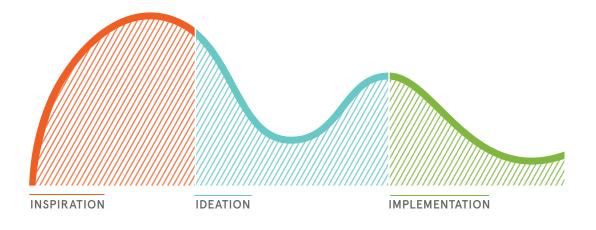




# **How to Frame Your Own Design Challenge**



**The Design Process** 

# **Table Of Contents**

# **How to Frame Your Own Design Challenge**

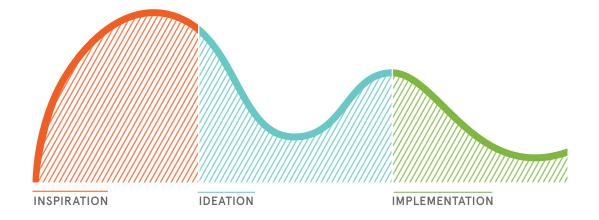
# Readings

How to Frame a Design Challenge

Dissecting a Design Challenge Design Challenge Example 1 Design Challenge Example 2 Design Challenge Example 3

# **Activity**

01 Frame Your Design Challenge



# How to Frame a Design Challenge

Properly framing a design challenge is critical to human-centered design and key to your success. Scope a challenge that's too broad and it'll be hard to know where to start, but pose one that's too narrow and your solution may not achieve the intended impact.

This piece of the human-centered design process is more art than science, but if you keep a few key things in mind while you're exploring the possibilities, we're confident you'll find a design challenge that's just right!

# Dissecting a Design Challenge

At IDEO.org, we always frame our design challenges as questions. Not only does phrasing our work as a question put us in the mindset of arriving at impactful solutions, but it also helps us generate as many ideas as possible along the way.

# Scoping a Design Challenge

This process is more art than science, but we're going to break it down for you, show you what a good design question looks like, and help you refine the problem you see into an inspiring and thought-provoking opportunity to design a better world.

### Too Narrow or Too Broad?

But there's a real trick to turning a problem in need of a solution into an opportunity for design. Ask your team to solve too broad a question and you won't know where to start. Ask them too narrow a question, and you risk stifling creativity. So as we scope each new project, we frame our design question with some key factors in mind.





### WHAT TO KEEP IN MIND

- A. Is the question focused on ultimate impact?
- B. Does the question allow for a variety of solutions?
- C. Does the question take into account context and constraints?

### **Design Challenge** Example



# How Might We Help Teens In Lusaka Take Control Of Their Reproductive Health?

A sexual health non-profit with clinics all over the world engaged IDEO.org for an initial 14-week project to help achieve a variety of goals in Lusaka, Zambia. They wanted to make youth more proactive about their sexual health. This included preventing unwanted pregnancies, quelling the spread of STIs, and reducing the stigma and prevailing myths around contraception.

# **Ask The Right Question**

#### TOO BROAD

# How might we end unwanted pregnancy?

This question is massive, and though it does allow for a huge variety of solutions, how do you know where to start? With parents, teens, teachers, the public health system? Too broad.

### JUST/RIGHT

# How might we help teens in Lusaka take control of their reproductive health?

# **TOO NARROW**

# How might we get Zambian teens to use condoms?

This one is too narrow because it focuses on one type of contraception. What if IUDs, the pill, or abstinence are actually better more effective solutions for Zambian teens? Too narrow.



# HERE'S WHY THE QUESTION SATISFIES OUR CRITERIA

# A. Is the question focused on ultimate impact?

Yes. The question is framed around a clearly stated end goal, helping teens take control of their reproductive health. A key element of the question is that it does not specify how the impact will occur, which brings us to our next criteria.

# B. Does the question allow for a variety of solutions?

Yes. Possible solutions might include a communications campaign, a service experience, a mobile tool, a physical space, or even an interaction. Because the organization has clinics, staff, and local know-how, we know that we could execute a variety of different solutions. Understanding what your partners can do brings us to our next criteria.

# C. Does the question take into account context and constraints?

Yes. We know immediately who we are designing for, teens in Lusaka. We also know about the organization's capacity-because they work across the sexual health field, they could implement a number of potential solutions.

### **Design Challenge** Example

# How Might We Design a Better Way to Plant Teff in Ethiopia?

Teff is a vastly important grain in Ethiopia, but its seeds are miniscule and it's been planted in the same way for thousands of years. In a yearlong project, IDEO.org was engaged to figure out how to plant teff efficiently and quickly while taking into account different soil types and terrain. The brief also told us that we'd have to design a method that was inexpensive, easy to use, and could be built and repaired in Ethiopia.

# **Ask The Right Question**

		///////////////////////////////////////	
 //TOO BROAD	///JUST/RIC	\$HX\////////////////////////////////////	TOO NARROW
	//////////////////////////////////////	///////////////////////////////////////	

# How might we help Ethiopians grow more food?

This question is too big to figure out what to design. You may as well reinvent the weather. Too broad.

How might we design a better way to plant teff in Ethiopia?

How might we design a plastic, solar-powered teff planter for under \$15?

An idea like this one might be an avenue to consider, but it rules out too many other possible solutions. Too narrow.



# HERE'S WHY THE QUESTION SATISFIES OUR CRITERIA

# A. Is the question focused on ultimate impact?

Yes. The project is focused on one crop and in one place, and we're doing it to improve farmers' livelihoods.

# B. Does the question allow for a variety of solutions?

Yes. The question doesn't suggest a particular way of planting teff. Though we suspected that we'd design a planting device, we could also have designed a behavior change campaign, or a new planting strategy for extension workers to teach.

# C. Does the question take into account context and constraints?

Yes. Knowing that we had to design for the whole of Ethiopia meant that we'd need to contend with hard earth as well as mud. Knowing that designing around small seed size was important, as well as understanding the constraints of building and working in

### **Design Challenge** Example



# How Might We Encourage Good Financial Habits Among Underserved Youth In Chicago?

For this project, IDEO.org had six weeks to design a tool to support the work of a Chicago-based nonprofit working to educate low-income teens around financial literacy. Though the program had success in the classroom, they wanted a digital tool that would reinforce their teachings when students were out in the world.

# **Ask The Right Question**

#### TOO BROAD

# How might we get lowincome teens in Chicago to save money?

It's a nice idea, but this question doesn't build off of the work of our partner. The aim here is to support their classroom teachings, not to reinvent their program.

# JUST/RIGHT

# How might we encourage good financial habits among underserved youth in Chicago?

### **TOO NARROW**

# How might we design an app to get teens to sign up for a bank account?

By focusing on just one financial habit, this is too specific. Though saving may be part of the solution, focusing on just one action limits how you might encourage a wider set of behaviors.



# HERE'S WHY THE QUESTION SATISFIES OUR CRITERIA

# A. Is the question focused on ultimate impact?

Yes. The question clearly states that the goal is to build good financial habits among a particular group of people in a particular place.

# B. Does the question allow for a variety of solutions?

Yes. We could have designed a website, an app, a game, or even a social network, all of which could encourage good habits. And the tool itself could focus on a variety of behaviors like saving, applying for credit, budgeting, and more.

# C. Does the question take into account context and constraints?

Yes. Right away we knew we were working with low-income teens in Chicago. We also knew that the tool has to be digital and support students when they're out of the classroom. We wanted to be able to use the tool within the next six months, so we had to be able to build it quickly.

# Frame Your Design Challenge

I want people to care more about sustainability issues, so that we can together have a positive impact and 'save the world'. Or I want to remove barriers to the engagement that already exists. Or I want to increase empathy across borders of time, space and species, so that people make better choices for the whole world. Or I want young people to feel like they can make a difference in the world, and give them the tools to do it.

1) Take a stab at framing it as a design question.

How might we increase engagement for sustainability issues amongst Uppsala students? (and staff?) How might we remove barriers to engagement for sustainability issues amongst Uppsala students?

two quite different questions...

2) Now state the ultimate impact you're trying to have.

Increase engagement amongst Uppsala students for sustainability + make them feel like it matters, so that they will have a positive impact on society (and feel they are doing something meaningful?)

3) What are some possible solutions to your problem?

Think broadly. It's fine to start a project with a hunch or two, but make sure you allow for surprising outcomes.

competitions, making it part of the curriculum, connecting it to Nation culture, to the party culture make a musical, organize trips to the wilderness, clarify opportunities to get involved in student politics, make an app, write a collective book, do massive art pieces,

4) Finally, write down some of the context and constraints that you're facing.

Τ	hey could b	be geographic, i	technological,	, time-base	d, or have	to do wit	h the popu	lation you	re trying t	to reach.
	/	0 0 1 ,			,				,	

Uppsala students...?

5) Does your original question need a tweak? Try it again.

kinda boring...