





Choose Research Methods Method: Community-driven Discovery

#### **Facilitator Notes**

(L) Time: 2-4 Days

#### ☆ Difficulty: \*\*\*

Step 1: Identify a few people in the community that will be good members to have on the design team. Try to ensure that these individuals are trusted and respected members of the community, that they are fair and unbiased. and have no personal stake in the results of the design solutions.

Step 2: Decide how you will compensate these individuals. Sometimes it will be appropriate to pay them a salary based on what other members of the design team are getting paid, while in other situations, nonmonetary gifts are more appropriate. If you are uncertain, seek advice.

Step 3: Integrate these design team members at every point in the project, valuing their knowledge of the community dynamics and needs.



#### **METHOD: COMMUNITY-DRIVEN DISCOVERY**

In most cases, the real experts on a certain topic and those with the most insight for the Design Challenge are the people in the community or end customers. Consider recruiting members of the community to be the primary researchers, translators, designers and/or key informants for the project.

Community members with strong relationships, respected leaders, or people with a reputation for intelligence and fairness are often good people to identify as research partners. By asking people in the community to lead the research, the other participants may be able to express their concerns more openly and honestly. In addition, through their intimate knowledge of the community, these research partners can help interpret the hidden meaning and motivations behind the statements of other participants.



Community politics can sometimes transform a research project into a community battle for access to the resources of the researcher and/or NGO. Even when these resources are not real, the perception of favoritism can be damaging. Before starting a project utilizing community-driven discovery, it is important to understand the relevant dynamics and power relationships.



Find people in the community who are particularly innovative or who have been doing things out of the ordinary in order to achieve success. How might you partner with these individuals to inspire new solutions? What can be learned by leveraging their innovations and knowledge?





**Facilitator Notes** 

L Time: 1.5-3 hours

☆ Difficulty: ★☆☆☆☆ Step 1: Identify the areas or topics that you would like to talk

to experts about.

Step 2: Find and

recruit these experts by telling them about your project and the intended length of time you will speak with them. Try to speak with people

who have different

opinions on the topics to challenge the team to think in new ways. Step 3: Return to



Hear

Choose Research Methods Method: Expert Interviews



#### METHOD: EXPERT INTERVIEWS

Experts can be called upon to provide in-depth and technical information. Reaching out to experts is particularly useful in cases where the team needs to learn a large amount of information in a short period of time, and/or where others have already done a lot of research on a topic.

Some examples of good times to call upon expert interviews are:

- » To learn about the history of a particular community or topic
- » To understand the regulations that might affect design and implementation of solutions
- » To gather information about new technologies that have been recently invented or that are on the horizon

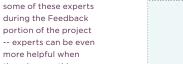


WATCH

Expert interviews are not a substitute for primary research with participants and communities. Often experts overstate their expertise or develop their own assumptions and biases that can stifle innovation.



TIF #1 If possible, interview experts with different points of view on a topic in order to balance out biases.



there is something tangible for them to respond to.



Remember that the real experts are the people you're designing for. Don't ask experts for solutions or take their ideas as the final solution.







Choose Research Methods Method: Seek Inspiration in New Places

#### **Facilitator Notes**

(L) Time: 20-60 mins.

#### ☆ Difficulty: ★★★☆☆

Step 1: Think about all the activities. feelings, and behaviors that make up the experience of your challenge. Ask the team to list these together.

Step 2: Next to each activity, feeling, or behavior, write down a few other areas or situations where this exists For example if the activity is "use a device at the same time every day", other situations might be how people use alarm clocks, wells. or mobile phones.

Step 3: Have the team vote on the situations that they would like to observe for inspiration and arrange for an observation.

Step 4: During the observation, have the team take pictures and notes of the experience. Together, debrief on what this experience was like and what they can apply to the design challenge.



#### **METHOD: SEEK INSPIRATION** IN NEW PLACES

One of the best ways to inspire new ideas is to look at similar experiences in other contexts, instead of focusing too narrowly on the research topic. The simple act of looking at different contexts can bring to mind new insights. For example a surgeon can get insights about organizing their medical supplies by visiting a hardware store, an airline employer might get ideas about check-in by observing a hotel front desk or a water-jug creator could observe other ways individuals transport heavy objects or liquids.



To identify inspirational settings, list all the distinct activities or emotions that make up the experience you are researching. For example, a doctor's visit might include the following activities and feelings: getting sick, discussing a doctor visit with family, travel, paying, and following doctor instructions such as taking medication or changing behavior. Find other situations that include some or all of these activities and then go and observe them.



This method is most useful when you have already done some research, and need to refresh your thinking.







Hear Develop an Interview Approach Method: Interview Guide



#### DEVELOP AN INTERVIEW APPROACH

Interviewing is an art that balances the dual needs of getting relevant information from the customer and engaging with them as a curious and empathetic friend. Intentionally developing your strategy for interviewing is key to managing this balance. Here we include three interview methods that may help you to develop the interview approach right for you:

- » Interview Guide
- » Sacrificial Concepts
- » Interview Techniques

#### **Facilitator Notes**

L Time: 1-2 Hours

### ☆ Difficulty:

Step 1: Generate a list of topics related to your design challenge to cover in field research.

Step 2: Sort the topics based on what are the main categories and sub-categories.

Step 3: Identify if any topics are specific to male or female activities.

Step 4: Break into groups of two. Take each main category and assign a group to generate a list of questions to ask in the field based on the topics listed in the main category.

Step 5: Have each group present their questions to the larger team and add any additional questions that may be missing.

#### METHOD: INTERVIEW GUIDE

The semi-structured interview is a key method of enabling dialogue and deep engagement with participants while retaining focus on a particular topic. Thoughtful structuring of the interview questions will take the participant on a mental journey from the specific to the aspirational to the tangible.



#### TIP #1

#### **OPEN SPECIFIC**

Warm up the participant with questions they are comfortable with.

- 1. Household demographics
- 2. Who does what in the household?
- 3. Stories of recent past

#### GO BROAD

Prompt bigger, even aspirational, thinking that they may not be accustomed to on a daily basis.

- 4. Aspirations for the future
- 5. System-based questions

#### PROBE DEEP

Dig deeper on the challenge at hand & prompt with 'what if' scenarios.

- 6. Income sources
- 7. Questions specific to innovation challenge
- 8. Sacrificial Concepts

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Begin by brainstorming the topical areas you'd like to cover during the interviews, such as:

- » sources of livelihood
- » sources of information
- » financing models

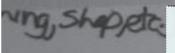


Use post-its to capture questions that respond to these topics. For 'sources of information,' one might ask:

- » When you have a setback in your life, who do you go to for advice?
- » Have you heard about new ways of doing things in the past year? How have you heard about them?

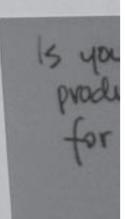


Move the post-its around to sort the questions into a logical flow based on the sequencing of START SPECIFIC, GO BROAD then PROBE DEEP.



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Create your own in your Interview Guide at the back of your Field Guide based on the example on the opposite page.









Develop an Interview Approach Method: Sacrificial Concepts



#### **METHOD:** SACRIFICIAL CONCEPTS

Scenario-based questions or Sacrificial Concepts can help make hypothetical or abstract questions more accessible. A sacrificial concept is an idea or solution created to help understand the issue further. It is a concept that doesn't have to be feasible, viable, or possible since its only purpose is deeper understanding. A good sacrificial concept sparks a conversation, prompts a participant to be more specific in their stories, and helps check and challenge your assumptions.

#### **Facilitator Notes**

(L) Time: 30-60 mins.

#### ☆ Difficulty: \*\*\*\*

Step 1: Based on your Design Challenge, identify an abstract auestion you would like to know the answer to. Pose the abstract question to your partner, and note the response.

Step 2: Now turn the abstract question into a concrete scenario with two options. Pose your scenariobased question to your partner.

Step 3: Now change a few of the variables in your scenario and pose the question again.

What kinds of information did you learn from the different ways of questioning?



Abstract concepts difficult to answer for many people include:

- » Questions about risk, insurance, and guarantees
- Questions about trade-offs
- Questions about return on investment
- Questions about future behavior



#### Make a question less abstract by creating a Sacrificial Concept:

Instead of asking: "How much would you pay to reduce the risk of purchasing new technology?"

Describe two scenarios for the participant to choose from: "If you had a choice between two new technologies that could improve your farm output. The first technology costs 1,000 and comes with no guarantee. The second costs 1,500 and comes with a guarantee that by the second harvest, your farm output will double or else we will come back, take the technology away, and give you back your 1,500. Which option would you prefer?" Discuss why.





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Develop an Interview Approach Method: Sacrificial Concepts



Ask a person to compare your concept to the way they currently do things. You might also create two concepts that contrast with each other or are opposites. People have an easier time reacting to concepts if they have something to compare it to.



A sacrificial concept might be a scenario told verbally or shown in pictures or drawings. It might be an object that the person can handle. It might be an experience that a participant can try.



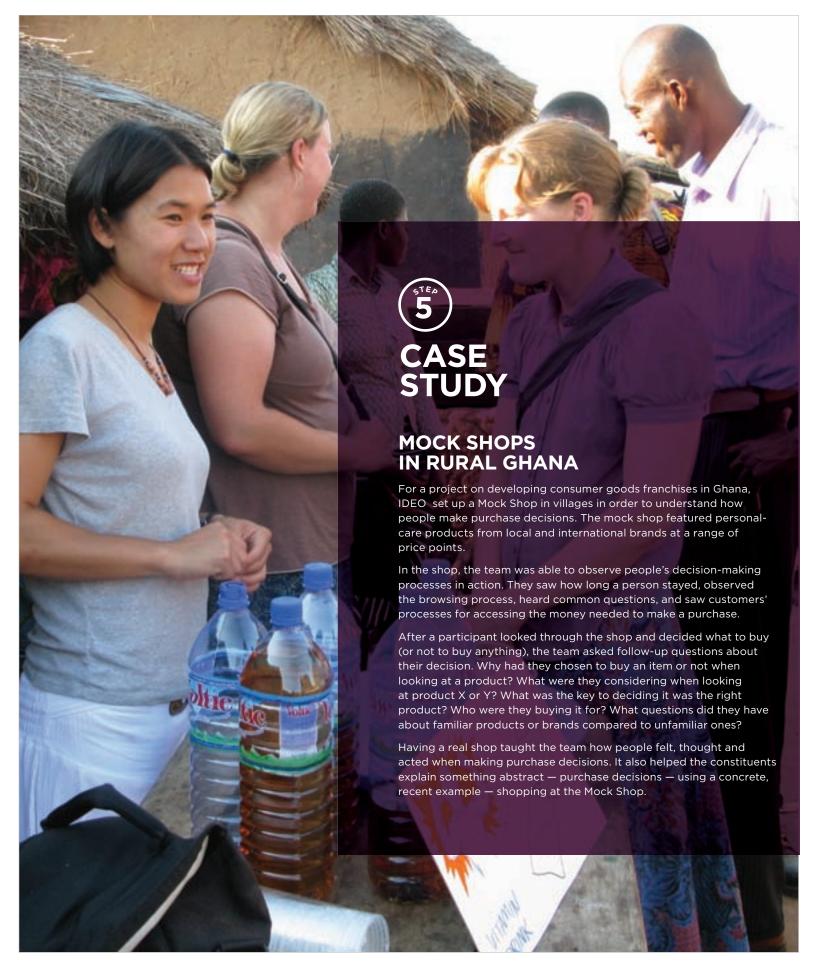
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Look at your design challenge and your big questions. What topics do you want to explore deeply? Create a sacrificial concept to help you prompt the right conversation.















Develop an Interview Approach Method: Interview Techniques

#### **Facilitator Notes**

(L) Time: 20-40 mins.

#### ☆ Difficulty: ★☆☆☆☆

Step 1: Have the team practice by partnering in groups of two. At least one person (Person A) in each team should have a mobile phone with them.

Step 2: Ask Person A to simply explain to their partner (Person B) how they enter a new contact into the phone.

Step 3: Have Person B use the Show Me technique with Person A.

Step 4: Have Person B use the Five Whys technique with Person A.

Step 5: Ask the team to come back together and ask, "What kind of information did you get from using Five Whys?" Then ask, "What kind of information did you get from using Show Me?"



#### METHOD: **INTERVIEW TECHNIQUES**

Through telling stories, human beings reveal important issues and opportunities in their daily experiences. Often, what people say they do and what they actually do are not the same thing. So it's important not just to rely on asking straight forward questions in an interview. Here are a few techniques for collecting rich stories in an interview.



TRY

Begin with a simple example, like how someone uses a mobile phone. Partner up and ask your partner to begin with a SHOW ME of how they entered the last contact into their address book. Next move on to the FIVE WHYS technique with your partner. Ask them to tell you about the last contact they entered into their address book and then five consecutive Why? questions.



Compare and contrast the type of information you get from the different techniques. Let this inform your questioning techniques in the field.



Develop an Interview Approach Method: Interview Techniques

#### SHOW ME

If you are in the interviewee's environment, ask him/her to show you the things they interact with (objects, spaces, tools, etc). Capture pictures and notes to jog your memory later. Or have them walk you through the process.

#### DRAW IT

Ask participants to visualize their experience through drawings and diagrams. This can be a good way to debunk assumptions and reveal how people conceive of and order their activities.

#### 5 WHY'S

Ask "Why?" questions in response to five consecutive answers. This forces people to examine and express the underlying reasons for their behavior and attitudes.

#### THINK ALOUD

As they perform a process or execute a specific task, ask participants to describe aloud what they are thinking. This helps uncover users' motivations, concerns, perceptions, and reasoning.





Develop Your Mindset Method: Beginner's Mind

#### **Facilitator Notes**

(L) Time: 20-40 mins.

#### ☆ Difficulty: \*\*\*\*

Step 1: Ask the design team to look at the photo and identify what stands out to them. Note when people explain behaviors based on personal assumptions (i.e. "The man in the white lab coat seems to be the manager").

Step 2: Ask what past experience led to this explanation.

Step 3: Use 'opposite logic' to question the assumption the person has made (i.e. "Wouldn't those wearing lab coats need to be most sterile and therefore working closest with the machinery, not supervising?)

Step 4: Ask how the interpretation would change if a new piece of information were introduced (i.e. "What if I were to tell you that in this place white is the color that servants wear? How would you view this scene differently?").

Step 5: Ask the design team what they have learned from this exercise.

Step 6: Stress the importance of going into research with a "Beginner's Mind" and asking questions that you think you might already know the answers to, because you may be surprised by the answers.



#### DEVELOP YOUR MINDSET

The exercises listed under this step are valuable to put you in the right frame of mind for research. It is often difficult, but very important, for experts and professionals to put aside what they know when they conduct research. Keeping an open mind takes practice. The three exercises here can provide you with this practice before you go into the field:

- Beginner's Mind
- » Observe vs. Interpret

#### MINDSET: **BEGINNER'S MIND**

Beginner's Mind is critical when entering a familiar environment without carrying assumptions with you that are based on prior experience. This is often very hard to do since we interpret the world based on our experience and what we think we know. This lens of personal experience can influence what we focus on and can make us unable to see important issues.



Remind yourself frequently of the need to approach your Design Challenge with Beginner's Mind, especially when you are in the field conducting research.



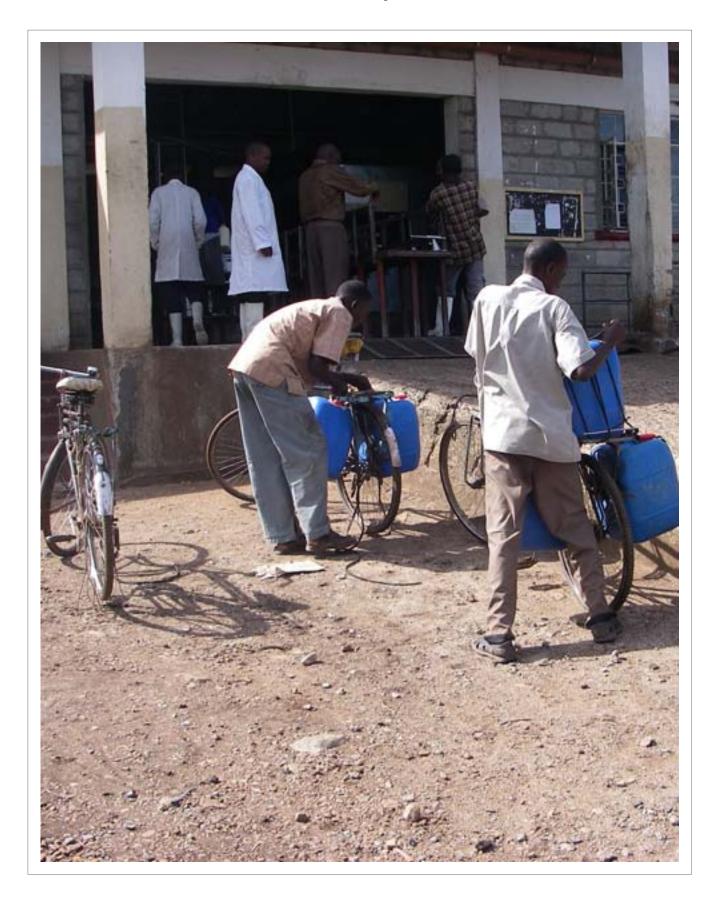
Here is one exercise to learn how to see the world through the eyes of a Beginner. Look at the photo on the following page and answer the following questions:

- » What stands out to you? What is happening?
- » What personal experience did you draw on when you looked at the picture?
- » How could you look at the photo as a Beginner, without making assumptions about what is happening?
- » What questions would you ask if you knew nothing about the context or activity of the people in the photo?





Hear Develop Your Mindset Method: Beginner's Mind







Develop your Mindset Mindset: Observe vs. Interpret

#### MINDSET: **OBSERVE VS. INTERPRET**

Building empathy for the people you serve means understanding their behavior and what motivates them. Understanding behavior enables us to identify physical, cognitive, social and/or cultural needs that we can meet through the products, services and experiences we create. This exercise helps us differentiate between observation and interpretation of what we see, revealing our biases and lenses through which we view the world.



Use the photo on the following page to practice making the distinction between observations and interpretations.

#### WHAT DO YOU SEE HAPPENING IN THIS IMAGE?

Describe only what you see, don't interpret yet.

#### WHAT IS THE REASON FOR THIS BEHAVIOR?

List five different possible interpretations that might explain this person's behavior.

#### HOW WOULD YOU FIND OUT THE REAL ANSWER?

List five questions you could ask her to determine which interpretation is correct.

#### **Facilitator Notes**

(L) Time: 20-40 mins.

#### ☆ Difficulty: ★★☆☆☆

Step 1: Ask the team "What do you see happening in this image?" Listen for responses that have built-in interpretations and remind people to describe only what they see at this point.

Step 2: Ask "What might be the reason for this behavior?" and have the team generate at least five different interpretations about why this might be happening.

If people are stuck, throw out an idea like: "This person is displaying her clothes to her neighbors as a sign of wealth by hanging them in a public space."

Step 3: Ask "What questions would vou ask to find out the real answer?" and make a list of the questions that would help your team discover the right interpretation for an observation.











CREATE







# CREATE: GOALS

To move from research to real-world solutions, you will go through a process of synthesis and interpretation. This requires a mode of narrowing and culling information and translating insights about the reality of today into a set of opportunities for the future. This is the most abstract part of the process, when the concrete needs of individuals are transformed into high-level insights about the larger population and system frameworks that the team creates.

With defined opportunities, the team will shift into a generative mindset to brainstorm hundreds of solutions and rapidly make a few of them tangible through prototyping. During this phase, solutions are created with only the customer Desirability filter in mind.

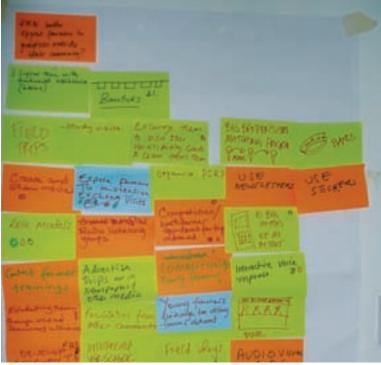
Goals of the Create Phase are:

- » MAKING SENSE OF DATA
- » IDENTIFYING PATTERNS
- » DEFINING OPPORTUNITIES
- » CREATING SOLUTIONS

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A new way to go beyond analysis, a way to create new solutions based on the voice of the customer.

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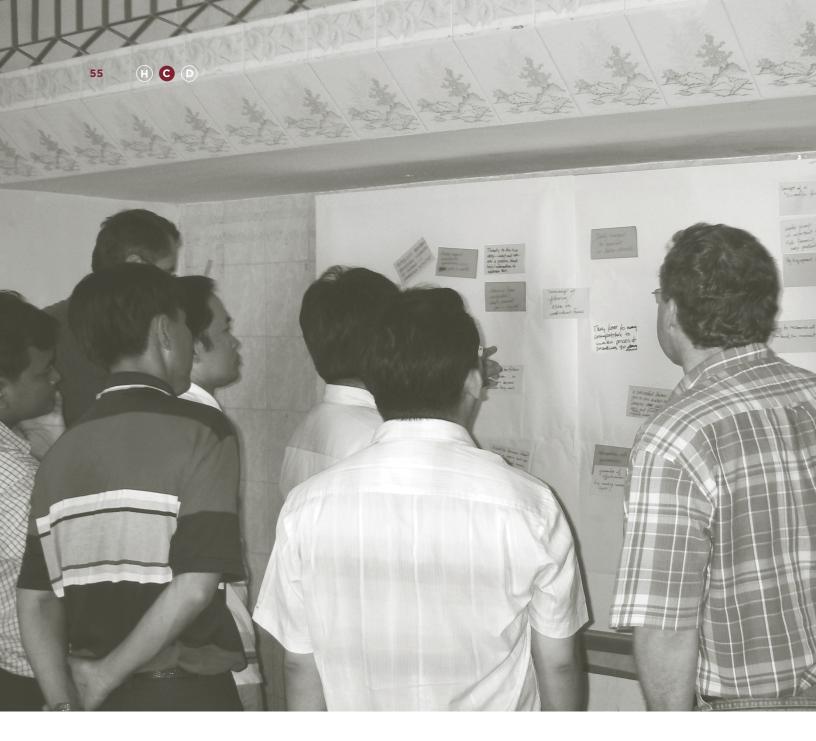


# CREATE: OUTPUTS

Using both left-brain (logical) thinking and right-brain (creative) thinking, this phase will translate your research into a set of strategic directions and tangible solutions.

At the end of the Create phase, the team will have generated the following:

- » OPPORTUNITIES
- » SOLUTIONS
- » PROTOTYPES



There are four key activities in the Create phase: synthesis, brainstorming, prototyping, and feedback.







# CREATE: THEORY

Synthesis is about making sense of what we've seen and heard during the observations.

#### Synthesis takes us from inspiration to ideas, from stories to strategic directions.

By aggregating, editing and condensing what we've learned, synthesis enables us to establish a new perspective and identify opportunities for innovation.

Brainstorming with rules like Defer Judgment and Build on the Ideas of Others is a proven method for coming up with unexpected innovations.

#### **Brainstorming makes us** think expansively and without constraints.

The practice of generating truly impractical solutions often sparks ideas that are relevant and reasonable. It may require generating 100 ideas (many of which are mediocre) in order to come up with three truly inspirational solutions.

Prototyping is a methodology for making solutions tangible in a rapid and low-investment way. It's a proven technique for quickly learning how to design an offering right and for accelerating the process of rolling out solutions to the world.

#### **Prototyping is about** building to think, acknowledging that the process of making ideas real and tangible helps us to refine and iterate the ideas very quickly.

Creating many different prototypes that highlight different aspects of your product or service not only enables people to give honest feedback, but also prevents the team from getting attached to an idea prematurely.

Feedback is critical to the design process. It brings the constituents directly back into the design process.

Feedback inspires further iterations to make solutions more compelling for constituents.







Create
Develop the Approach
Method: Participatory
Co-Design



#### **DEVELOP THE APPROACH**

Creation is about developing deeper understanding and translating that understanding into new innovations. There are many ways to do this, but the two most common are participatory approaches and empathic approaches. Use one or both of these approaches, develop your own, or draw upon different techniques when appropriate.

### METHOD: PARTICIPATORY CO-DESIGN

Having the team co-design solutions with people from the community and local value chain actors can be a great way to leverage local knowledge. It can also lead to innovations that may be better adapted to the context and be more likely to be adopted, since local people have invested resources in their creation.

Consider using participatory co-design when:

- » you need a lot of local expertise and knowledge
- » solutions from the "outside" will not be easily adopted
- » the politics of a community require it



Facilitate a co-design workshop. Bring 8-20 people from the community together to design solutions to a challenge. Introduce the challenge by telling a few stories of problems that led to the design challenge. Then generalize those stories to How Might We? statements. Ask people to add their own stories or How Might We? questions. Brainstorm solutions with the participants and make sure you have the appropriate materials on hand to prototype.

#### **Facilitator Notes**

L Time: Days-Weeks.

☆ Difficulty:

Step 1. Identify constituents who would be good design team members. The criteria will vary from place to place and from challenge to challenge. For example, do you need people who are successful, respected, and/or politically powerful? Or would it be more valuable to have people who are typical community members? Or perhaps a mix of the two.

Step 2. Schedule a co-design session or series of sessions that works for everyone, and explain the process and goals of the session in advance.

Step 3. Conduct co-design sessions with attentions to the needs, goals, and priorities of the community.







Develop the Approach Method: Participatory Co-Design



Co-design over a longer period of time through an in-context immersion. By living with a family over a few days or weeks, you will have the opportunity to ask people to informally identify problems and work together with them in their home, farm, or community. This approach is also very good for spotting new problems and developing solutions to those problems in the moment they happen.



Find local experts and best practices. Ask different community members about the people who are considered to be successful. Schedule time with these people and leverage their knowledge to develop solutions together with them.

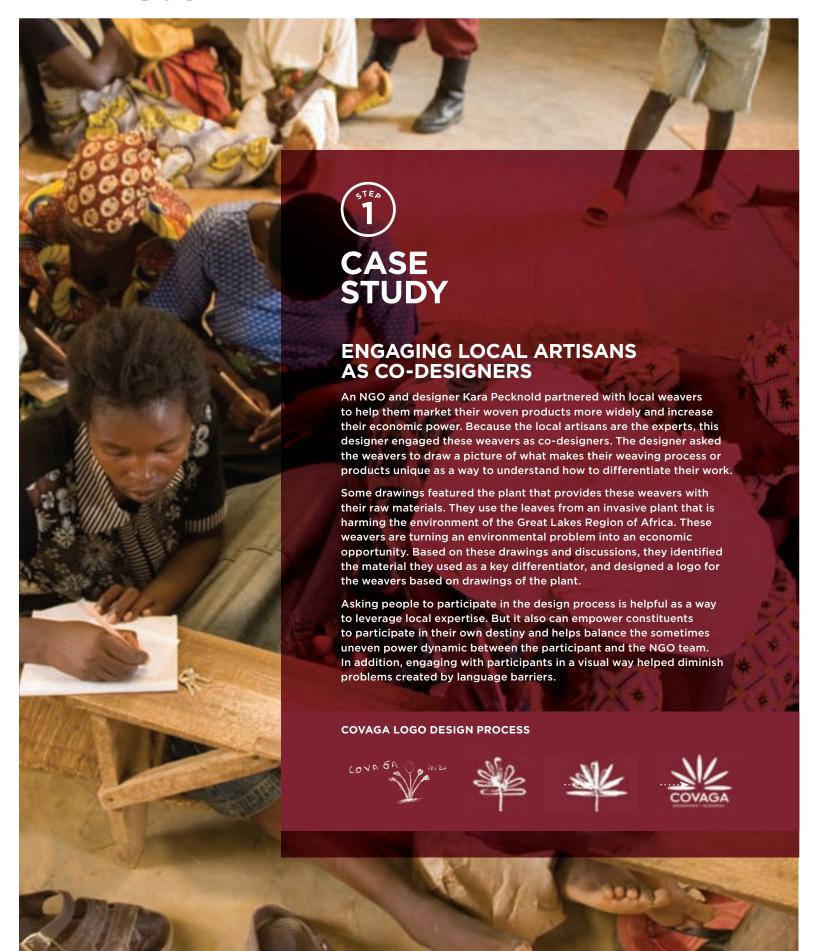


Make sure to include women in the design team and female community members in the co-design. If living with a family, spend time equally with the husband, wife, extended family, and even the children. When hosting a co-design session, think about whether to have mixed-gender groups, or to have separate groups of men and women. When looking for local experts and best practices, ask who is considered an expert of both men and women, as well as less powerful groups.













Create
Develop the Approach
Method: Empathetic Design

# METHOD: EMPATHIC DESIGN

Creating solutions through empathy is a way for the design team to blend their expertise with the on-the-ground needs of people. Empathy means deep understanding of the problems and realities of the people you are designing for. It is important to do research across many different groups of people and to "walk in their shoes" before the Create phase if employing empathic design methods. By understanding people deeply, empathic design can lead to both appropriate and more breakthrough solutions. But this method challenges the design team not just to understand the problem mentally, but also to start creating solutions from a connection to deep thoughts and feelings.

Consider using empathic design when:

- » the design team has specific skills required to develop solutions
- » the solutions you are seeking are "new to the world"
- » community politics make it difficult to select a few individuals to work with



Include men and women in the design team to ensure a balance of perspectives.



When possible, recruit members of the community with the skills needed to be members of the design team.



Empathic design is not a method in which preconceived ideas and assumptions are substituted for grounded research and connection with end users. Although solutions are generated by the design team, the goal is to always have the people you are designing for in mind.

#### **Facilitator Notes**

La Time:
Days-Weeks

☆ Difficulty:

Step 1. Encourage the team to connect at both the rational and emotional levels with constituents.

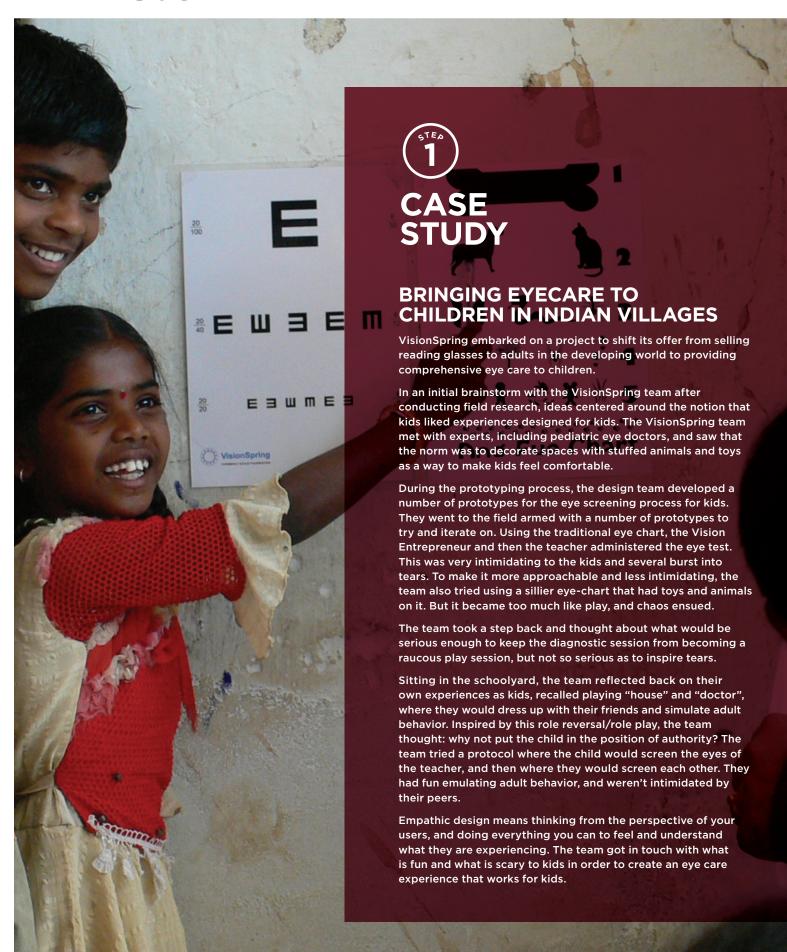
Step 2. If team members start to judge or exoticize the behaviors or decisions of constituents, remind them that their task is to understand and empathize with people, not to judge them.

Step 3. Make sure the team has spoken with enough people in the Hear phase to develop empathy. If the design team still doesn't understand and feel the reasons for the behavior of constituents, go back to the field and conduct more research.













Create Share Stories

### **Facilitator Notes**

(L) Time: 4 Hours-Days

#### The Difficulty: ★★☆☆☆

Step 1. Gather the design team together in a room with plenty of wall space. Optimally, the team should be sitting in a circle.

Step 2. Distribute postit notes and markers. Have a flip chart or large sheets of paper nearby, as well as tape to attach these sheets to the wall.

Step 3 Tell the team to capture their notes, observations, and thoughts on the post-its as they speak. Everything that is said during story sharing should be captured in a note: life history, household details, income, aspirations, barriers, quotes, observations, etc.

Step 4. Ask each team member to share the story of the person(s) they met. Go through the stories one by one.

Step 5. Affix all the post-it notes to the flip chart or large pieces of paper on the wall. Use one large sheet per story. When the story is finished, hang it on the wall and move on to the next story. At the end of Story Sharing, you will have many sheets lined up on the wall with hundreds of post-it notes.

#### SHARE STORIES

Telling stories is about transforming the stories we heard during research into data and information that we can use to inspire opportunities, ideas and solutions. Stories are framed around real people and their lives, not summaries of information.

Stories are useful because they are accounts of specific events, not general statements. They provide us with concrete details that help us imagine solutions to particular problems.



It's best to share stories soon after research so that details are not lost. One team member should tell the story of the person(s) they met, while the rest of the team takes notes on post-its. Notes should be small pieces of information (no longer than a sentence) that will be easy to remember later. As a group you should be thinking, "What does this new information mean for the project?" Some tips on storytelling are below.

Talk about what actually happened. It helps to begin stories with "One time..." or "After such and such happened..."

#### **Be Descriptive**

Use your physical senses to give texture to your description.

#### **Follow Reporting Rules**

Cover the following topics: who, what, when, where, why, and how.



#### Try to avoid:

- » Generalizing
- » Prescribing (they should, would, could...)
- » Hypothesizing
- » Judging
- » Evaluating or Assuming





