



# HUMAN CENTERED DESIGN

AN INTRODUCTION

2ND EDITION

# ARE YOU LOOKING TO...

**Bring innovation to the base  
of the pyramid? Enter a new region?  
Adapt a technology to your region?  
Understand the needs of constituents  
better? Find new methods for  
monitoring and evaluation?**

# THIS TOOLKIT WAS MADE FOR YOU.

It contains the elements to Human-Centered Design, a process used for decades to create new solutions for multi-national corporations. This process has created ideas such as the HeartStart defibrillator, Cleanwell natural antibacterial products, and the Blood Donor System for the Red Cross—innovations that have enhanced the lives of millions of people.

**Now Human-Centered Design can help you enhance the lives of people living on less than \$2/day.**

This process has been specially-adapted for organizations like yours that work with communities of need in Africa, Asia, and Latin America.

Human-Centered Design (HCD) will help you **hear** the needs of constituents in new ways, **create** innovative solutions to meet these needs, and **deliver** solutions with financial sustainability in mind.

**LET'S GET STARTED.**

# WHY DO HUMAN CENTERED DESIGN?

**Because it can help your organization connect better with the people you serve. It can transform data into actionable ideas. It can help you to see new opportunities. It can help to increase the speed and effectiveness of creating new solutions.**



**We are excited about our ability to continue replicating the Human-Centered Design process to create and bring to scale new approaches to provide eye care in the developing world.**

**—VISIONSPRING, INDIA**

**HCD surprised us because even people who didn't know a lot about the topic were able to create so many solutions.**

**—IDE VIETNAM**

## **WHY A TOOLKIT?**

### **Because the people are the experts.**

They are the ones who know best what the right solutions are. This kit doesn't offer solutions. Instead, it offers techniques, methods, tips, and worksheets to guide you through a process that gives voice to communities and allows their desires to guide the creation and implementation of solutions.

### **Because only you know how to best use it.**

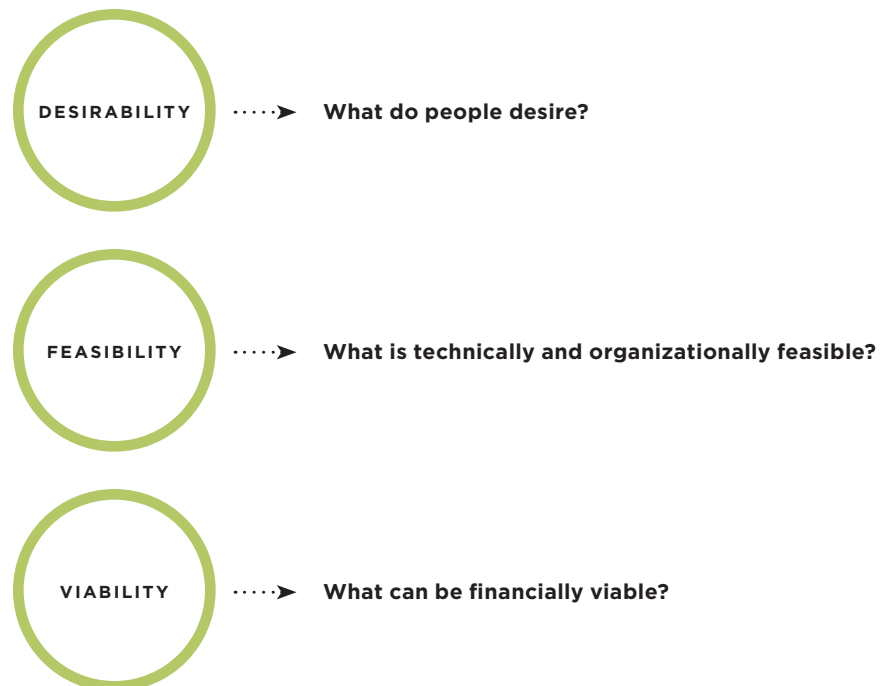
Human-Centered Design is a process broken into a set of tools. This is so that you can pick and choose which techniques work best for your context and your situation. Use it alone or along with PRISM, value chain analysis, PRA, triangulation or other methods you use in your organization to imagine and implement new ideas.

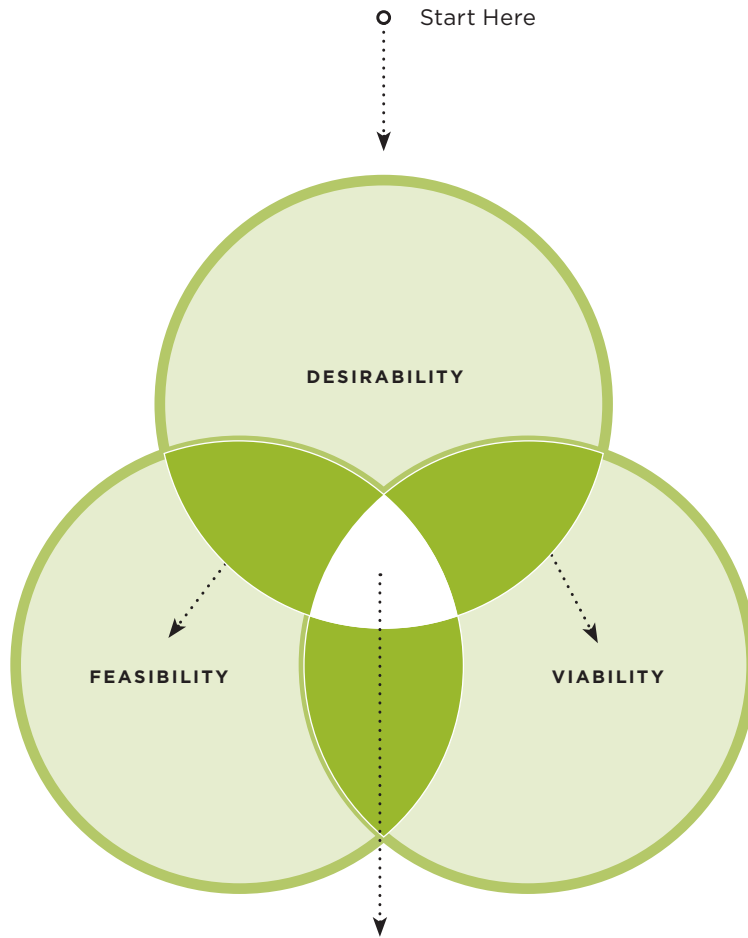
## THE THREE LENSES OF HUMAN-CENTERED DESIGN

Human-Centered Design (HCD) is a process and a set of techniques used to create new solutions for the world. Solutions include products, services, environments, organizations, and modes of interaction.

The reason this process is called “human-centered” is because it starts with the people we are designing for. The HCD process begins by examining the needs, dreams, and behaviors of the people we want to affect with our solutions. We seek to listen to and understand what they want. We call this the Desirability lens. We view the world through this lens throughout the design process.

Once we have identified a range of what is Desirable, we begin to view our solutions through the lenses of Feasibility and Viability. We carefully bring in these lenses during the later phases of the process.





The solutions that emerge at the end of the Human-Centered Design should hit the overlap of these three lenses; they need to be **Desirable, Feasible, and Viable.**

## THE HCD PROCESS

The process of Human-Centered Design starts with a specific Design Challenge and goes through three main phases: Hear, Create, and Deliver. The process will move your team from concrete observations about people, to abstract thinking as you uncover insights and themes, then back to the concrete with tangible solutions.



### HEAR

During the Hear phase, your Design Team will collect stories and inspiration from people. You will prepare for and conduct field research.



### CREATE

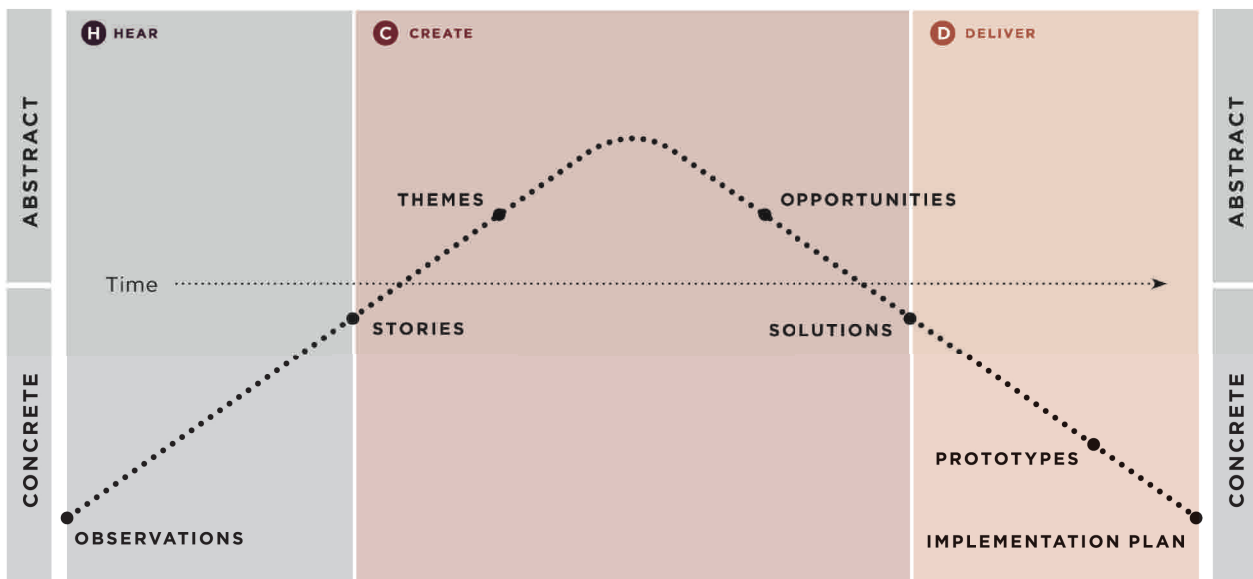
In the Create phase, you will work together in a workshop format to translate what you heard from people into frameworks, opportunities, solutions, and prototypes. During this phase you will move together from concrete to more abstract thinking in identifying themes and opportunities, and then back to the concrete with solutions and prototypes.



### DELIVER

The Deliver phase will begin to realize your solutions through rapid revenue and cost modeling, capability assessment, and implementation planning. This will help you launch new solutions into the world.

To recall these phases, simply remember H-C-D.





# HOW TO USE THIS TOOLKIT

This toolkit will guide you through an innovation process based on HCD methodology.

## A FLEXIBLE TOOLKIT

Using this toolkit on its own will yield great solutions. However, HCD is also very flexible and can complement or be supplemented by various other approaches. Methods such as Participatory Rural Appraisal (PRA), Subsector/Value Chain Analysis and Triangulation can all be incorporated into the HCD methodology provided here. For example, your Design Challenge may necessitate knowing about the mapping of village resources. If a team member is familiar with a PRA method effective for gathering this kind of information, it should absolutely be incorporated into the process.

So be creative and rigorous in choosing and mixing your methods - the best outcomes might come from the most unexpected combinations!



### TIP

There is the “facilitator” version of the Toolkit. If you are the facilitator, use the notes provided to you in the margins as rough instructions of how to move your team forward through the innovation process. Please add any additional instructions, methods, or techniques you feel would be relevant to your design challenge.



### WATCH OUT

The facilitator must use his/her power wisely. The facilitator is a role to lead the team through the process; this person can certainly contribute to the content of the ideas, but should not use his/her power to sway decisions.

# BEST PRACTICES FOR INNOVATION

By completing thousands of innovation and design challenges, IDEO has learned a few rules for creating an environment to facilitate innovation. See if any of these can be applied to your organization.

## MULTI-DISCIPLINARY TEAMS

The challenges you face are very complex and are likely to have been explored by predecessors. You will have a higher likelihood of success at solving such complex, difficult, and already-examined problems by intentionally assembling the right team of people. This team will work best if it consists of a core group of 3-8 individuals, one of whom is the facilitator. By mixing different disciplinary and educational backgrounds, you will have a better chance of coming up with unexpected solutions when these people approach problems from different points of view.

## DEDICATED SPACES

Having a separate project space allows the team to be constantly inspired by imagery from the field, immersed in their post-it notes, and able to track the progress of the project. If possible, find a dedicated space for your design team to focus on the challenge.

## FINITE TIMEFRAMES

Many people notice that they work best with deadlines and concrete timelines. Likewise, an innovation project with a beginning, middle, and end is more likely to keep the team motivated and focused on moving forward.



TIP

To ensure that there is a balanced gender perspective, involve female staff in all phases of this process.

# SCENARIOS OF USE

The following Scenarios of Use help to outline four possible ways to use this toolkit for innovation. The first two scenarios utilize the principle of finite timeframes to frame the entire challenge, while the latter two demonstrate how small sections of the toolkit can be used to provide motivation, concrete goals, and a path to getting unstuck in longer-term programs.

## 01

**SCENARIO 1:  
THE WEEK-LONG  
DEEP DIVE**

This mode of engagement forces the design team to work quickly to gather and analyze data, then moves rapidly to solutions, prototypes and plans. The one-week timeframe is a familiar timeline that is long enough to gain good understanding, yet short enough to allow a stressed organization to put limited resources against a challenge. This format is good for early-phase learning and for spurring new thinking.

**Use When You:**

- » Need to learn about a new area or challenge quickly.
- » Need to kick-start thinking about a long-standing intractable problem.
- » Want to refresh the thinking of the staff.

**Pull Out and Use:**

- » All sections of the Toolkit in sequence.

**TIP**

Know the limitations of your data and your early prototypes when doing a Week-Long Deep Dive. If validity is necessary without much time for research, use secondary data to triangulate your findings. Build a plan for iterating early prototypes for future refinement.

## 02

**SCENARIO 2:  
THE SEVERAL-MONTH  
DEEP DIVE**

A longer Deep Dive can last several weeks to several months. This mode of use enables a deeper, more nuanced understanding and theorization of a complex challenge or problem. With a longer time frame, more locations can be examined and more stakeholders in the value chain can become participants in the process.

**Use When You:**

- » Need to design robust solutions because the funds for implementation are available.
- » Have the resources to allocate on thinking through a multi-faceted challenge.
- » Need to engage many actors in the process, such as partners, value chain stakeholders, funders, etc.

**Pull Out and Use:**

- » All sections of the Toolkit, allowing the nature of the Challenge to dictate the appropriate timeframes for each Phase.

**TIP**

When you have more time for a Deep Dive, it may be tempting to spend the vast majority of time doing more research. Pay attention and notice when you are hitting decreasing returns and stop the research when you are learning little new information. Remember, in the early stages, you are doing research to understand the problem and inspire the team. There will be time to validate later.

## 03

**SCENARIO 3:  
ACTIVATING ALREADY-EXISTING  
KNOWLEDGE**

Often organizations have a great deal of research and already-existing information but are unable to translate all that information into actionable solutions. In this case, the processes outlined in Create and Deliver can help your team transform what you know into things you can start doing.

**Use When You:**

- » Have a lot of data and you don't quite know what to do with it.
- » Have been hearing interesting stories from the field staff and want to see if those stories can yield new opportunities or solutions.
- » Have a robust research methodology that you like better than the one in this toolkit.

**Pull Out and Use:**

- » Create
- » Deliver

**TIP**

Even if you have the information captured in a different form (in Word documents, for example), take the time to translate that information through the Story Sharing methods outlined in the first part of the Create booklet.



## 04

**SCENARIO 4:  
COMPLEMENTING EXISTING  
LONG-TERM ACTIVITIES**

Many HCD methods are applicable at different times to the challenges your organization will face in Technology Adaptation, Monitoring & Evaluation, etc. We hope that you will find some of the techniques useful in infusing the spirit of innovation in your day-to-day activities, even when there is no explicit Design Challenge at hand. Pick and choose your methods as you wish to help complement your daily work.

**Use When You:**

- » Want a new technique to add to your work routines.
- » See a method in this toolkit that you find applicable to the daily challenges you face.
- » Can't set aside the resources for an HCD project, but want to infuse the spirit of Human-Centered Design in your everyday work.

**Pull Out and Use:**

- » Any pieces of your choosing.

**TIP**

For example, if you're working on adapting an existing technology and have already-existing information about the context you want to adapt to, use Steps 3, 4, 5, and 6 in the Create book to guide you through several iterations of opportunity identification, brainstorming, prototyping, and user feedback.

On the other hand, if you are looking for help in gathering data for M&E reporting, use the exercises in the Field Guide to supplement your current activities.