This is a guide for selecting, framing, and communicating the intentions of a design project.

A design approach can be inserted into many junctures of almost any project. For example, iteration and making low-resolution prototypes is useful in nearly any work you do. Speaking to people for whom you are designing is never a bad idea. Start your practice by using design techniques in your current projects when they are useful.

When you are ready to take on a complete exploratory project using design, this guide is for you. It discusses what challenges are best suited for human-centered design, and how to scope and frame design projects. We hope you find it to be useful.

Written by Thomas Both, building on the work of many at the d.school. Particular thanks to Perry Klebahn, Nadia Roumani, and Gigi Gormley Kalaher for input on this guide.
How to start to use design?

The most important thing is to take action
A fundamental tenet of human-centered design is to do. Start using design by starting to do design. Integrate new behaviors and mindsets into your work, before feeling you need to formally “launch” your (or your organization’s) design practice.

Declaring you and your team will be using a design approach can help bring intentionality to the way you work, and give permission to people to try on new behaviors. However, the declaration must be paired (or even preceded) by meaningful action.

Use pieces of design before doing a “full project”
You may have learned human-centered design as a process with a series of methods, but you can use elements of design piecemeal. Get going without waiting for the “right” time or “right” project. Talk to a customer/stakeholder. Set up your space to facilitate a different way of working. Jump into a brainstorm. Synthesize information visually to build towards insights. Make a quick prototype and show it someone. Integrate design methods like these into your work everyday.

Once you have some success there, then you may want to take it up a notch and launch a design thinking project.

Do it yourself, before telling others to do it
Use design yourself on real work before managing others’ design work. Once you get your and your team’s practice in, then involve more people.

If you are a teacher, the same applies to you. How are you using this approach yourself to design the class experience, as well as asking students to try it?

Hey, want to start?
One place to start is to talk to people (like customers or stakeholders). Take some time to reach a level of deep understanding by listening to stories and getting into emotions.

A second thing to do right away is to make a prototype. Take 30 minutes or a couple hours (not days) to create a tangible prototype that you can show someone. Your goal should be to test your assumptions and thinking (not validate a solution).

For some guidance, take a look at the “Interview for Empathy” or “Prototype to Test” pages of the Stanford d.school Bootcamp Bootleg: dbootleg.stanford.edu
What should I use design for?

Use design for human, subjective challenges

A human-centered design approach helps you excel in understanding how people think and act, and use that understanding to bring new clarity to the challenge by reframing it. The value of this is only relevant in problems that have to do with people. These problems are inherently subjective.

If there is a universal right answer to your question – independent of individuals, circumstance, and culture – then you don’t have a design challenge.

That said, a human challenge need not be a consumer or “end beneficiary” project. Just think about the people involved in your challenge and work to understand them (these could be your clients, partners, stakeholders, suppliers, fellow employees, etc.).

Use design for discovery

Design can be used for diverse work, but it is most easily adopted for the discovery phase of a project: when you are still seeking the meaningful problem to work on, or the right solution to pursue. So when you select a project for a design approach, choose one in its early stages or one you want to really shake up.

Go for a project of exploration rather than optimization, for a first design project.

Use design to question assumptions

Often, you will have experience in the challenge space, and you may have a (type of) solution, technology, or response in mind. In this case, use design as an intentional approach to testing your ideas, and the underlining assumptions in your thinking.

Are these human, subjective challenges?

Optimizing a turbine –
No. This is an engineering problem.

Creating a better vaccination process –
Yes. Patients, doctors, pharmacists, etc. are all human elements in this system.

Developing a higher efficacy vaccine –
No and yes. Medical science would be one approach to this challenge. At the same time, the effectiveness of a vaccine is determined by many human factors as well as the vaccine itself. Design has a role there.

Making a supply chain more efficient –
Maybe. Are there benefits to be gained by understanding the people involved in the design chain and their behavior? Then this could be a good design challenge.

Redesigning a website –
Yes, but . . . reframe it. Take a step back from the layout and coding of the website, and ask yourself what experience you trying to create for people. Then understanding your users becomes important, and design methodology becomes more useful.
What first projects, as I’m still learning?

To start, take on a product or service challenge

Select a project that you can imagine being satisfactorily solved with singular products, services, experiences, or campaigns.

The test for this is to ask yourself if the essence of solutions could be communicated in a single concept. If you imagine solutions to the challenge would require a blueprint, strategy, report, or list of principles to sufficiently communicate the basic idea, then it is likely a difficult challenge for novice design thinkers.

While design can certainly be used for more complex and systems-level issues, you may be well served to take on one distinct piece of a larger challenge to start your design practice. Doing a more narrowly focused project will increase traction and likely will benefit the larger challenge at hand.

Pick a project that is important but that has space for experimentation

Take on a project that has real consequence; one in which successes and failures matter. It has to matter enough for you to care to get it right. But you should also choose a project with more room for experimentation and rough patches. For example, maybe the project has lower direct financial risk, but has a high upside if you get it right. Choose one in which you won’t negatively impact vulnerable populations if you make some mistakes. Perhaps it is a hard problem no one else wanted – thus the upside of a win is huge, but there is also more tolerance for speed bumps. The unwanted problem may also be ripe for a new approach.

A difficult first project (strategy-level):
Design the new community center for teens
is not possible to solve with a single event or offering. It may seem like a fun challenge with a relatively simple objective, but good solutions would likely contain principles for activities and curriculum and/or blueprints for the space. This level of abstraction and sophistication may not make for a good first design challenge.

That said, challenges can be scoped to a more manageable level, such as —

Better (more manageable):
Design a first day of our after-school program for new sixth graders or Redesign the activity space in the community center for teens open up many possibilities – but you can imagine singular events or physical things that would address the challenge. (In this case, having the physical building space dictated would be a hugely helpful constraint.)

Another example of difficult challenge (systems-level):
Redesign philanthropy for Muslim donors
has similar difficulties. A singular event or service likely will not suffice. This challenge demands a strategy at best, if not a multi-stakeholder coordination and collaboration. This is a difficult first project.

In this case, you might scope it down by focusing on an element of a philanthropic journey and/or designing with/for a particular group.
What first projects, as I’m still learning?

Choose a project focused on end-users (the people that will use what you create)

Designing ‘things’ that people to ‘use’ is the simplest version design. Designing things to help people create for, sell to, or serve others, often raises the level of complexity. For a first project, even if your direct customers/stakeholders are not the end users, you might still consider focusing on those end users.

Do real work

While some internal projects can be a great low-pressure place to start with design, make sure you still work on something that matters — and you treat it that way.

Avoid the broadly-scoped make-our-work-better projects like “Design more delight and satisfaction into our day at the office.” These projects tend not to have teeth. Particularly avoid internal projects for which you have no intention or plan to implement results.

Beware of high-level managerial mandates rebranded as design projects.

If you want a lighter internal project create an engaging, tightly-scoped challenge for which you plan to implement results.

Designing internal processes can be good projects, particularly when there is a meaningful need to address, or when tied to a better customer or client experience.

Work with implications in mind

Particularly if working with vulnerable populations, consider the (worst-case) outcomes for those affected by the work; then mitigate those risks, and set proper expectations for the work. If you are still very new to your design practice, consider working on other projects first, and/or seek guidance and collaboration with those who are of or have long-term relationships with those you aim to design for/with.
Who to involve in the work and how?

Work with a diverse group of collaborators

Design benefits from diverse perspectives. The success of developed solutions depends on both understanding of and buy-in from stakeholders. As such, structure the team and work to include different perspectives. Importantly, ask yourself how those most affected by the work have a voice in it?

Create different configurations of “team”

Create different layers of collaborators that gather at different times and frequency. This allows for both agility and inclusion in the process. Include stakeholders (including “users” and “end beneficiaries”) in the framing, process and decision making.

Acknowledge people as whole and capable

You may aim to create something useful and beneficial to others. In that endeavor, be conscious see those you design for and with as whole and capable people — not people, groups, or demographics to be “fixed” or “saved” by your work. This is both respectful and puts you in the best position to make an impact with the design work.

Here’s one way to think of different formations of the team:

- The core team (small group responsible for progress of the work)
- An extended team (additional internal or external stakeholders for important for implementation)
- Wider stakeholders/beneficiaries/customers (people affected by the work)

Note these groups overlap with each other. All these people need to be included with real voice in the work. In some projects, most of the work and decisions might be held by the core team; in other projects, it would be important that the wider stakeholders hold the power, and be involved in all stages of work and decisions.
How to prepare yourself for the work?

Inform yourself on the challenge and context

Inform yourself before you engage in, or in tandem with, the first-hand work of design (such as interviews, observations, or prototyping). Read relevant secondary research and study available quantitative data. Learn about the issues at hand and gain understanding about the state of the art/moment — what can you learn from what has come before in your context as well as other places/contexts? Investigate the historical context that underlies the challenge at hand. This is particularly important for equitable and effective work on systemic issues — to see beyond the symptoms of deeper problem.

Consider power, privilege, and identity at play

Going into the work, do some awareness work: How might your experiences, biases, and identities impact what you see and how you interpret it? You can do this as self-reflection (writing, e.g.) or through discussion in a team. With that awareness in mind, how can you engage with people (customers, stakeholders, etc.) with respect, and to best gain understanding and insight. What power dynamics might be at play as you interview someone or test a prototype? What precautions might you take to avoid a distressing or invasive experience for stakeholders/interviewees?

Doing this awareness work also presents an opportunity to assess what other collaborators might complement your perspective, and seek them out.
How should I scope a design challenge?

In general, constrain the challenge space, broaden the solution space

Typical instinct is to dictate the solution but leave the users and context ambiguous. Flip that.

Scope a project by giving bounds to the area to explore, not by dictating the solution space. Create design challenges that contain intriguing issues to learn more about. Think about redesigning experiences (verbs) not solutions (nouns).

**Constrain the challenge space**

A narrow framing of the challenge space (the playing field) is usually desirable, if done without dictating the solution or need. A narrow framing makes the project actionable, and allows the team to deeply understand one aspect of people’s lives. This may be counter-intuitive: powerful insights result from constraining the project space. The trick is to have a open mindset on that narrow area (and allow yourself to break the constraint if you find a fruitful opportunity outside of the original framing).

Don’t do this:

“We need a new website” dictates the solution, but gives zero direction for whom, for what purpose, and what experience.

All these are potential valid project scopes. The narrower scopes will help teams know where to focus and may prompt stronger insights and novel solutions. The broader scopes may yield a wider range of discoveries:

- Redesign the experience of caring for one’s home for . . .
- Redesign the home cleaning experience for . . .
- Redesign the kitchen cleaning experience for . . .
- Redesign the post-dinner cleaning in home kitchens for . . .

Also note that the scope of these are quite varied, yet none dictate the solution or user need.
How should I scope a design challenge?

Broaden the solution space

An open design challenge is one where neither the solution nor the form of the solution is known at the beginning. The solution could be a physical product, a new interface, an improved service offering, a new marketing message, a new space, a new policy, etc.

While all organizations and projects have constraints that dictate viable forms of solutions, err on the side of inviting varied solution possibilities. Consider that the assumed form of solution may not be the only or best one to achieve your goal.

Even if you do know the form of the final solution (you know you are creating a physical tool for cleaning, e.g.) it is still valuable to frame and approach the challenge as “figure out how to redesign people’s experience of . . .” rather than “make a better . . . product.” It puts you in a more human and discovery mindset.

Often organizations hold unstated assumptions. Consider if you need to explicitly remove those (implied) assumptions when you start the project.

Avoid embedding assumptions of people’s needs

In the same way you should avoid presuming the solution, watch out for presuming people’s needs to address (unless you have identified those needs through rigorous work/consideration). Frame the challenge to allow room to discover the human needs (the specific issues to take on) you could not have thought of before you engaged with the challenge.

Scope for action

Create challenges that are meaningful and engaging for your team. Take on a challenge with enough depth (not breadth) that you would likely surface compelling new information by speaking to, engaging with, and observing people.

For example, at your company the outcome of the Redesign the kitchen cleaning experience project may be assumed to be some sort of physical device or consumable product. But could it be a new training service, new storage products, or a website to help consumers select a product?

It may be worth considering these possibilities – both because of their own potential, and for the power of how they inform your more “expected” solutions.

Good:
Redesign the kitchen cleaning experience for . . .

Bad:
Redesign a better mop for . . .

Still limiting:
Redesign a better cleaning tool for . . .

Good:
Design a better kitchen cleaning experience for . . .

Here, the need may be too dictated:
Create ways to make kitchen cleaning take less time for . . .

Note that the former gives a specific area, but doesn’t dictate the problem to fix, whereas the latter assumes the experience is bad because it takes too long – which may or may not be the most meaningful issue for people.
A tool: Five elements to frame a challenge

Consider and articulate these five elements of your design challenge to frame the work:

**What**

What's the challenge space? What human experience are you trying to affect? (Not the solution to design.)

**For whom**

For/with what group of people are you designing? Our tendency is to want to broaden this as much as possible (“All our customers” or “Teachers”); it can be much more fruitful to narrow your focus with a specific user group. Even if you want to affect a broad group, scope your work by choosing a place to start (“New members of the Hillsdale location gym” or “Math teachers at Lincoln Elementary”).

**Context**

What are the important facts that are known, or insights already gained that set context and explain the challenge at hand and why it matters?

**Goals**

What are the explicit goals of the design team. This can be straightforward: “Bring a meaningful viable offering to market.” It can be more nuanced or short-term: “Get ten people to opt into . . .” or “Understand deeply the existing needs and beliefs of . . .”

**The crux**

When it comes down to it, what are you trying to figure out? Why are you employing an exploratory process? What’s not already known? This ‘crux’ could be an assumption you need to test [“X must be true (about our users) for this to work. Is it?”] or an unknown to explore [“How do people experience Y? What do people believe about Z? What are the factors that affect people (in this realm)?”].

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<table>
<thead>
<tr>
<th>What:</th>
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<tbody>
<tr>
<td>Create ways to human action .</td>
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<tr>
<td>or</td>
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<tr>
<td>Redesign the human experience . experience.</td>
</tr>
<tr>
<td>Both of these are intended to frame efforts in terms of what you are doing for people (not the thing you are creating).</td>
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<tr>
<th>For whom:</th>
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<tr>
<td>For user group ; (while considering other stakeholders ).</td>
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<tr>
<td>The second phrase (‘other stakeholders’) is optional but is an opportunity to acknowledge other important players.</td>
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<thead>
<tr>
<th>Context:</th>
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<tbody>
<tr>
<td>In a world where context .</td>
</tr>
<tr>
<td>or</td>
</tr>
<tr>
<td>Keeping in mind context .</td>
</tr>
<tr>
<td>Avoid presuming the needs of people here, unless you have findings to support this stance. Often facts of the situation paint a good contextual picture. For example, “This group orders take-out on average 3 times a week.” instead of “People hate cooking.”</td>
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<tr>
<th>Goals:</th>
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<tr>
<td>We aim to outcome (in the project / in this project phase).</td>
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<table>
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<tr>
<th>The crux:</th>
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<tbody>
<tr>
<td>We really need to figure out question/assumption .</td>
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</table>
A tool: Five elements to frame a challenge

Each element is a lever

Notice that each of the five elements is a lever that can drastically change the challenge scope (both the topic and how broad or narrow). Your goal is to bound the playing field in a specific way but leave room for discovery.

This is the art of scoping here. You need to create an actionable direction but also leave room for discovery and exploration. In the most open innovation work, you don’t know what solution or even what type of solution (event, campaign, service, product, digital platform . . .) will be most effective. The goal is not to eliminate ambiguity. Ambiguity is necessary to allow for new discovery. However, how you frame a challenge will affect how much ambiguity exists, and how much exploration will happen.

Another way to think about it: Scoping will happen. It will happen either prior to the project or during the project. It may be more efficient to narrow the scope prior (save time by preventing wide investigation); but it may be more effective to narrow the scope during the project (allow a human-centered process to lead you to the most meaningful and fruitful opportunity).

Scope both the challenge space and for the design team

The first three elements describe the challenge space to be explored (focused on the user experience). In cases where you are framing a project for others (like student projects), these three may be enough to outline the challenge. (In fact, it may be better if the receiving team articulated the last two themselves.)

The last two elements describe the design team’s considerations: what are we trying to get done, and where do we need to check ourselves? For real world projects, these elements are important to agree upon and state as a team, and potentially with a larger group of stakeholders.

As an example, focusing on the first three elements, consider the framing:

*Redesign the SPORTS AND FITNESS experience for THE SERIOUS HIGH-SCHOOL ATHLETE in a world where THESE USERS ARE BEYOND CONSUMER-LEVEL GOODS BUT ARE NOT YET PROS*

and note the difference in scope by adjusting one part:

*Redesign the ATHLETIC SHOE BUYING experience for THE SERIOUS HIGH-SCHOOL ATHLETE in a world where THESE USERS ARE BEYOND CONSUMER-LEVEL GOODS BUT ARE NOT YET PROS*

and again:

*Redesign the ATHLETIC SHOE BUYING experience for THE SERIOUS HIGH-SCHOOL ATHLETE in a world where THESE USERS ARE BEYOND CONSUMER-LEVEL GOODS BUT ARE NOT YET PROS*

and changing the context:

*Redesign the ATHLETIC SHOE BUYING experience for YOUNG FEMALE ATHLETES in a world where EXERCISE IS INCREASINGLY GOING BACK OUTSIDE*

(Note: this framing embeds the assertion that supporting outside exercise is a fruitful direction. If you have findings that support this, great; just be aware of assumptions you’re imposing and do so with intentionality. You might also call this out in the ‘assumption’ part.)
Work it now

With the scoping guidelines in mind, use this five elements to create a challenge framing. Create five sentences, and adjust them to iterate the framing. Play and adjust each blank and notice how the scope changes. Use Post-its if it helps you write possibilities more uninhibitedly. Tweak the scaffolding sentences (the phrases given below) if needed.

**WHAT**

Create ways to ________

or

Redesign the ________ experience.

**FOR WHOM**

For ________;

(while considering ________).

**CONTEXT**

In a world where ________.

or

Keeping in mind ________.

**GOALS**

We aim to ________

(in the project/phase).

**THE CRUX**

We really need to figure out ________.
Work it now

Two examples of challenge framings are shown here.

<table>
<thead>
<tr>
<th>EXAMPLE ONE</th>
<th>EXAMPLE TWO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Redesign the</strong> in-store sunglasses <strong>buying experience.</strong></td>
<td><strong>Create ways to</strong> encourage residents of our city to register to vote.</td>
</tr>
<tr>
<td>For fashion-conscious women who update their style often; (while considering) sales clerks and what part they might play.</td>
<td>For those who are disengaged from the political process (likely have never registered to vote before) but involved in the community.</td>
</tr>
<tr>
<td><strong>Keeping in mind</strong> we’ve learned that physically trying on the glasses (an advantage over online buying) is hugely important to people.</td>
<td>In a world where we hear residents say they don’t feel connected to any candidates.</td>
</tr>
<tr>
<td><strong>We aim to</strong> create new interactions, campaigns and/or space for buying glasses in our stores. By the end of this project we want to implement one solution in one of our stores.</td>
<td><strong>We aim to</strong> test a number of solutions, and attempt to register at least 2,000 people in the three-month project.</td>
</tr>
<tr>
<td><strong>We really need to figure out</strong> whether customers currently have trouble deciding on the right style of glasses (and if that deters purchases).</td>
<td><strong>We really need to figure out</strong> if people care about issues but don’t connect those to voting (and if true, why).</td>
</tr>
</tbody>
</table>
How to communicate a design challenge?

Guide the team by intentionally communicating the project framing

How you frame and communicate a challenge is pivotal to how folks take on the work. Explicitly stating the challenge, with an intentional frame, sets the stage for all the work to follow. It is an opportunity to set the playing field, get everyone on the same page, and get people excited about working on the project.

The five-elements tool on the previous page is a way to work out the scope of a project, but you may want to rewrite this in a more engaging and clear way.

Use the language of those you are communicating with

To communicate the project and explain the process and approach, usually the best language to use is that which your team/org./stakeholders already use. In particular, be thoughtful about using the language (jargon) of design; it may not be needed or called for. Make design work for your team, instead having your team work to adopt a “new” design approach and language. Over time, language may shift toward terms used in design for the sake of clarity and nuance.

Plan to iterate the scope during the project

In this exploratory work, you should expect the scope and direction of the project to shift — as you discover things you couldn’t predict. Set that expectation up front with your team and stakeholders, so trust is retained through those changes.

For example:

Redesign the food purchase and eating experience. For poor, urban residents of Windward neighborhood. In a world where cost, access, and education affect choice. We aim to create and prototype intervention options (campaigns, products, engagements) and pilot one in the Fall. We really need to figure out if the cost of healthy food is the primary barrier to better eating.

could become:

Design ways to improve nutritional health of low-income residents of Windward. Engage members of the community to understand issues around cost, access, and nutritional awareness. Our assumption is that cost is the primary barrier to better eating for these individuals and families; what are the true barriers? In this phase we plan to create and prototype intervention options in collaboration with community members, working toward choosing one or more to pilot by the Fall.
A PROJECT FRAMING CHECKLIST

Typically, all these should be true (for your first projects):

☐ You tried on some behaviors (like empathy and rapid prototyping) on a current project before launching a new one.

☐ Project is a human, subjective challenge (understanding people is key to the project success).

☐ Project is geared toward discovery (not optimization).

☐ Challenge can be solved with a product, service, or event, not a strategy or system (for your first project).

☐ Those most affected by the work are acknowledged as actors with agency, not simply receivers of outcomes.

☐ Framing doesn’t embed a solution.

☐ Framing doesn’t (unintentionally) assume the form of the solution.

☐ Framing doesn’t (unintentionally) presume people’s needs.

☐ Goal of the project work is clear without dictating the specific solution outcome.

☐ You and your team actually care about this challenge (If not, why are you doing it?)