you find that they often have ingenious ideas about what would really help them. And it's not a one time thing; it's an iterative process."

Melinda Gates

Introduction

Interest in human centered design (HCD) has been growing within the development sector, yet few organizations have figured out how to integrate design approaches into their work on a consistent basis. This report provides a snapshot of the potential value and the shortcomings of design for development as well as a set of pathways to increase its impact and sustainability as a meaningful contributor to program success and lasting outcomes. We highlight three key areas for investment to strengthen the role of design in the sector:

1. **Strategy and Assessment**
2. **Program Design & Implementation**
3. **Local Capacity Building**

There are a number of factors driving the increased investment in HCD within the development sector

- **Growing interest in entrepreneurship & market-based approaches to social problems** in which organizations are increasingly targeting users as consumers not beneficiaries. (ex. Proximity Design)

- **Low engagement with and adoption of new interventions in critical communities** due to a failure to understand target users, their context and the way in which their experience can be meaningfully enhanced. (ex. CGAP)

- **Multiple solutions targeting the same markets and user groups** such as smallholder farmers, community health workers, and adolescent girls without effective strategies to integrate these solutions into a coherent experience for providers or end-users. (ex MDGHA Community Health Worker +)

- **New communication and collaboration technologies** that allow organizations to source creative ideas more easily and rapidly and collaborate with diverse communities. (ex. OpenIDEO)

But there are also a number of barriers to driving greater acceptance and adoption of design approaches

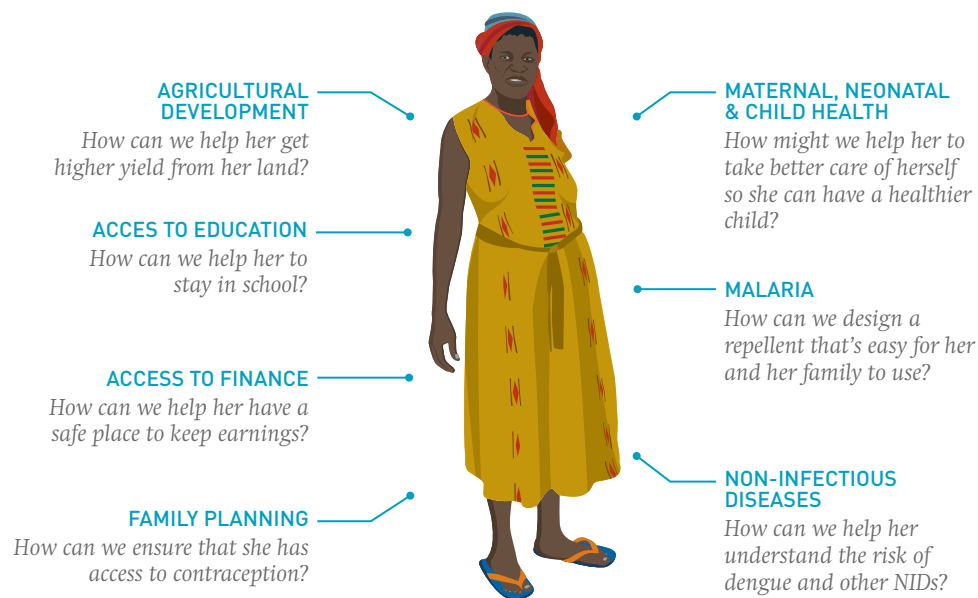### Cultural bias & skepticism about feasibility

- Strong bias towards traditional sciences and quantitative data makes integrating qualitative insights challenging

- Many design insights are highly context-specific and may not apply across countries and projects

- Limited design expertise in local settings, particularly Sub Saharan Africa

- Fragmented design industry lacking consistency in outputs from different types of design partners

Lack of clarity around HCD definition & strategic purpose

- No shared definition for HCD; design is associated with everything from ethnography to market research to product development

- Lack of identification of clear strategic purpose of HCD

- Lack of success stories and metrics to highlight how HCD and user understanding can help overcome challenges and increase impact

Many different programs target the same users, with implementers often lacking a holistic picture of their needs and expectations

User needs are not compartmentalized into the neat categories that define most program objectives, as illustrated by this example of a young woman in Ethiopia:

AGRICULTURAL DEVELOPMENT
How can we help her get higher yield from her land?

ACCES TO EDUCATION
How can we help her to stay in school?

ACCESS TO FINANCE
How can we help her have a safe place to keep earnings?

FAMILY PLANNING
How can we ensure that she has access to contraception?

MATERNAL, NEONATAL & CHILD HEALTH
How might we help her to take better care of herself so she can have a healthier child?

MALARIA
How can we design a repellent that's easy for her and her family to use?

NON-INFECTIOUS DISEASES
How can we help her understand the risk of dengue and other NIDs?

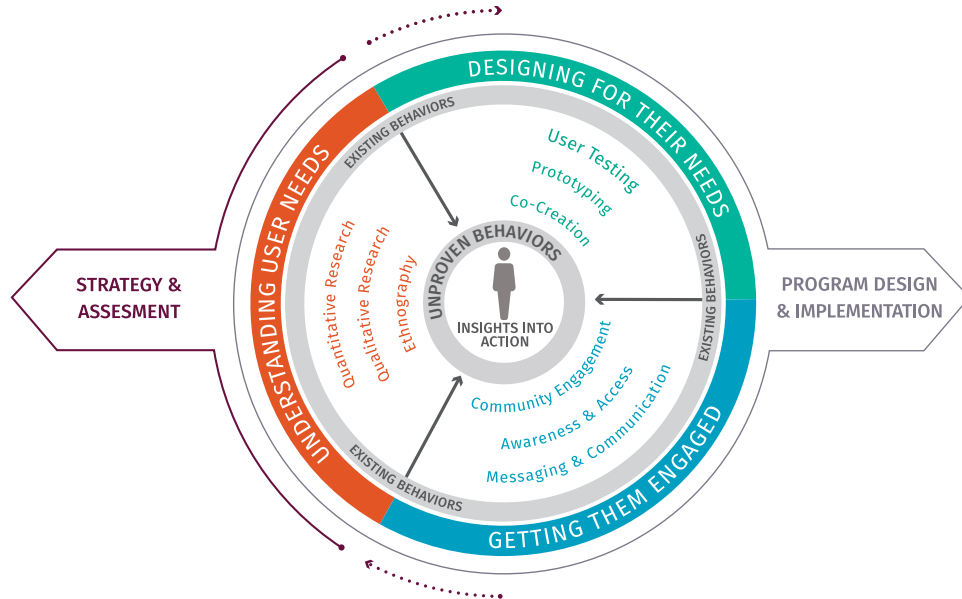# Implementers often lacking a holistic picture of their needs and expectations

STRATEGY & ASSESSMENT

- **Who are the users and other stakeholders that we are targeting** across our portfolio of programs?

- How can we understand the **segments of the market** we are serving? What is the relative size and value of each? Which are going to be easier or harder to target in terms of behavior change?

- What is the **context of use** and what are the most **pressing user needs?** Which of these needs (and hence which products, services and systems) should be prioritized?

- What **new behavior patterns** are emerging in the market that might shape (positively or negatively) the introduction of new products and services?

PROGRAM DESIGN & IMPLEMENTATION

- Who are the **users and other relevant stakeholders** for this product, service or system?

- What's the **potential market** for this product, service or system.

- What are the **needs and preferences of these users** and stakeholders and how do they relate to one and other?

- How can we design a product that is **appealing and easy to use?**

- What **branding, marketing, and distribution strategy** will be most effective in reaching these users?

- What needs to be done at a **systems level** to ensure success?

HCD integrates a broad set of practices around a common understanding of user needs that can improve strategic decision-making as well as increase the effectiveness of individual programs

Quantitative Research:
The collection and analysis of large scale demographic and psychographic data through methods such as surveys and interviews to gather representative data on current perceptions and practices.

Qualitative Research:
Direct engagement with target users and influencers through interviews, observational and participatory techniques to gather directional data on emerging needs and behavior

Ethnography:
A type of qualitative research based on the social sciences that relies on deep immersion in user's lives and culture in order to minimize bias

User Testing:
The evaluation a product or service by directly testing it with users, focusing on the product's ability to meet users' needs and fit into their lives so adoption is easy and natural.

Prototyping:
The process of building an early sample or model of a product, service or system in order to refine and validate the concept or generate new concepts

Co-Creation:
The process whereby users directly participate in the design of a product or service intended for their use

Messaging & Communication:
The process of crafting the value proposition of a product or service in a way that is compelling and determining where and when that message is best communicated to different user segments

Awareness & Access:
Includes any activities to increase the knowledge and reach of a product or service among target user segments, including marketing and sales channels

Community Engagement:
The process of building a long-term relationships with communities to increase trust and the potential to influence behavior and norms

Synthesizing Insights into Action:
An active, collaborative process for manipulating, organizing, pruning, and filtering data to produce knowledge that can be applied directly to active problem-solving

HCD can help drive alignment and prioritize resources across a typical strategic planning process

··· **Strategic Planning Process** ································· →

	DEFINE PROBLEM AND PROBLEM CONTEXT		DEFINE STRATEGY AND GOALS	EXECUTE AGAINST GOALS	
Key Question	Which user groups are the most impactful to target?	What are our users' common needs? How are they influenced?	What are the best opportunities to interact with our target users?	What are the leverage points to make a system better serve the user?	What are the best pathways to reach target users for maximum impact?
HCD Use cases*	• Relative value of different target segments, combining demographic and behavioral characteristics, for key markets and issues	• Create holistic understanding of shared users across programs • Establish a baseline understanding to inform behavior change strategies	• Relative importance among various solutions targeting the user	• Understand potential levers for influencing user behavior through surrounding systems and the actors within these systems	• Understand potential channels to reach and influence users
HCD Activities*	• Conduct qualitative research to identify potential target user groups and uncover behavioral or psychographic characteristics • Conduct quantitative research to assess relative scope and size of different segments	• Conduct interviews and observational studies of users to understand their needs and the context in which they operate	• Conduct in-depth, observational studies and participatory design to identify opportunities and gaps in their current experiences	• Conduct interviews of users, community members and other actors or influencers in the system • Visit sites where users spend time or interact with related products and services	• Conduct interviews and observational studies with users and influencers to understand the channels they most frequently access today.

Understanding user segments   Understanding user experiences and needs   Understanding ecosystems sorrounding target users

HCD can also improve the effectiveness of individual programs and solutions

	DEFINE PROBLEM & SET VISION	SPECIFY USE CASE & DESIRED PRODUCT PROFILE	EVALUATE MARKET FEASIBILITY & DELIVERABILITY	DEVELOP DETAILED OPERATIONAL LAUNCH PLAN	MONITOR EXECUTION & OPTIMIZE
Key Question	• Who is the end user and other stakeholders? • What are the user's context, needs, preferences and limitations? • How much effort is required to change norms/behavior?	• What is the user's context? How will s/he access and use the product / service? • What product features are most important? • What are the key leverage points to shift behavior?	• What is the product solution that best addresses user needs and ecosystem demands? • What are the usability and deliverability challenges? • What is the behavior change model and has it been validated?	• What is the value proposition to the user that is resonant with norms and culture? • What are the best marketing and distribution channels to reach target users? • What are the key qualitative metrics of user engagement?	• What are the user-specific barriers to increase uptake and ensure long-term engagement? • How can features and incentives be optimized for increased engagement and adoption?
HCD Use cases*	• Define personas to guide all design decisions • Define the needs: physical, emotional & social • Uncover the 'why' behind those needs	• Incorporate 'the why' (user insights) into product profiles • Prioritize the product features best aligned with user needs, expectations and beliefs • Map highest-value points of intervention in the consumer experience and surrounding ecosystem	• Accelerate design decisions through rapid prototyping and user feedback • Validate design solutions with all participants in the product delivery and support • Evaluate how product fits within users' typical behavior to see if it will deliver impact	• Incorporate learnings gained throughout design process to drive engagement strategies • Select appropriate messages and channels through user feedback, participatory practices and prototyping • Validate the end-user perceptions, reactions and attitudes that most influence impact and drive engagement	• Incorporate user feedback into revised delivery strategy and next generation products / services • Rapidly prototype improvements and enhancements to product experience to gauge appeal and inform ongoing product strategy
HCD Activities*	• Conduct observational studies, interviews and surveys • Map social relationships and influence in the community	• Conduct participatory exercises with users and other stakeholders to prioritize concepts • Conduct physical prototyping	• Conduct user testing; solicit user and provider feedback • Iterate on prototypes • Revise value proposition and behavioral model	• Interview end users to gain insights about messaging and preferred distribution channels	• Continually collect user feedback • Iterate on design, distribution or marketing • Gather input for product roadmap

Behavior change is an important criteria for determining the potential value of HCD to specific programs

Definition	HCD should be appleid to programs that depend on a significant divergence from existing behaviors for the end user as well as other important stakeholders (e.g., healthcare workers).
Criteria	**High behavior change requirements apply to:** • New product/service category for the target population – e.g., new prophylaxis; drug targeted at child vs. adult • New user interface – e.g., new usage pattern for a dx device; new dosage frequency for an existing drug • 2nd-gen. product with traditionally low levels of engagement – e.g., toilets • Culturally sensitive products – e.g., family planning • Products requiring long-term adherence – e.g., ARVs • Products not perceived as necessary by the user – e.g., preventive products, nutrition products
Implications	Informs the level of investment in HCD required to achieve the desired outcomes within target communities.

"We have taken for granted that [because the problems are complicated] the solutions are going to be complicated. But simple things can go a long way."

Bernard Kasawa
UNICEF, Zambia

HCD requires close proximity and local capacity to be an effective, sustainable and efficient partner

Effectiveness

Greater depth of insight with a local team that already has local market knowledge and is more quickly accepted by users during ethnography / qualitative research

Sustainability

Lower cost with a local team given lack of travel cost (e.g., no international flights and hotel for a team flying in from afar) and frequent lower operating costs in local market

Efficiency

Less up front time is required for designers to get up to speed on a new market given pre-existing local knowledge and higher ability to continually build on learnings in the market

Interacting with users across projects and over time enables local teams to accumulate valuable knowledge

"I had one local designer in Ethiopia that did the work of four designers in Rwanda because the Rwanda team was led by a foreigner."

"The cost to fly an international team constantly to Africa is outrageous, not to mention that they have higher overhead costs to begin with."

There are a growing number of players at the intersection of design and social impact (SI)

Local SI Design Practitioner

(Individual or firm)

Individual or organization based in a developing country that provides design consulting services to other organizations, with some prior experience in, or focus on, social impact work

Example: Quick Sand

Global SI Design Practitioner

(Individual or firm)

Individual or organization that provide design consulting services on a global scale, typically based in US or EU."

Example: ideo.org

Adjacent Professionals

Independent or freelance marketing or market research professionals who contract services on a case-by-case basis, usually independently although at times with a team

Example: an Independent Marketing professional

Adjacent Firms

(Marketing or market research firms)

Firms that are in related fields (e.g., marketing or market research firms) and have some internal design or design research capability

Example: CKS

Hubs/Labs

Collaborative, multidisciplinary organization that brings together multiple stakeholders to work on product, service, system development

Example: Bihar Innovation Lab

S.I. University programs

Academic program that combines research and design practice to address social impact issues.

Example: Maryland Institute College of Art (MICA) Center for Social Design

Embedded talent NGOs

A non-profit organization or for-profit social enterprise that incorporates design talent as a core competency, often to design and develop its own products
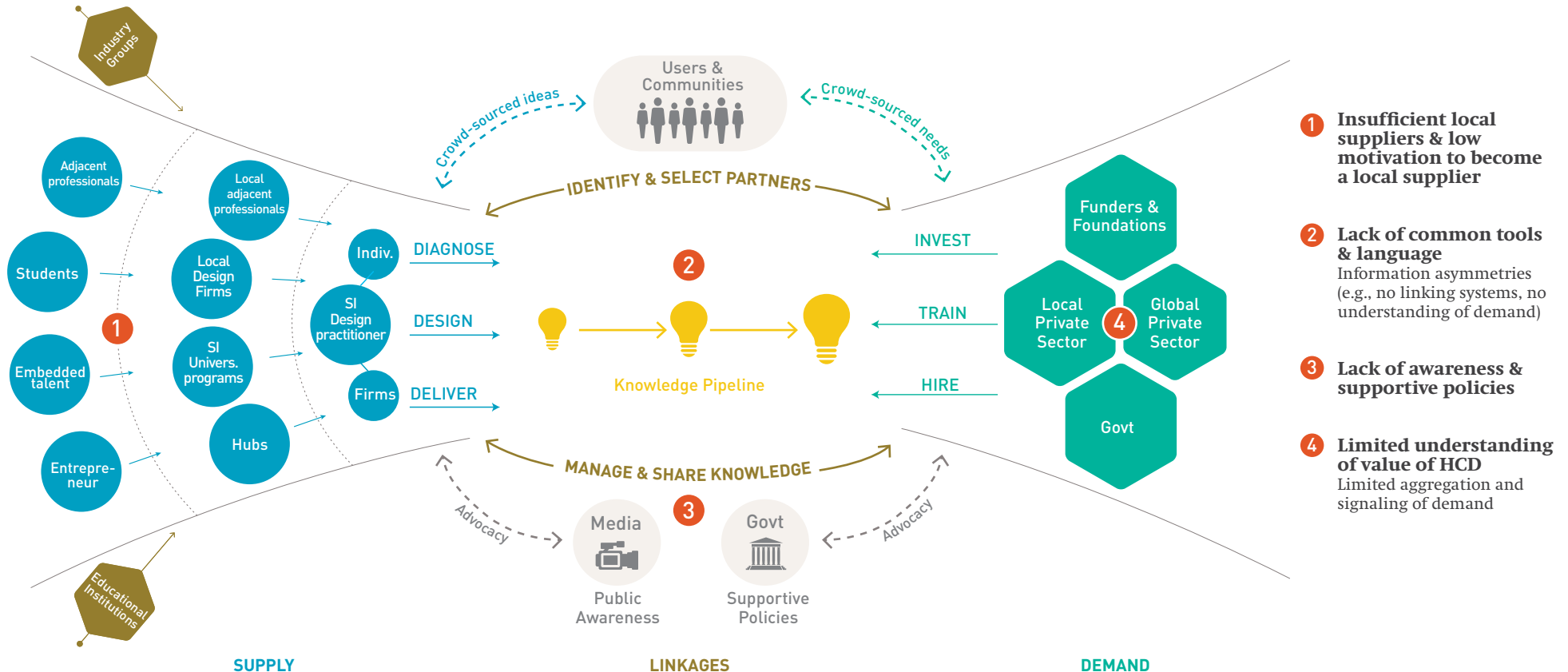
Example: Proximity Designs

Embedded talent Corporations

Corporation with internal HCD capabilities that is willing to use them for a social impact purposes, sometimes as part of CSR efforts

Example: S.C. Johnson

There are many factors that contribute to a healthy and sustainable local design ecosystem

But many barriers and gaps will need to be addressed to build capacity in critical markets

Industry Groups

Educational Institutions

Adjacent professionals

Students

Embedded talent

Entrepreneur

Local adjacent professionals

Local Design Firms

SI Univers. programs

Hubs

Indiv.

SI Design practitioner

Firms

1

DIAGNOSE

DESIGN

DELIVER

Users & Communities

Crowd-sourced ideas

Crowd-sourced needs

IDENTIFY & SELECT PARTNERS

2

Knowledge Pipeline

MANAGE & SHARE KNOWLEDGE

Advocacy

Advocacy

3

Media
Public Awareness

Govt
Supportive Policies

INVEST

TRAIN

HIRE

Funders & Foundations

Local Private Sector

Global Private Sector

4

Govt

1 **Insufficient local suppliers & low motivation to become a local supplier**

2 **Lack of common tools & language**
Information asymmetries (e.g., no linking systems, no understanding of demand)

3 **Lack of awareness & supportive policies**

4 **Limited understanding of value of HCD**
Limited aggregation and signaling of demand

SUPPLY

LINKAGES

DEMAND

Development organizations can invest in a number of different approaches to improve both the quality and availability of local design support in key markets

Increase Supply

Strengthen & Scale Capacity

- Create toolkits and training to help designers work with development agencies
- Train existing, nascent providers and project managers within these providers
- Support local adjacent firms and local design firms to build SI design capacity
- Cross-train adjacent practitioners such as community organizers
- Support university programs to spin-out as providers
- Incubate design providers in tech hubs
- Create design hubs in target communities
- Expand capacity of existing SI design practitioners

Educate

- Create university programs, training programs, and continuing ed. programs
- Incorporate SI into existing design schools

Improve Linkages

Facilitate Identification and Selection of Providers

- Develop networks and platforms to recruit and connect SI design practitioners
- Credential providers via pre-qualification process

Manage and Share Knowledge

- Build toolkits for designers and development organizations to facilitate common language and understanding of value of design to development partners
- Train and mentor project managers in development organizations in HCD
- Identify and hire regional HCD coordinators to manage knowledge and maintain local relationships
- Create platforms to share knowledge

Increase Demand

Generate Demand

- Train executives within buyers to generate demand for HCD
- Identify partners (e.g., development actors, private companies) with HCD demand
- Capture and publish "design for development" success stories and metrics

Smooth Gaps in Demand

- Launch "retainer" model and support with steady pipeline of "rapid appraisals"

Agreggate Demand

- Quantify and aggregate demand among development actors & private companies

Signal Demand

- Signal demand by committing large-scale funding to HCD

Increase Policy & Policy Awareness

Build public awareness

- Raise public awareness via media, education, case studies, etc.
- Advocate to create more design-friendly policies in key markets
- Convene and connect design community via industry groups, competitions, conferences, etc.

A healthy and sustainable design ecosystem can increase the potential for lasting human impact

Increase confidence that programs will deliver impact

Design can ensure that programs meet real human needs (both for end users and other stakeholders) to drive adoption and maximize to impact. Design approaches open up new pathways to test and iterate on solutions before committing large scale investments.

Bring focus and alignment to broader strategies

Design can clarify key needs and opportunities across program areas to bring greater focus, alignment and synergies across investments.

Increase trust and engagement with end users, partners and other stakeholders

Design can build greater trust among the communities that development organizations work in through more participatory approaches; at the same time, design can also help communities strengthen their capacity to solve problems collaboratively.

A healthy and sustainable design ecosystem will have secondary benefits for development

Communicate development Impact

Design can help the sector better communicate the story of development and the impact development organizations have on communities around the world.

Create stronger development leaders

Design thinking can be a vital part of leadership development in the sector to help improve collaboration and break out of conventional ways of thinking within development organizations.

Generate new employment

Design skills can offer a viable career path in underserved markets as well as become a standard part of the toolset for adjacent professionals like teachers and community organizers.

Expert interviewees

John Carey	Autodesk Foundation
Heather Fleming	Catapult Designs
Yanina Seltzer	CGAP / World Bank
Claudia McKay	CGAP / World Bank
Aditya Dev Sood	CKS
Nicole Rappin	D-Rev
Bryan Bell	Design Corps
Ravi Naidoo	Design Indaba
Marianna Amatullo	Design Matters
Fabio Sergio	frog
Jocelyn Wyatt	Ideo.org
Lee Davis	MICA
Colman Chamberlain	Nike Foundation
Tom De Blasis	Nike Foundation
Anurag Mairal	PATH
Jim Taylor	Proximity Design
Ayush Chauhan	Quicksand
Amira Bliss	Rockefeller Foundation
Marika Shioiri Clark	SOSHL Studio
David Milestone	USAID
Joel Segre	Independent

Workshop participants

Mary Aikenhead	Bill & Melinda Gates Foundation
John Duffy	Bill & Melinda Gates Foundation
Blair Hanewall	Bill & Melinda Gates Foundation
Kartik Radhavan	Bill & Melinda Gates Foundation
Emily Brew	Brew
Ben Gallagher	Ben & Andrew
Erin Barringer	Dalberg
Vicky Hausman	Dalberg
Yuting Lien	Dalberg
Robert Fabricant	Dalberg, Design Impact Group
Aditya Dev Sood	CKS
Ravi Naidoo	Design Indaba
Jessica Colaco	iHub Nairobi
Raj Pannu	Independent Consultant
John Sherry	Intel Business Innovation Lab
Allan Chochinov	School of Visual Arts, Core 77
Pargya Mishra	School of Visual Arts, Design for Social Innovation
Tom Putzer	SC Johnson
Erica Kochi	UNICEF Innovation Unit

Credits

The findings and recommendations represent the synthesis of a diverse group of leading stakeholders in the design and development communities, as well as research and analysis funded by the Bill and Melinda Gates Foundation. We hope that it can serve as a catalyst for the advancement of design as a catalyst for even greater impact in the future. We are grateful to all of the participants for their time, inspiration and insights.

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