MAKING THE CASE FOR DESIGN IN THE DEVELOPMENT SECTOR
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

“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
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:

- **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?

- **ACCESS 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?

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

- **NON-INFECTIONOUS 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.

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

<table>
<thead>
<tr>
<th>Key Question</th>
<th>DEFINE PROBLEM AND PROBLEM CONTEXT</th>
<th>DEFINE STRATEGY AND GOALS</th>
<th>EXECUTE AGAINST GOALS</th>
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</thead>
<tbody>
<tr>
<td><strong>Which user groups are the most impactful to target?</strong></td>
<td><strong>What are our users’ common needs? How are they influenced?</strong></td>
<td><strong>What are the best opportunities to interact with our target users?</strong></td>
<td><strong>What are the best pathways to reach target users for maximum impact?</strong></td>
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<tr>
<td><strong>HCD Use cases</strong>*</td>
<td>• Relative value of different target segments, combining demographic and behavioral characteristics, for key markets and issues</td>
<td>• Relative importance among various solutions targeting the user</td>
<td>• Understand potential levers for influencing user behavior through surrounding systems and the actors within these systems</td>
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<td><strong>HCD Activities</strong>*</td>
<td>• Conduct qualitative research to identify potential target user groups and uncover behavioral or psychographic characteristics</td>
<td>• Conduct interviews and observational studies of users to understand their needs and the context in which they operate</td>
<td>• Conduct interviews of users, community members and other actors or influencers in the system</td>
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<td></td>
<td>• Conduct quantitative research to assess relative scope and size of different segments</td>
<td>• Conduct in-depth, observational studies and participatory design to identify opportunities and gaps in their current experiences</td>
<td>• Visit sites where users spend time or interact with related products and services</td>
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*NOTE: The use cases and activities noted below are an indicative rather than a mandatory and/or exhaustive one. They intend to be used as a guide, rather than a step by step framework.*
### 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?

### HCD Use cases*

- Define personas to guide all design decisions
- Define the needs: physical, emotional & social
- Uncover the ‘why’ behind those needs

### HCD Activities*

- Conduct observational studies, interviews and surveys
- Map social relationships and influence in the community

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<tr>
<th>DEFINE PROBLEM &amp; SET VISION</th>
<th>SPECIFY USE CASE &amp; DESIRED PRODUCT PROFILE</th>
<th>EVALUATE MARKET FEASIBILITY &amp; DELIVERABILITY</th>
<th>DEVELOP DETAILED OPERATIONAL LAUNCH PLAN</th>
<th>MONITOR EXECUTION &amp; OPTIMIZE</th>
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<tbody>
<tr>
<td>• Who is the end user and other stakeholders?</td>
<td>• What is the user’s context? How will she access and use the product / service?</td>
<td>• What is the product solution that best addresses user needs and ecosystem demands?</td>
<td>• What is the value proposition to the user that is resonant with norms and culture?</td>
<td>• What are the user-specific barriers to increase uptake and ensure long-term engagement?</td>
</tr>
<tr>
<td>• What are the user’s context, needs, preferences and limitations?</td>
<td>• What product features are most important?</td>
<td>• What are the usability and deliverability challenges?</td>
<td>• What are the best marketing and distribution channels to reach target users?</td>
<td>• How can features and incentives be optimized for increased engagement and adoption?</td>
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<tr>
<td>• How much effort is required to change norms/behavior?</td>
<td>• What are the key leverage points to shift behavior?</td>
<td>• What is the behavior change model and has it been validated?</td>
<td>• What is the value proposition to the user that is resonant with norms and culture?</td>
<td>• Incorporate user feedback into revised delivery strategy and next generation products / services</td>
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### Program Design & Implementation Process

- Accelerate design decisions through rapid prototyping and user feedback
- 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

- 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

- Interview end users to gain insights about messaging and preferred distribution channels
- Iterate on prototypes
- Revise value proposition and behavioral model

- Conduct user testing; solicit user and provider feedback
- Iterate on prototypes
- Revise value proposition and behavioral model

- Conduct physical prototyping
- Interview end users to gain insights about messaging and preferred distribution channels
- Iterate on prototypes
- Revise value proposition and behavioral model

- Conduct participatory exercises with users and other stakeholders to prioritize concepts
- Conduct physical prototyping
- Conduct user testing; solicit user and provider feedback

- 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

- Continually collect user feedback
- Iterate on design, distribution or marketing
- Gather input for product roadmap

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HCD can also improve the effectiveness of individual programs and solutions.
Behavior change is an important criteria for determining the potential value of HCD to specific programs

<table>
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<tr>
<th>Definition</th>
<th>HCD should be applied 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).</th>
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| 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

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

**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

“Effectiveness

“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.”

“Sustainability

“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)

<table>
<thead>
<tr>
<th>Local SI Design Practitioner</th>
<th>Global SI Design Practitioner</th>
<th>Adjacent Professionals</th>
<th>Adjacent Firms</th>
<th>Hubs/Labs</th>
<th>S.I. University programs</th>
<th>Embedded talent NGOs</th>
<th>Embedded talent Corporations</th>
</tr>
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<tr>
<td>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</td>
<td>Individual or organization that provide design consulting services on a global scale, typically based in US or EU. Example: ideo.org</td>
<td>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</td>
<td>Firms that are in related fields (e.g., marketing or market research firms) and have some internal design or design research capability. Example: CKS</td>
<td>Collaborative, multidisciplinary organization that brings together multiple stakeholders to work on product, service, system development. Example: Bihar Innovation Lab</td>
<td>Academic program that combines research and design practice to address social impact issues. Example: Maryland Institute College of Art (MICA) Center for Social Design</td>
<td>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</td>
<td>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</td>
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</table>
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.

1. Insufficient local suppliers & low motivation to become a local supplier
2. Lack of common tools & language (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.
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”

- **Agregate 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 | ido.org
Lee Davis | MICA
Colman Chamberlain | Nike Foundation
Tom De Blassis | 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

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

Workshop participants
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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