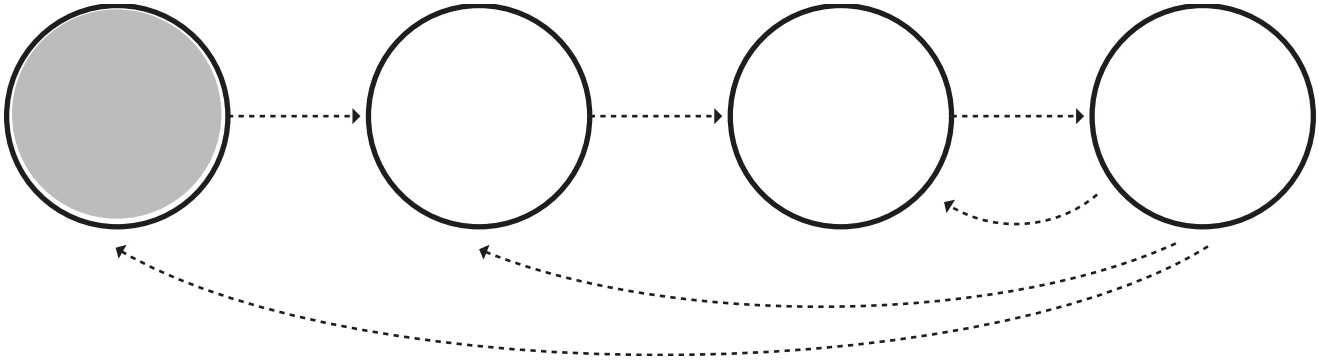
HUMAN-CENTERED DESIGN (HCD) DISCOVERY STAGE OPERATIONS GUIDE



PLEASE PRINT THIS GUIDE

The Ops Guide is meant to be written in, stapled to, shoved in your bag, and covered in notes. We designed it to be used in the field, so we look forward to seeing your ideas, your research, and your analysis written all over it. A few coffee mug rings and doodles wouldn't upset anyone, either.

How the Ops Guide Gives Direction

Throughout this Operations Guide, the authors have elected to speak to a generalized “you”. However, the use of “you” should not be interpreted as a directive to one person. “You” in English can mean a single person, but it can also mean a group of people or a team. It is to teams that we are speaking throughout this Guide.

A team-based approach is central to the Human-Centered Design process. By crowd-sourcing our knowledge and understanding through teams, we get to best answers for problem identification, directed research, open-minded review, and open-minded conclusion-making. Therefore, please read “you” as “you all, the team”, throughout the Guide. We used the simple “you” form as a convenience to avoid wordiness.

How to Use This Guide

- [ ] Make sure you have a copy of The Lab Human-Centered Design Discovery Stage Field Guide. They are companions and must be used together.
- [ ] Get an empty, three ring binder.
- [ ] Print this Ops Guide on blank, new, letter-sized paper.
- [ ] Use a three hole punch or a single hole punch and punch holes at each place you see the black, filled in circles.
    - You'll notice the black circles are sometimes on the left side of the page, and sometimes on the right: this is so that when you print the pages on a basic printer, punch the circles, and put the pages in your binder, they will come out facing each other and in the proper page order. You will create a book in your binder, with pages that face one another.
- [ ] Use the blank sides of the pages throughout your project for additional note-taking space.

Purpose of This Guide

This *Human-Centered Design (HCD) Discovery Stage Operations Guide* is a companion to the *Human-Centered Design Discovery Stage Field Guide*. The latter provides the Why of the HCD project and illustrative case studies, while the former, this Operations Guide (Ops Guide), acts as the workbook and archive of an HCD Discovery project.

The Ops Guides' format allows project managers, project leads, researchers, team members, and leadership to contribute to institutional knowledge through building an accurate and detailed record of a project's process. As Discovery provides a format for agencies and departments to continuously pursue a better, more nuanced understanding of people's experiences, it is crucial that we systematize and archive the knowledge so that these institutions can build upon it in the future.

By listening to those we serve, HCD as a project cycle allows agencies and departments to create new and evaluate current programs. This moves the organizations towards the goal of improving service, both in terms of understanding how people would like to receive services from their government as well as providing a nuanced perspective of any quantitative data that has been collected and requires interpretation.

Table of Contents

How to Read & Use This Guide 2-3

Purpose of This Guide 4

Discovery Cycle: High Level Concepts 6-7

Discovery Cycle Timeline 8-9

Framing 10-21

Team Building 22-31

Get Buy-In 32-33

Planning 1.....34-47

Recruit.....48 - 51

Planning 2.....52-55

Research.....56-73

Synthesis: Insights.....74-81

Synthesis: Opportunities 82-87

Communications & Deliverables 88-93

Thanks & Acknowledgments..... 94

Glossary 96-97

Additional Notes 98

Blank Consent Form 99

Get Started: Project Brief

The project brief is the initial ask, expressed interest, or situation to study. This can come from leadership, one of your partners, or from your own experience or inquiry. Read more about framing on pages 10-11 of the Introductory HCD Discovery Guide and page 8 of this Operations Guide.

Get Started: Create a frame of inquiry

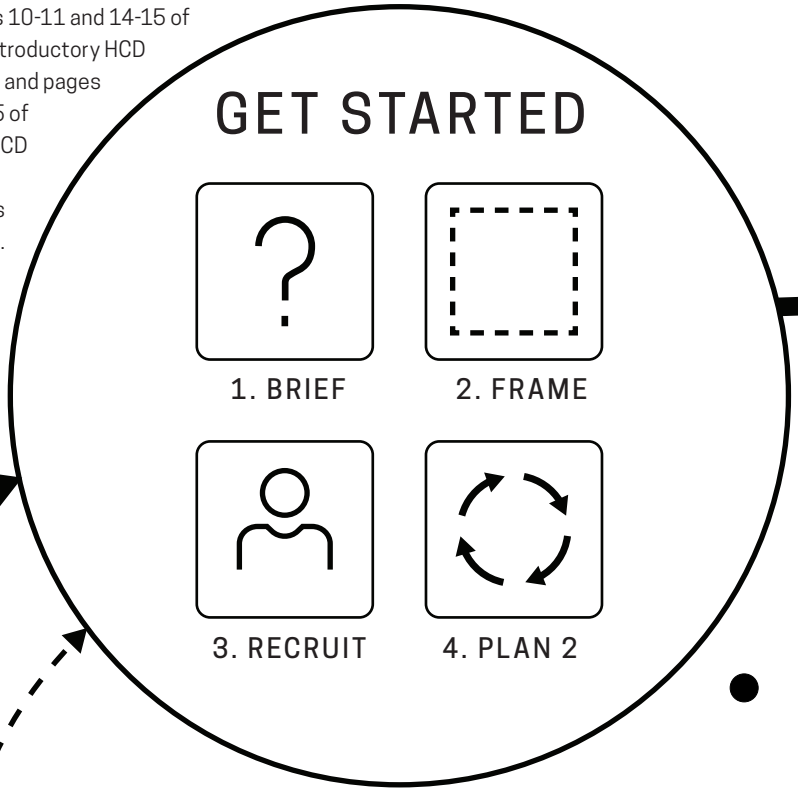
A frame of inquiry identifies and frames the issue or the situation you are exploring. Read more about framing on pages 10-11 of the Introductory HCD Discovery Guide and page 8-19 of this Operations Guide.

Get Started: Recruit research participants

Work within your network (both inside and outside of your agency) to find participants who fit your brief's needs. Look closely for participants whose life circumstances and experiences align with your frame of inquiry. Read more about recruiting on pages 12-13 of the Introductory HCD Discovery Guide and pages 48 - 51 of this HCD Discovery Operations Guide.

Get Started: Planning 2, the Final Details

Why is there a Plan 2 and not a Plan 1? Planning 1 informs the Framing process; it is a first pass at project tactics that informs project strategy. Read about it on pages 36-49. Planning 2 is final tactics details. Read about Planning 2 on pages 10-11 and 14-15 of the introductory HCD Guide and pages 52-55 of this HCD Operations Guide.



START

REFRAME

Reframe *(if needed)*

Often, after your first round of research and synthesis, you realize how much you didn't know about what you didn't know. Though it may not feel like progress, it is. Sometimes, at this stage, you also decide to adjust your Project Statement to one that more accurately captures your findings in this initial phase of research. You may also decide to engage in additional rounds of research.

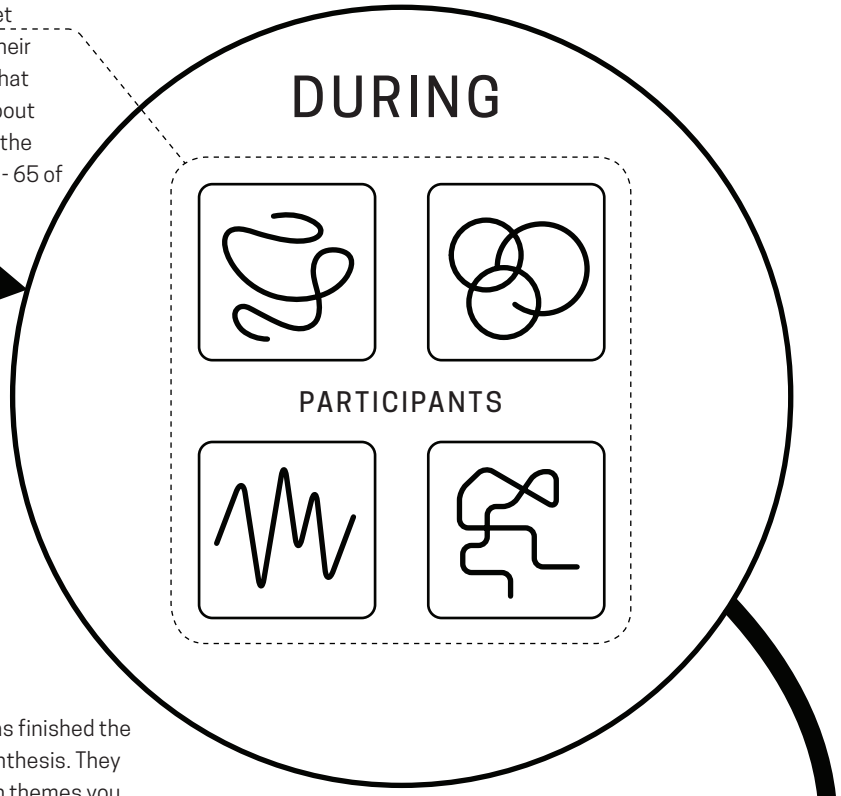
DESIGN PHASE

Once your team has completed the research, synthesized the results, presented them, and have support to move forward, then the next step in the Human Centered Design process is Design.

Discovery Cycle

During: Do the research

As the participants move through your frame of inquiry in their own way, remember that however they perceive or interpret your problem frame is a reflection of their experience, and it is that experience that you want to understand. Read more about doing the research on pages 16-19 of the Introductory HCD Guide and pages 56 - 65 of this HCD Operations Guide.

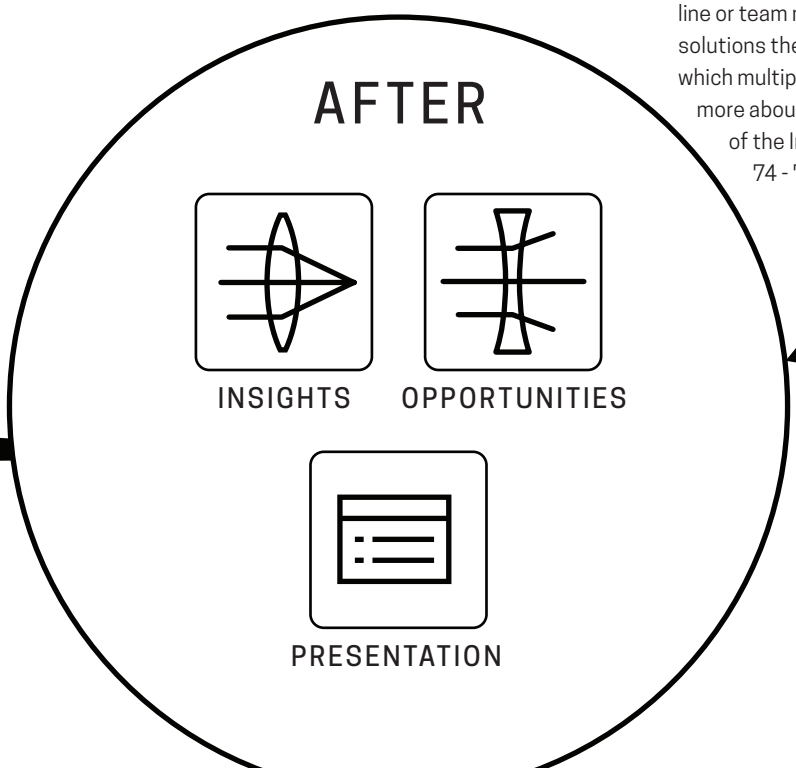


After: Synthesis, Insights

Synthesis happens after your team has finished the interviews. Insights emerge during synthesis. They can be broadly defined as the common themes you see across your research. Read more about Synthesis, Insights on pages 20-23 of the Introductory HCD Guide and pages 66 - 73 of this HCD Operations Guide.

After: Synthesis, Opportunities

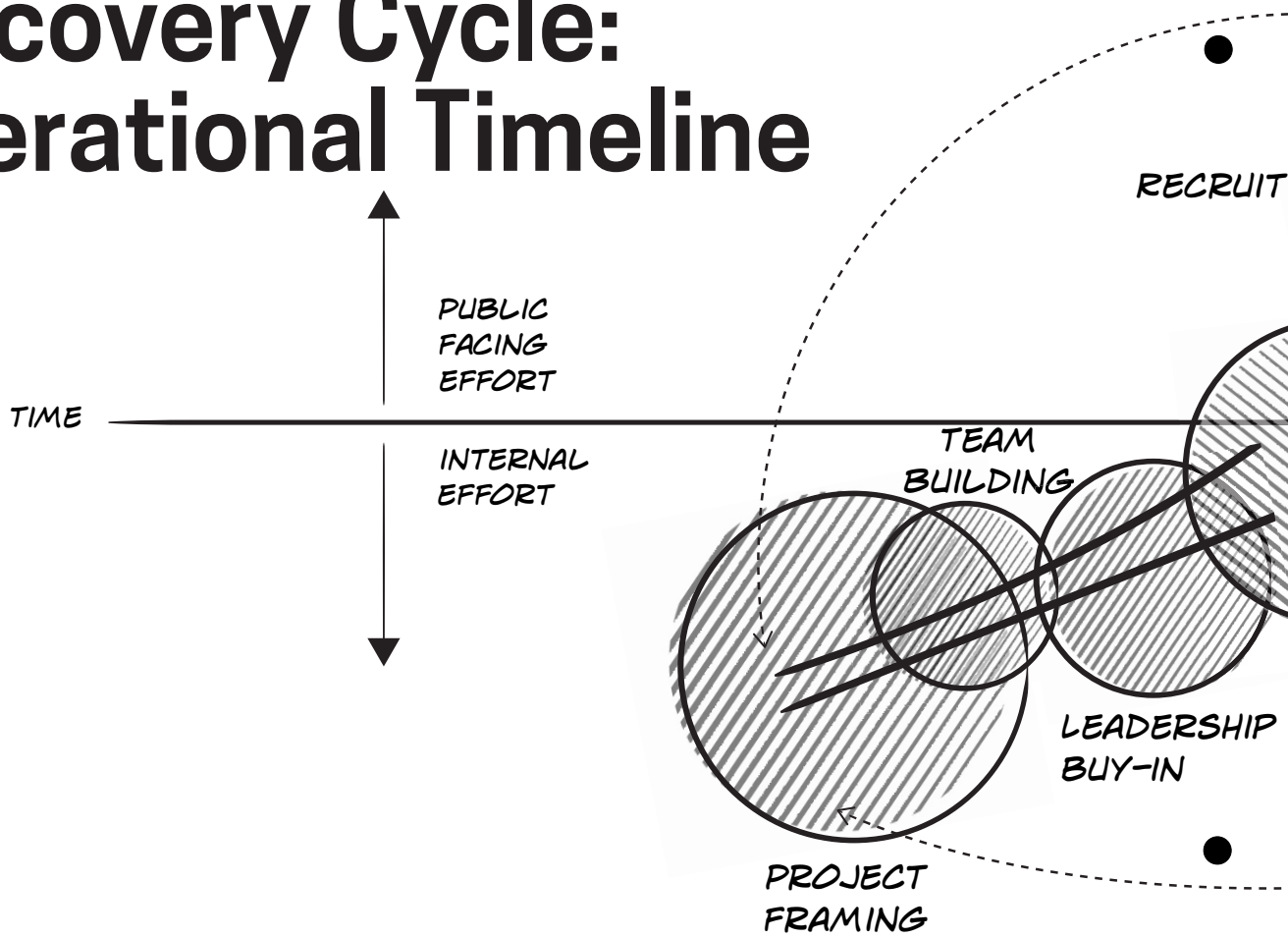
Fields of Opportunity are surfaced by looking at your insights through the lens of your business line or team mission. Opportunities are not solutions themselves but are wide spaces in which multiple solutions probably exist. Read more about Opportunities on pages 24-25 of the Introductory HCD Guide and pages 74 - 77 of this HCD Operations Guide.



After: Presenting Findings

Now is the time to communicate your findings to stakeholders and leadership. Know your audience and tailor your presentation accordingly. Read more about presenting on pages 26-27 of the Introductory HCD Guide and pages 80 - 85 of this HCD Operations Guide.

Discovery Cycle: Operational Timeline



Steps in the Cycle Overlap

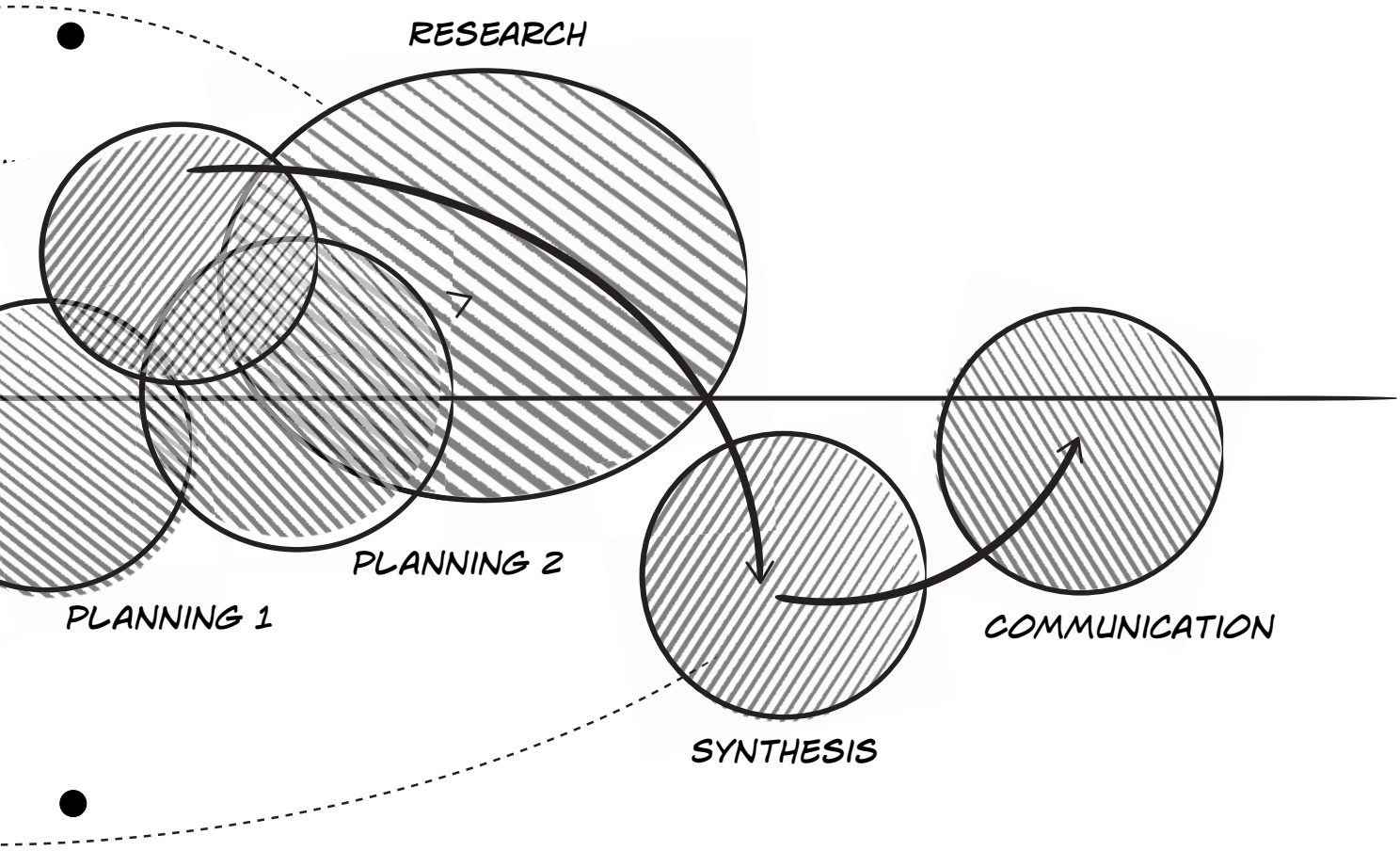
Once the Discovery Cycle from the previous page is placed onto a time-line, you can see how the HCD process requires many operational steps, some of which overlap in time. This means that you and your team cannot work individually without coordination or looking to the next step, nor can you try to accomplish one step before starting another.

This visualization illustrates how each step of a Human-Centered Design Discovery project differs in three basic ways: (1) the amount of time a step might take to complete; (2) the amount of internal, team, or individual work versus external, organizational, or public work it will require; and (3) the level of coordination and overlap between steps that you and your team can expect.

Project Framing is a deeply internal step. Sometimes Leadership will be deeply invested during Project Framing; if not, update them and get sign-off on the project frame once you have articulated it.

Simultaneous to finishing Project Framing and starting high-level logistics planning in Planning 1, build your team. It's important to have a well-rounded team bringing complementary skills.

Leadership Buy-In is a second touch to leadership to ensure the final go-ahead for your project. Details regarding manpower and travel should get clearance in this phase.



Planning 2 means logistics; it can be stressful as it runs partially in tandem to Recruiting and sometimes Research, which are both external-facing. Making public your project can cause anxiety, but if you have it well-framed and are willing and able to discuss your work clearly and succinctly, people will be interested.

Planning 2 means finalizing details. Inevitably when working with many people and their competing schedules, it's essential to keep both a detailed and a bird's-eye view on both the overall project schedule and your team members' schedules.

Immediately after Research wraps up, Synthesis, begins. Expect Synthesis to be deep mental work. This is one of the most difficult and tiring parts of the project, but this is where you will see your research come together in patterns. Ensure that you do not lose the momentum of research by scheduling the Synthesis sessions for as few days as possible after the end of the Research phase.

Communication

Communication is where you take your discoveries to your stakeholders. This is a crucial piece of the project. If you do not communicate well, then your research, and all your work, could be lost. Be sure to prepare, practice, and follow up on your presentations. Your work deserves it.

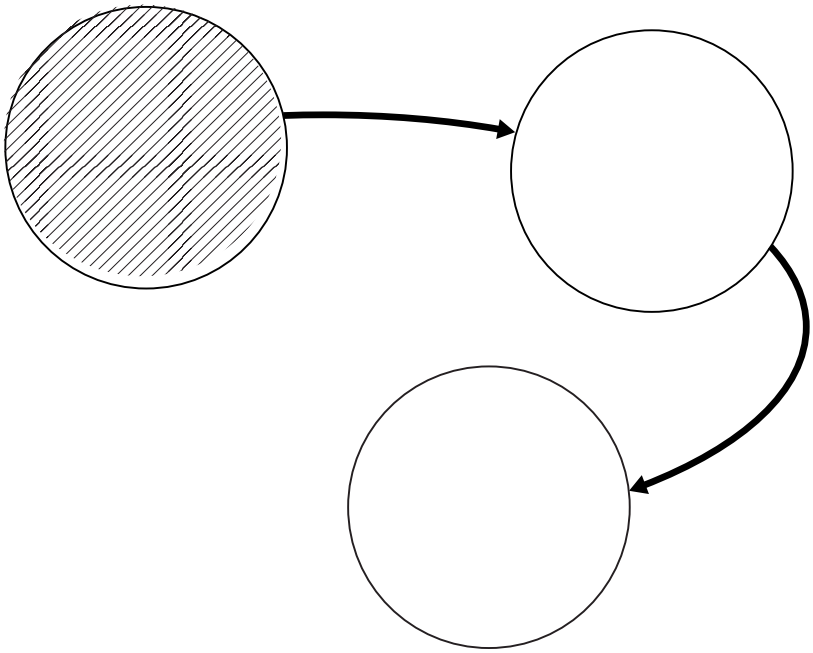
Framing

GETTING STARTED

Our frame of reference largely defines our ideas of what is possible. For this reason, creating new solutions and contributing value to systems and organizations is often a function of reframing our perception of a problem or situation. When we think narrowly, in reference to the well-established, or only in terms of functional outcomes that could address a problem, we limit our ability to generate forward-thinking solutions. Framing and reframing helps us see more options.

Framing isn't something that design made up; it's a critical sensibility that you can apply across you life. For example, puns are reframes of a word or phrase: the author takes the primary or expected meaning of a word and changes the context to create a comedic effect. As in, "Thanks for explaining the word "many" to me, it means a lot." More seriously, in recent years the healthcare industry has reframed medical treatment to include prevention as well as intervention. Medical providers used to define care narrowly as a reaction to a specific event, such as a resetting a broken arm in an elderly patient. Now, they define healthcare as including the prevention of osteoporosis so the arm won't break in the first place.

This chapter will help you step through constructing a frame that is wide enough to create new solutions, but narrow enough to be realistic about constraints such as skills, personnel, time, and budget. As a rule of thumb, err towards a narrow frame in which you could produce thorough work over a larger frame that you might struggle to produce or implement.



CHECKLIST

- [ ] Read the HCD Discovery Stage Field Guide pages 10 - 11.
- [ ] Identify your Leadership and Project Leads.
- [ ] Speak in detail with leadership to understand their project brief or the problem they would like to research
- [ ] Produce a Problem Frame Statement based on detailed conversations with leadership and / or stakeholders.
- [ ] Receive acknowledgment and confirmation of that your Problem Frame Statement from leadership and / or stakeholders.
- [ ] Investigate prior research in this area through traditional journals and publications both online and in VA archives.
- [ ] Determine the project scale / scope.

Start with what's there

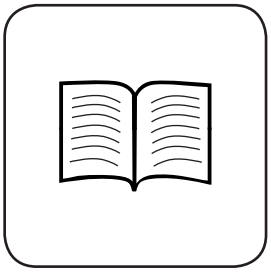
Where to start has to be one of the hardest questions to ask yourself when interested in a problem. Depending on the type of project, you'll need to look into all or some of the listed research types in order to know what's been done before and to focus in on where you can do new research and how to frame that research. This process is often called the Literature Review or Benchmarking.

Knowing what others have already discovered means you can contribute new, original thought to a knowledge base.

It essentially means doing traditional desk-based research to find out what others have discovered in the field you're investigating. This desk research should also include finding research that supports or does not support items that you might already know or think you know about the subject.

This process both informs and gives direction to your work. If you know where others have been, you can build off of their work. In building off previous work, you contribute to the overall knowledge in this topic through your original research.

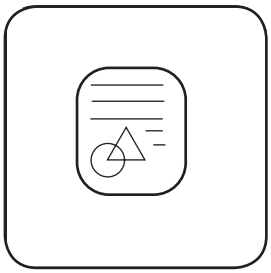
Academic Research



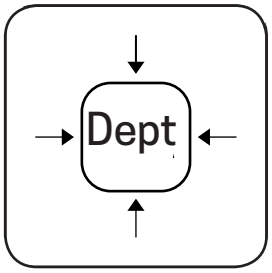
Find out what people have already done in your topic area: use search engines like Google Scholar or Academia.edu and publications like the Harvard Business Review, the Stanford Social Innovation Review, and the MIT Technology Review to find projects related to your subject. Read the abstracts of articles that sound interesting, then check those papers' bibliographies to find additional articles and works.

Statistical Research

Statistical research can help you properly frame your area of interest. Looking up historical statistics will allow you to understand if your problem frame should widen out or focus in. Remember to always evaluate the source of your data so as to maintain data hygiene and fidelity. Data hygiene refers to the quality of the data collection and interpretation. Data fidelity refers to the precision with with the data has been recorded. If you see data collection or interpretation you think is illogical or messy, move forward and find better data on which to base your work.



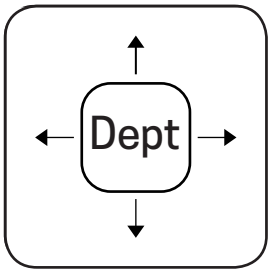
Internal Research



If your project addresses or extends a program or set of programs already underway in your organization, look them up to see what's already being done. Ask the program leaders, review their documents, and, if possible, observe the working group and their activities in the field. This process will help you frame your approach appropriately so to avoid work duplication and increase to your contribution to work already in process.

External Research

External benchmarking means seeking out and studying existing programs outside of your organization. Look at all sectors to find them: private, non-profit, academic, or even other parts of the public sector. Through learning what others are developing, you will be able to frame your project in a way that builds on this work. Additionally, by notifying others of your work, you will contribute to the community of knowledge on your subject.



NOTE YOUR RESEARCH SOURCES

Use the entry in this section to record your first research source. When you fill these two entries and need more space, write down the same information about your other sources on the the blank pages of this Guide or on scrap paper. Tape, staple, or three hole punch any scrap paper into this book.

REFERENCE #:

Title:

Author(s):
Name of Publication:

Published on web / print / radio / other:
Date of publication:

Notes on text; people, and / or articles cited:

REFERENCE #:

Title:

Author(s):
Name of Publication:

Published on web / print / radio / other:
Date of publication:

Notes on text; people, and / or articles cited:

Keeping track of research sources means you can quickly and easily find content that you would like to reference or cite in a final report or communication to others.

Use the space in this section to break down or build up your proposed project until you arrive at a balanced, feasible project for you and your team. If you need to, use scrap paper first. But record your process of breaking down or building out your project in this section of the Guide, so that you can follow your logic later.

You might find yourself in need of reframing through the course of the project. See the HCD Discovery Stage diagram in the HCD Guide, pages 8-9 or this Ops Guide, pages 6-7.

Conceptual

Too big to be feasible!

If a project is highly conceptual or abstract, think about its component parts, breaking it down until you arrive at the middle line.

Proper Framing

Feasible!

Managable for your team, and true to the intent of the project brief.

Tactical

Too narrow for original research!

Build this project out towards the center line. What do the specifics in the brief actually talk about, at a high or thematic level?

This process aids in finding a level of engagement appropriate to you and your team, give your time, resources, and position in the organization.

Articulating the project frame clearly is one of the most important set ups to a successful project. Whether your project originates from your own work or from a project brief from your leadership, it is essential to be able to answer each of the questions in this section before moving on to the next phase of development. As you answer these questions, **speak** your answers so you can hear them. Get a teammate to sit in and **get feedback** on your answers. **Ensure** that your answers are **precise, coherent and in plain language**. This process of phrasing and rephrasing can help you articulate precisely so you can communicate your idea to others.

Who

My audience for this project is:

What

I am trying to understand:

Why

This is a problem because:

Project Goal

To find out how we might:

Knowing Who, What, Why, and the Goal allows you to talk clearly about your project. These are the bases of your project statement and your elevator pitch.

PROJECT FRAME STATEMENT: HOW MIGHT WE?

Referencing the work done in the past two sections, try writing your project frame statement. Use the blank pages in this Guide or scrap paper to write down versions, then, when you feel confident in your framing, write the final version in this section. As you move through the project, refer back to this statement at times when you feel uncertain of your focus, there have been many different viewpoints coming in, or you feel that you simply need a refresher on the purpose of the project. Feeling a bit lost in the course of research is normal. By writing down the proper Problem Frame Statement, you define boundaries.

PROJECT FRAME STATEMENT: HOW MIGHT WE...

DATE

Recording your process in these pages has multiple benefits. The first is as a reference to you and your team. The second is that it is a ready-made project update for your leadership. And the third is that it acts as a history of your project, so that others can follow and build on your work in the future.

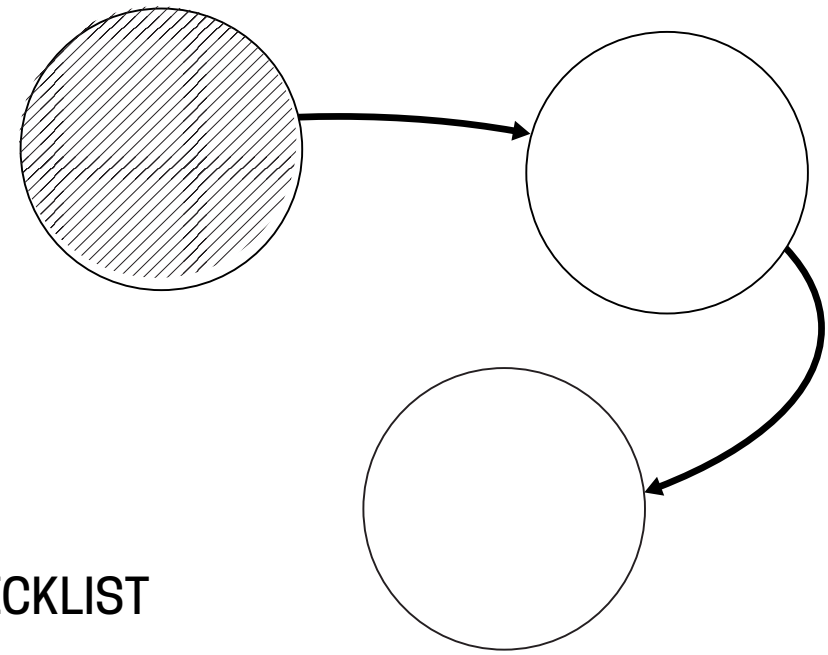
Team Building

Why spend time and care in building a core team?

First, spend more time than you might think necessary in getting to know who is on the team (if it is a new team) and on crafting and assigning roles and responsibilities. How well a team works together will have a notable affect on the success of the project. Refer to the Team Roles Descriptions on pages 26-27 and the Team Roles by Project Phase on pages 28-29) for detailed guidance on the skills you might need on your team.

Many roles have overlapping features. For example, both a Recruiter and a Researcher need to be comfortable speaking with strangers, but under different circumstances: a Recruiter needs to understand the nuance of a cold call, how to explain the project quickly, and "sell" the project. But a Researcher needs to be able to slow down a conversation, use silence, and talk about the project without explicitly framing it and directing their interview subject.

It is also important to know that each role will have its time to be at the forefront of the project, and then that role will need to recede as the next phase comes to the fore. The Research Lead does not need to micromanage the Recruiter, just as the Logistics Coordinator does not interrupt the Project Lead during a presentation to Leadership or Stakeholders.



CHECKLIST

- [ ] Create a list of available, potential teammates.
- [ ] Read through the Team Role Descriptions, pages 26-27.
- [ ] Identify potential Researchers.
- [ ] Identify potential Recruiter(s).
- [ ] Identify potential Researchers.
- [ ] Identify a potential Local Contact.
- [ ] Ask each identified person to join the team and acquire sign-on from each.
- [ ] Share the team map with all teammates in order to ensure that everyone knows their role and the roles of the others.

Team Role Descriptions

These are general descriptions of each team members' responsibilities. Treat these as guidelines, not absolutes.

Research Lead

1. Requirement: HCD-trained: Lab | OPM, IDEO, or the Luma Institute are all examples of places that offer HCD training.
2. Liaisons with Leadership and Stakeholders.
3. Leads interviews and/ or observations.
4. Guides post-interview downloading sessions, daily synthesis and weekly synthesis.
5. Communicates with Leadership and Stakeholders.
6. Relays these communications back to team.

Notes:
On a large project, there may be more than one Research Lead due to specialty knowledge or geographic location. In these cases, the Research Leads are responsible for organizing themselves into a functional unit that can communicate with each other fluidly and flex around changes in the project.

Researchers

1. Requirement: HCD trained or in direct oversight by an HCD-trained team member.
2. Lead interviews and/ or observations.
3. Actively participate in post-interview, daily, and weekly synthesis sessions.

Notes:
On any project, Researchers may wear multiple hats. A Researcher may be the Recruiter or the Logistics Coordinator, or they may be the Local VE person. Each Researcher is responsible for conducting HCD interviews and observations to the best of their ability. Researchers should always be prepared to act as the Notetaker in interviews that they do not lead.

Recruiter

1. Manages and follows up with potential participants and sources of participants.
2. Works with the Local Contact.
3. Presents participant options to team, noting possible times for research sessions.
4. Works with the Logistics Coordinator to book time for interviews, site visits, team travel, and time and sites for synthesis sessions.

Notes:
This person needs to be outgoing in personality and meticulous in detail. They will need to be comfortable making cold calls and following up with people multiple times.

Local Contact

1. Works with the Recruiter to find the local people whose work or community position means that they will most likely be able to inform the research project frame.
2. Helps the Recruiter gather references.
3. Tracks down local leads when the Recruiter cannot.
4. Scouts and secures synthesis sites that make sense in terms of size of the team, necessary all-day privacy, and distance from team members' residences or hotels.

Logistics Coordinator

1. Owns the calendar: responsible for gathering all calendar updates as Recruiter and other team members report interview subject, interview, and travel changes.
2. Chooses a hotel for the full team to stay.
3. Secures synthesis space for weekly synthesis sessions at the hotel or VAMC.
4. Identifies transportation options for the team.
5. Plans for and coordinates the printing of consent forms and any other required documents for field work. Purchases supplies and tools needed before travel. See Supplies List for more detail.
6. Ensures that all team(s) have required supplies.

Team Roles by Project Phase

Problem Framing

Research Lead(s)

- Involved in conceptualization of problem framing and articulation at the earliest stage.
- Has a management responsibility over the project.
- If this is a large-scale project with multiple research teams, the Project Lead should be someone with management training.
- Trained in Human Centered Design research.

Leadership

- Not always involved in Project Framing since projects coming from the grassroots or laterally in an organization will not touch Leadership at the earliest level.
- In projects that do come from the leadership level, Leadership may actually give a project brief to the Project Lead.
- If they give the Lead a brief, Leadership should be deeply involved in the project-framing process.
- Involved in conceptualization of problem framing and articulation at the earliest stage.
- Agrees to actively lend their sponsorship and support to this research project.
- Works at their level in the hierarchy to ensure consensus and knowledge amongst their peers as well as any partner organization(s).

Leadership Buy-In

Research Lead(s)

- If Leadership was not involved in the primary project framing for any reason, the Project Lead(s) are responsible for communicating the value of the project to Leadership or others in similar positions as necessary to gain support and sponsorship for the project.
- If Leadership was involved in framing part way through, and then became disengaged, the Project Lead(s) are responsible for informing Leadership on the frame and the logic behind that frame.

Potential or Signed-On Team Members

- Responsible for helping the Project Lead(s) sell the project to Leadership.
- Responsible for helping the Project Lead(s) define the team by reading the HCD and HCD Op Guide in order to sort themselves into preferred project roles. Follow up by communicating those decisions to the Project Lead(s).

Local Contact

- Local contact may be defined as a geographic local contact, a subject matter local contact, or as the representative of a local group.
- The decision on whether or not the project needs to have a local contact should be decided at this point. If the answer is affirmative, the Project Lead(s) and Team Members should begin the process of identifying the type of local contact needed as well as recruiting the Local Contact.

Team Building

Research Lead(s)

- Responsible for hearing preferred roles of potential team members and managing the distribution of efforts.
- Role assignment should be tailored to the potential team members' soft and hard skills. People will do a better job if they have a natural and/or learned affinity with their role.

Potential Team Members

- Responsible for taking on some role(s) that are not their preferred role. An ability to be flexible is a valued trait in Human-Centered Design research.
- Team roles will change as the project progresses. For example, one team member might start as the Recruiter and then move into the Logistics Coordinator role.

Local Contact

- "Local" can be defined geographically, in terms of subject, or in terms of membership in group.
- This person also needs to brief their local leadership that they would like to be involved.
- This person can be from inside or outside VEO, depending on the location and people or groups necessary to the project.

Recruiting Participants

Recruiter

- Manages recruiting sources; follows-up on leads.
- Works with the Local Contact.
- Presents potential participant options to team and identifies timing.
- Works with the Local Contact to book identify local leadership and book on-site briefing.

Local contact

- Works with the Recruiter to find the local people whose at-work or in-community position means that they will be able to inform the project frame.
- Helps the Recruiter gather references for potential participants or sources of participants.
- Tracks down local leads when the Recruiter cannot do that from a distance or for any other reason.
- Scouts and secures synthesis sites that make sense in terms of size of the team, necessary all-day privacy, and distance from team members' residences or hotels.

Team Roles by Project Phase

Overview Planning

Logistics Coordinator

- Owns the calendar. Is responsible for gathering all calendar updates as Recruiter and other team members report interview subject, interview schedule, and travel changes.
- Chooses a hotel for the full team to stay in and relays selection to the team so each can book their travel appropriately.
- Secures daily and weekly synthesis session site(s) at the hotel or VAMC.
- Identifies transportation options for the team (public transit, car rentals, taxi, carpooling).
- Plans for and coordinates the document printing while in the field.
- Purchases necessary supplies.

Local Contact

- Works with both Recruitment and Logistics Coordinator to ensure local details.
- Conducts pre-visit observation (recon) to evaluate interview location options.
- Sets time for briefing once team is on site.
- Coordinates with unions and other required parties prior to site visit.
- Communicates any needs from local power structures, such as local leadership, unions, or bureaucracies, to the Project Lead before the team assembles on site.

Research

Research Lead(s)

- Requirement: HCD trained.
- Research Lead can also be the Project Lead
- Leads interviews and/or observations .
- Coordinates with the Project Lead (if different), Logistics Coordinator, and Local Contact in days immediately preceding interview(s) to track schedule, location, or subject shifts.
- Guides post-interview downloading sessions, daily synthesis and week synthesis meetings.

Researchers

- Requirement: HCD trained.
- All core team members should act as researchers.
- Lead interviews and/or observations.
- Guide post-interview downloading sesssion.
- Communicates broad strokes of interviews with Project Lead if working in multiple groups.

Note-taker

- Takes notes during interview.
- Observes area & person for interesting things.
- Transcribes notes into digital format.
- Files notes in project folder.
- Transcribes notes into digital format.
- Files notes and photos in project folder.

Synthesis

Research Lead(s)

- Leads team through finding Insights and Opportunities during main Synthesis sessions after the end of all the interviews.
- Takes pictures of Insights and Opportunities.
- Responsible for ensuring that all Insights and Opportunities speak to, lead back to, or operate within the Project Frame.
- Actively participates in Synthesis by providing ideas, defending positions, writing agreed upon ideas and themes on sticky notes on the wall or board in the room.
- Communicates the outcomes from the Synthesis session(s) to Project Lead and / or Leadership.

Researchers

- Physically in the room during Synthesis session(s).
- Participate as an equal team member in synthesis session and analysis.
- Actively engage as equals to Leads and all other team positions during Synthesis session by providing ideas, defending positions, writing agreed upon ideas and themes on sticky notes on the wall or board in the room.

Communicating Findings / Deliverables

Research Lead(s)

- Deliverables should be defined during Planning 1. Deliverables are the items that Leadership and/or Stakeholders want to see at the end of research. Read more about Deliverables on pages 42-49.
- Presents and / or communicates deliverables to Leadership and Stakeholders.
- Coordinates the production, review, delivery, and communication of products that come out of the research round, if any.
- Ensures that all benchmarking, background and ancillary research, interview notes and photographs, deliverables, and recommendations are organized in an approved location.

Researchers

- Supports the communication of Findings and Deliverables to Leadership and Stakeholders.
- Present findings when asked by Project Lead or when is appropriate.

Use the entry on the facing page as a model for creating your team's role assignment lists. This is the basic information that needs to be recorded for each team member who signs on to your project. Note this information for other members either in the blank parts of this page, on the back of the book, or on scrap sheets that you can tape, staple, or three-hole punch into this book.

The basic roles you must assign are **Leadership, Project Lead, Researcher(s), Recruiter, and Logistics Coordinator.**

TEAM MEMBER INFO CARD:

Who (name & title):

Contact info (phone / email / social media):

Start Date:

Notes on availability, location, etc:

Even if you work closely with your teammates on a regular basis, having the team's names and contact information will allow you to quickly access each other as the project progresses.

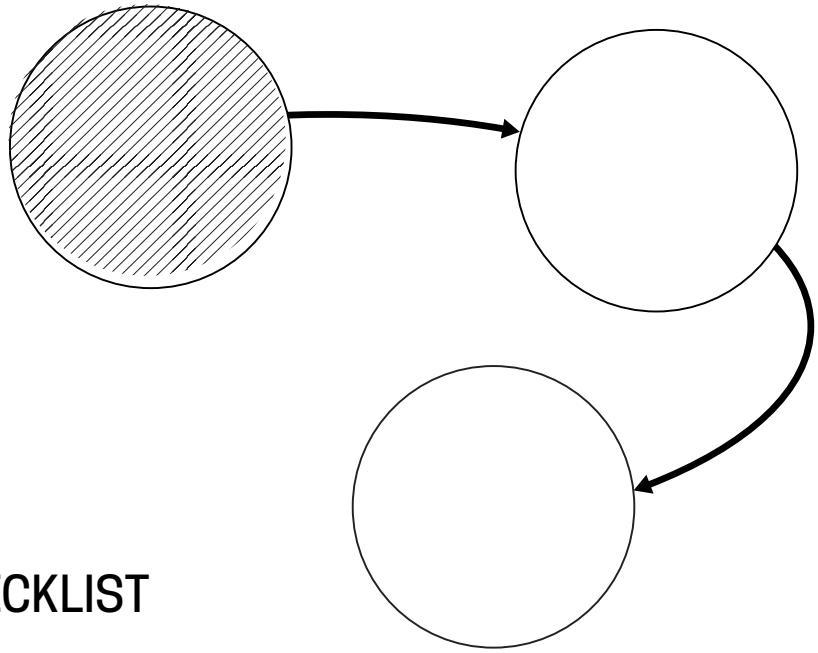
3

Get Buy-In

Why get Leadership buy-in?

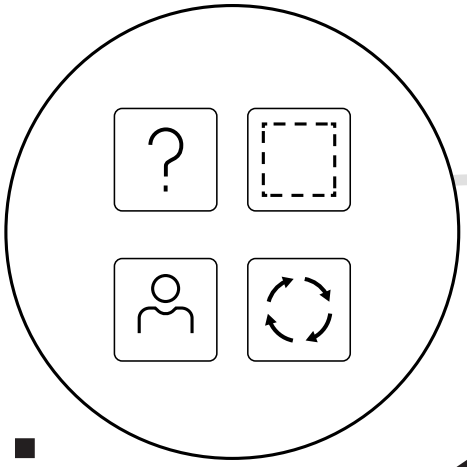
Your Leadership may already know that you've been working on this project: they either gave you the Project Brief, and / or they should have been involved in the early framing of the project itself. Now that you have further refinement to the Project Frame, details as per potential locations, project scope, and solid thoughts on your team, it is the time to check in with them again to validate their support and involvement before proceeding into the active recruiting stage.

This part of the project involves "selling" your project idea. This means putting together a compelling argument for why you and your team should be allowed to proceed with your work. To put together this argument, be sure show the leadership how your work will benefit them and / or their organization. You can frame this as the projected **Return on Investment (ROI)**, if that is helpful. Concentrate on communicating your project frame and reasoning behind it, but also include details like estimates of how many personnel are needed, plus the amount or percentage of their time they'll spend on the project. In addition, provide a projected timeline, as in, "We expect this work to take 6 - 8 weeks." Don't pin yourself down; instead, offer ballparks on all of these details. This will allow Leadership to adjust their expectations for you and your team's workload on other projects and, also, when to expect updates on this project.



CHECKLIST

- [ ] Put together a persuasive argument (the pitch) for why your project should be allowed to proceed. You can do this through creating a project write up, a project deck, or a spreadsheet showing data that initially drove your project frame.
- [ ] Include your Project Frame and state up front what the project will do for Leadership and / or their organization.
- [ ] Schedule time with Leadership to walk them through your argument.
- [ ] Practice your project pitch multiple times before walking into the presentation to Leadership.



Moving into:

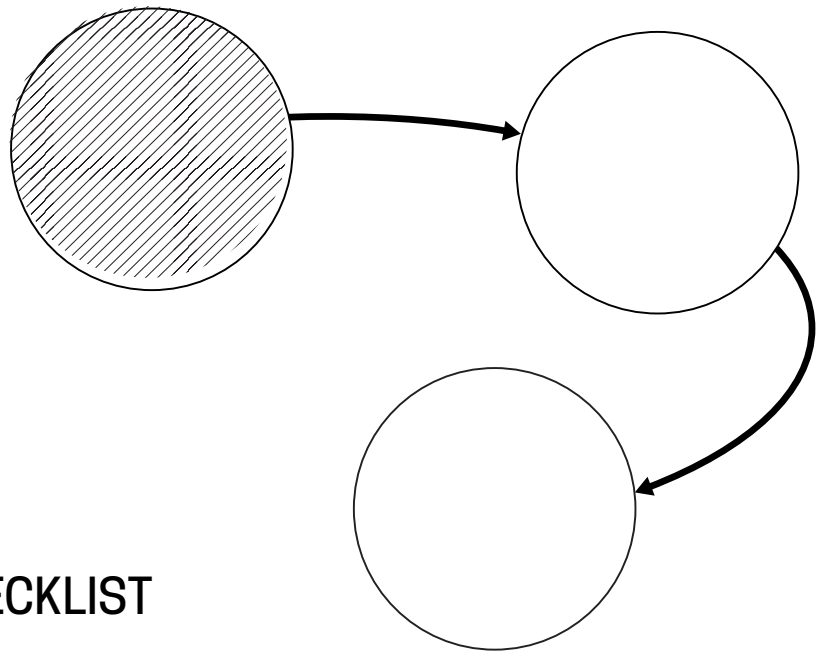
Planning 1

What's overview planning?

Build in time to get through it but don't let the time limit you. A high-level timeline is necessary to drive recruitment and keep leadership informed. Use the calendar on the facing page to outline the weeks you want to spend recruiting, the weeks you want to spend traveling to and performing interviews and observations, and the weeks you'll spend in synthesis. Budget in time to make and present to leadership to keep them informed on your project. Keep your timeline as tight as possible.

Assumedly, you will use a digital calendar to track your schedule, but it's a good starting point to jot a messy, loose one down by hand. A great place to start is with a white board calendar posted in the office. Changes can be made quickly, but teammates won't be overwhelmed by constant digital updates before those updates are really necessary.

An example of this high-level calendar type is provided on the following page. Do not try to enter all the details of every day at this point, even in a digital version; just rough out the activities that should happen in the course of a week, and don't get bogged down in daily details. Print and use the calendar template on the following pages if it is useful to you.



CHECKLIST

- [ ] Create high-level timeline by week. Use a digital or written calendar to do this. See an example and calendar template on the following pages.
- [ ] Meet with team as group to vocalize roles and discuss high-level timeline.
- [ ] Explain to team that this timeline is tentative; items will change as interview times shift.
- [ ] Ensure that Recruiter knows the timeline for recruitment, is comfortable with it, and is poised to start work as soon as possible.
- [ ] Ensure that Logistics Coordinator knows the site type and Local Contact, if required and is poised to start work roughing out a team and travel schedule as soon as interviews start being scheduled.
- [ ] Give Researchers access to the early research you have done so that they can review while the logistics come together.

Use a messy, easily updated calendar for planning. Tape, staple, or three-hole punch a printed version into this book so you can go back and see how you scheduled yourself later. Block days or weeks out in general, then go back and add details as schedules start to come together. The Logistics Coordinator should own this calendar while the project is in-flight, but remember: change your calendar schedule before you ask the participant to change their schedule.

Deadlines can also shift. If there are interesting research opportunities to be had, communicate them to your Leadership and try to get a project extension. Living and dying by arbitrary deadlines will not deliver best possible final product.

Sample calendar

month _____ project name _____ start date _____ end date _____

S	M	T	W	R	F	S
	Planning 1!				Update Leadership	
	Academic Research: read articles					

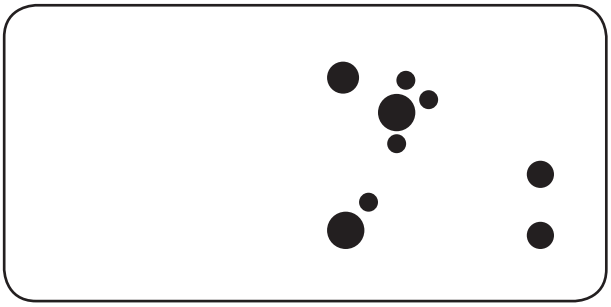
Understanding Site Types

Identifying site types also contributes to your understanding of your project as a whole. Are you working inside a single institution? If so, think about what that means for this stage of your project; do you think you might need to investigate other locations in order to round out your research work, or does the single location fulfill the needs of the project. If you are traveling to many sites, what does that mean for your project? Do you need to visit all these sites in order to have a well-rounded, throughly researched project, or could you edit down your sites a bit and keep the project tighter and more precise? You must be honest with yourself and your goals when evaluating your site type in light of the project needs. Visiting the right kind and number of sites means strong, focused, yet in-depth work; visiting too few or too many sites can either limit you and the team or spread you too thin.

Identifying site types also contributes to your understanding of your project as a whole.

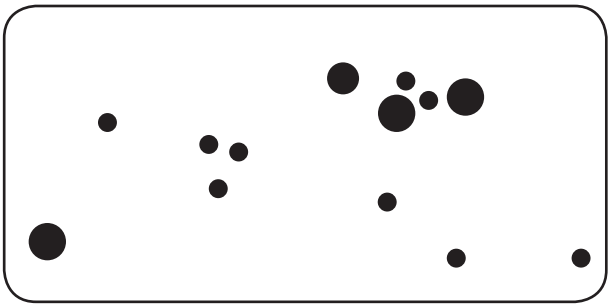
Centralized, Small

If you'll conduct all your research within the a single site, like a medical center. Transit times between interview locations should be manageable, as they are all within a single or a few closely located buildings. One team of 2-3 people will suffice for research at a centralized site.



Multi-Campus

Many sites may be large and campus-like. Transit times between interview locations need to be planned and can take 30-45 minutes walking, or driving is necessary and parking may be an issue. For this size site visit, consider a site team size of 4+ people to allow for 2 teams of 2-3 people to conduct simultaneous research.



De-centralized

This type of site is actually a collection of unrelated locations. You'll encounter this site type when projects include groups both inside and outside VA. For example, if the project studies suicide preventative outreach programs in rural counties in the State of New York, then you will need to visit not only the VAMCs and CBOCs serving that area, but also State, private, and charitable organizations' suicide prevention offices. Transit times between interview locations need to be carefully planned and can take over an hour, or even a few hours, considering drive time and parking. For this site type, consider a site team 4+ people to allow for 2 teams of 2-3 people to conduct simultaneous research.

Determine Project Scale

Project Scale / Scope and Problem Frame have a lot to do with one another. The naming can also be confusing because Project Frame can also be called Project Scope. In this Op Guide, we will keep the Frame / Scope separate from Scale by referring to the project's conceptual constraints as the Project Frame, and the operations and logistical constraints as the Project Scale.

Avoid "scope creep": the unwanted growth of a project from precise and feasibly executed to unwieldy and lacking focus.

Broadly, you can think of the difference through these questions:

Problem frame answers what and why: What are you studying? And why? What is your reasoning for this study? Problem Scale answers how and where: How will you study your problem? Where will you execute that study?

This guide uses four elements to help you determine Project Scale: number of teammates, number and type of stakeholders, number of locations, and number and type of deliverables required by the project. These are not the only elements to use when evaluating your project's scale, but they are useful ones.

Use your best judgment to weight the importance of these items when first determining your scale / scope. Always try to keep the scale as small as possible, as it will help you stay inside your Problem Frame.

Resist the urge to include on the team everyone who seems to be related to the project. You can keep people informed of how the project is going without inviting them into the core research or stakeholder teams. Identifying site types also contributes to your understanding of your project as a whole. Are you working inside a single institution? If so, what does that mean for this stage of your project; do you think you might need to investigate other locations to round out your research, or does the single location fulfill the needs of the project? If you are traveling to many sites, what does that mean? Do you need to visit all these sites in order to have a well-rounded, throughly researched project, or could you edit down and keep the project tighter and more precise?

You must be honest with yourself and your goals when evaluating your site type in light of the project needs. Visiting the right kind and number of sites means strong, focused, yet in-depth work; visiting too few or too many sites can either limit you and the team or spread you too thin.

Small Scale

A Small Scale project is one in which you have one research team of 2-3 teammates, a single, individual stakeholder, such as a VAMC Director, a single location, such as a VAMC, and a single deliverable.

Teammates

Teams should always be at least two people: one person to perform HCD Interviews, one to take notes.

Stakeholder

A stakeholder can be the person who gave your team the initial project brief, a person who is a regular project partner with your office and approached you or your leadership with a specific project, or someone you or your leadership approached.

Location

Understanding the physical location of research matters. Physical location can mean buildings, but it can also be virtual. The internet is a real place.

Deliverable

Deliverables can include reports, lists, white papers, journey maps, or a variety of other outputs from a project. When you begin, work with your stakeholder to define this form but not its content. The deliverable content must accurately and minutely reflect your research, including the voice of the research participants and any other group(s) studied.

Small / Medium Scale

A Small / Medium Scale project is one in which you have one research team of 2-3 teammates, multiple stakeholders, and either a single, complicated deliverable or a few smaller ones.

Teammates

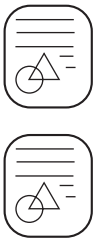
For a Small/Medium scale project, a single research team of two to three people is sufficient.

Stakeholder

The Stakeholder count should still be quite small, a maximum of two individuals or groups.

Location

A Small/Medium scale project should be limited to a single research location.

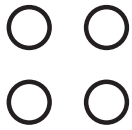


Deliverable(s)

A deliverable in a Small/Medium scale project could be a single, difficult or multi-part task, like the evaluation of a long-standing system and recommendations on how to change it, or the documentation and compilation of several different work processes for review. If your deliverables sound similar to the scale of these tasks, then you know you have a Small/Medium scale project instead of a straight forward, Small scale project.

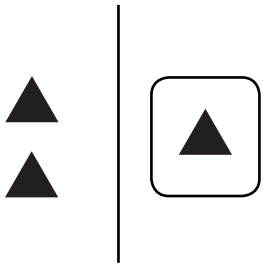
Medium / Large Scale

A Medium / Large project is one with more than one research team (4-8 teammates), multiple Stakeholders including Institutional Stakeholders, multiple locations, and multiple deliverables.



Teammates

Projects that require more than one research team because of timeline, participant, or team members' availability should be treated as Medium / Large Scale. Tracking and including multiple team members requires extra effort that must be calculated into the total effort required by the project.

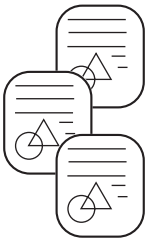


Individual Stakeholders ***Institutional Stakeholders***

Mixed Stakeholder Group Sometimes stakeholders can be a mixture of individuals and offices or organizations. In this case, it's important to know the points of contact for the institutional stakeholders and keep them informed so they can report on the project to their larger organization.

Multiple Locations

Even if you're operating in a single VAMC or VISN, if your team must perform research in a physical location as well as online, such as in the case of telemedicine, then the project has multiple locations involved.

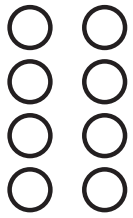


Multiple Deliverables

Deliverables could be multiple or simply large scale. As deliverables get larger, it's important to have detailed conversations with your stakeholders regarding formats. Always follow the research; change the deliverable format if you need to; do not adapt what the research directs you towards to fit the deliverable format.

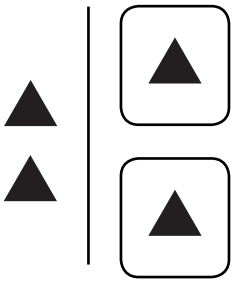
Large Scale

A Large project has more than two research teams, multiple Stakeholders, locations, and deliverables. These projects will require substantial pre-production and in-flight logistical support.



Teammates

If you have multiple teams in the field, have ways for each team to report their findings on a weekly basis. This can be a shared document, a template document, or a template slide deck. Reporting on a regular cadence ensures that data is not lost in the course of the teams' activities.

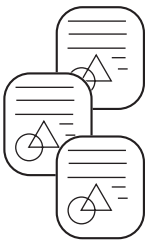


Individual Stakeholders ***Institutional Stakeholders***

A big stakeholder group immediately means a big project scale / scope. Keeping your stakeholders informed, involved, and aligned is a necessary and energy-heavy task. If you do not have the bandwidth to do this, consider asking your leadership if you and the team could break the project down into several smaller projects.

Multiple Locations

Lots of locations means a lot of travel. This brings with it several potential problems, including submitting for and receiving travel permission, factoring in drive or fly time, and considering team members' energy levels. If at all possible, never have team members travel and perform research all in one day. It's a recipe for team exhaustion, and the quality of your research will suffer.



Multiple Deliverables

Deliverables at this scale require time to produce. Be sure to build in production time at the end of your research process to make the deliverables that your research, your leadership, and your stakeholders deserve. Do not risk all your hard work by not giving yourself enough time to make excellent deliverables. Allow yourself to deliver strong outputs that reflect your work's quality.

Based on the guidelines in the previous pages, use this outline to codify your project's scale / scope.

Leadership Name(s) / Title(s):

Stakeholder Name(s) / Title(s):

Site Type: (circle one)
Small / Small-Medium / Medium-Large / Large

Location(s):

Project Start Date / Projected End date:

Project Scale / Scope is:

Explicitly noting scale at the beginning of your project allows you to create timelines and personnel allocations rationally, avoiding ad hoc or triage project management.

5

Recruit

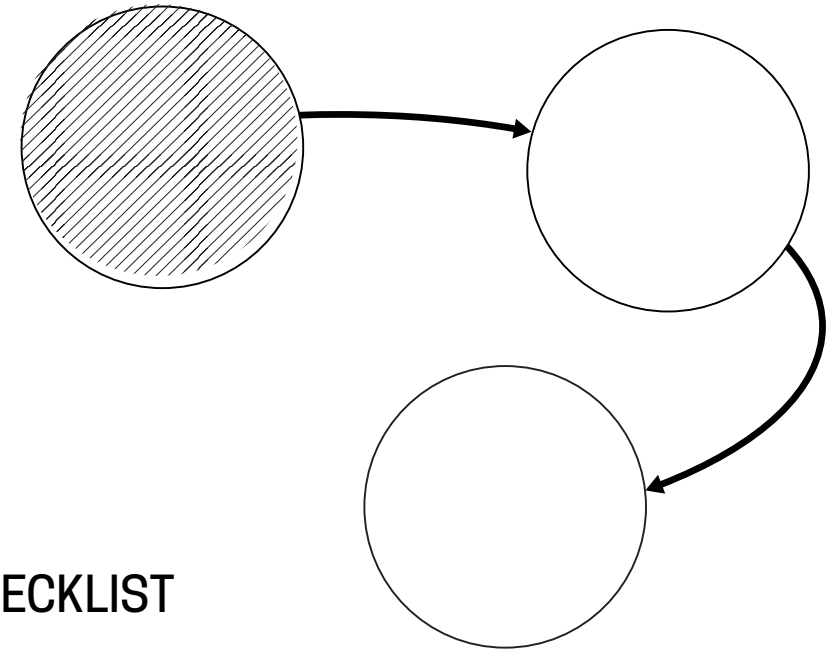
Why spend time and care on selecting participants?

You will expend a lot of effort to coordinate and interview people. For this reason, make sure you recruit the right potential participants to interview from the start.

You want to interview a variety of people involved in your project's frame. Don't just recruit from single groups, like executives, or front line employees, or nurses, as participants to interview; try to talk to all the types of people who are involved in a system or interaction. Aim for a 360 degree understanding of the topics in your project frame.

Use the VA intranet for VA folks, and internet searches to find related (VSOs, private providers) groups. Do not limit yourself to reaching out based on job titles. If you think talking to them could help you, put them on your list to reach out to. While phone and email are reliable tools for outreach for some groups, if you are working in marginalized or less well-connected groups, like homeless, incarcerated, or mentally ill Veterans, remember that your outreach methods need to match how they communicate. For groups like this, it is also recommended that you work with your Ethics Office in order to follow the accepted regulations for working with protected persons.

When speaking to potential participants, always end the conversation by thanking them and asking if they might know anyone who might give you more information on your research area. You can say something like "Thanks again for your time; looking forward to seeing you when we interview [if you're interviewing them] or "It was great talking with you today [if you're not interviewing them]; do you recommend anyone or group in particular that I should look up to possibly interview for this project?" By asking them, you're widening your potential participant field beyond those that you might find on your own; you are tapping into the social fabric that supports your project frame.



CHECKLIST

- [ ] Review HCD Guide, pages 12 - 13.
- [ ] Start recruitment search by talking to people you know who might know someone to talk to, or by googling possible interview subjects, or by searching social media for possible subjects.
- [ ] Keep detailed notes of everyone you talk to. Follow the template provided on the next few pages. Use more pages when you run out of space on these templates, but capture all the information requested on the templates. Having this information at hand will prove to be useful later.
- [ ] Keep your Project Lead, Research Lead, and teammates informed as per who you are talking to. This keeps the process transparent, and allows for team alignment on project direction.

Use this entry as a model for recording the people you reach out to as potential participants. This is the basic information that you need to record for each person to whom you reach out. Note this information for other potential interviewees either in the blank parts of this page, on the back of the book, in a spreadsheet you can print, or on scrap sheets that you can tape, staple, or three-hole punch into this book.

POSSIBLE PARTICIPANT 1 (NAME & TITLE):

Contact info (phone / email / social media):

Why this person? Job title / social position / reference / other
Referred by (if applicable):

Contacted via phone / email / social media (circle one)
If applicable, follow up on (date):
via phone / email / social media (circle one)
Notes on availability, location, et cetera:

Keep these records neat and detailed. Not tracking who you reach out to can result in overlooking potential participants, different team members calling the same potentials, or forgetting key parts of why you reached out to these individuals in the first place.

Planning 2

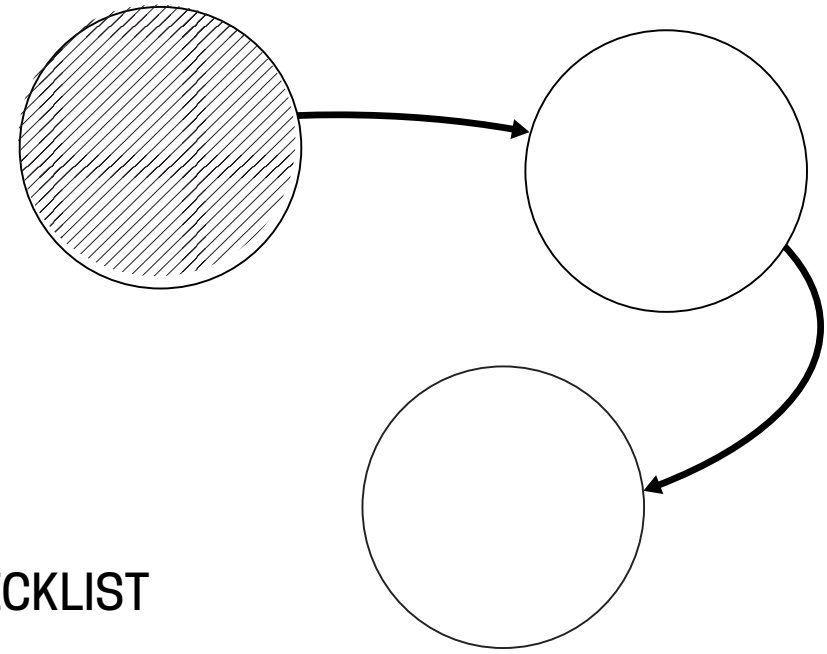
Be ready to make changes.

In this section, start building out the details in each day of your research. Though the schedule will definitely change as peoples' availability and desire to participate in the project changes, you should be approaching your first interviews.

Constant communication between the Project Lead, Recruiter, and Logistics Coordinator is required at this stage. Don't let the seeming rush of changes throw you off; this is a normal part of trying to pull together many people with different schedules. As you build the schedule, allow for no more than two interviews per team per day. Thinking on your feet and engaging with people is exhausting; your teams will need recovery time between interviews, especially if traveling.

If you have been using a handwritten calendar, it's recommended at this stage to move to a common, sharable calendar that is easily updated, such as on a white board in the office as well as a shared digital calendar. With changes being made each day, sometimes more frequently, and travel days approaching, everyone on the team needs to have immediate notifications on shifts in schedule and interview subjects.

Create an interview / conversation guide with a list of keywords or themes you want to cover with each participant. This does not need to be formal, but it should all researchers should use it so as to create continuity across the interviews.



CHECKLIST

- [ ] Be flexible.

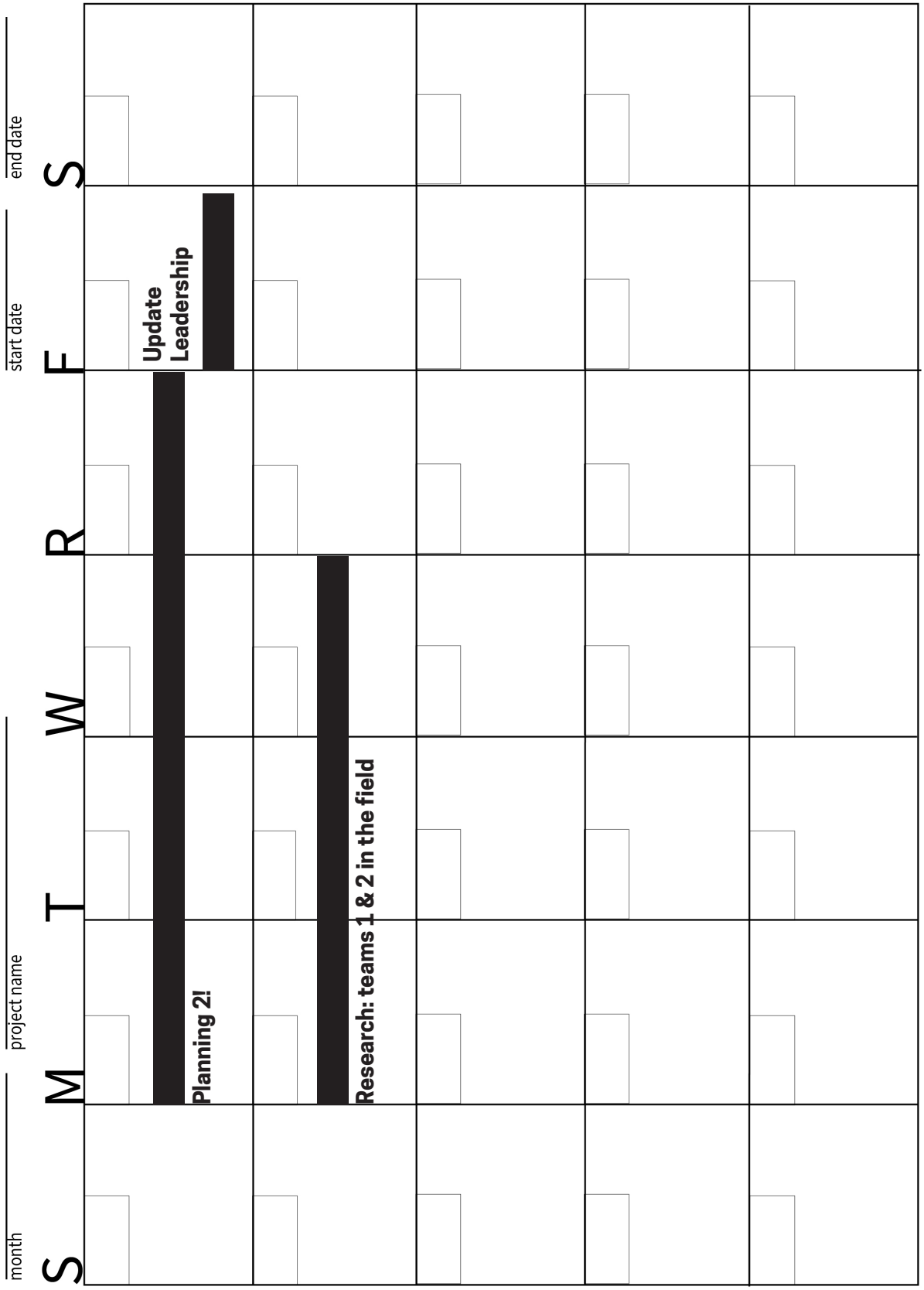
- [ ] If an potential interview needs a time that it is simply impossible for your team to accommodate, don't tell them no or promise the impossible; ask for another time, or be willing to simply drop the interview and come back to it.

- [ ] Identify potential Recruiter(s).

- [ ] Purchase supplies:
  - [ ] Notebooks
  - [ ] Pens
  - [ ] Sticky notes
  - [ ] Audio Recorders
  - [ ] Camera(s)
  - [ ] Consent Forms

- [ ] Create an interview/ conversation guide. These keywords and/or themes should reflect the points you and the team needs to cover in each interview. Do not format this as a list of questions a researcher must ask each participant, which will stifle the flow of conversation. Instead, make bullet points of the themes you must touch on to inform your project.

Update your calendar on the fly. This may seem messy, but this type of flexibility means that you will be able to create a meaningful research project reflective of your participants, not of the system that's already in place or of your own, outside timeline. Remember to staple or tape a copy of this timeline to this book so you can review and improve your process later.



Sample calendar

7

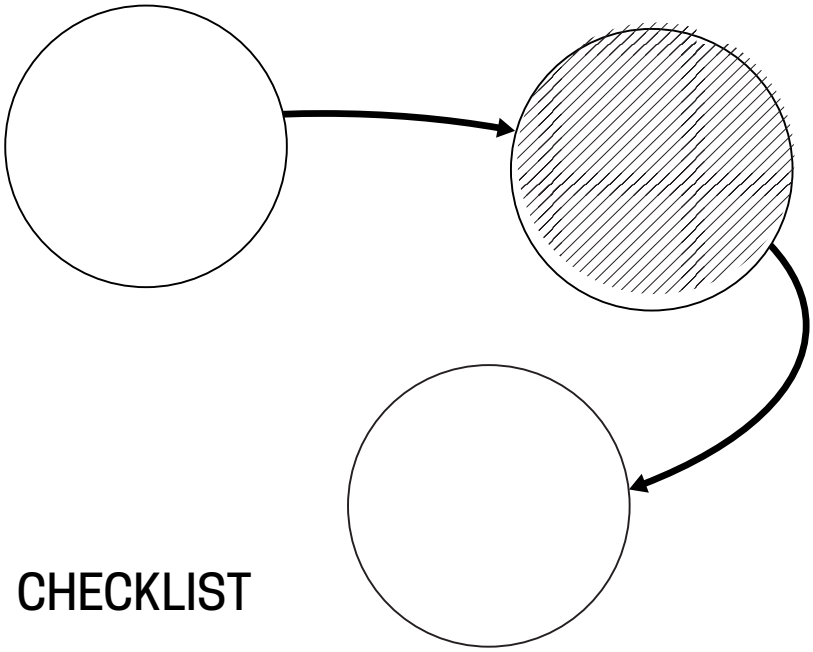
Research

Research two ways: Interviews and Observation

There are many means by which designers accomplish the research necessary to understand their problem frame. Two of the major methods are interviews and observation. Interviews are usually conducted with only one or two participants, and are structured more like guided conversations, and less like formal interviews that you might have conducted or participated in in your past. You always need at least two team members to complete an interview: a interviewer and a notetaker.

The second major method is oberservation. Observation means understanding the system(s) with which your participant interacts in order to understand their experience. This can be as simple as a fly-on-the-wall tactic, in which you stay silent and take notes on your participant's activities, or as in-depth as what we call participatory observation, where you actually participate in the system in order to fully understand its function and how it might / does affect your participants. A single researcher can perform an observation, but if you are working as a team and / or the process seems to require multiple sets of eyes, two team members can work together in these engagements.

Preparation for both research methods is similar. The creation of a reserach guide with the key points you and the team need to touch on during interviews or watch for during observations is a key component to staying on task throughout these engagements. Also have at-the-ready your elevator pitch, in case you need to quickly explain your project.



CHECKLIST

- [ ] Review the HCD Guide pages 14 -19.
- [ ] Check with the Logistics Coordinator on interview site details before each time you go into the field to research.
- [ ] Review the participants' background the night before.
- [ ] Gather your have your supplies and pack them.
- [ ] Print out and have digital versions of your research guide.
- [ ] Review your project elevator pitch.
- [ ] Focus. Get yourself mentally ready to deeply listen and interact with another person.

Interviews

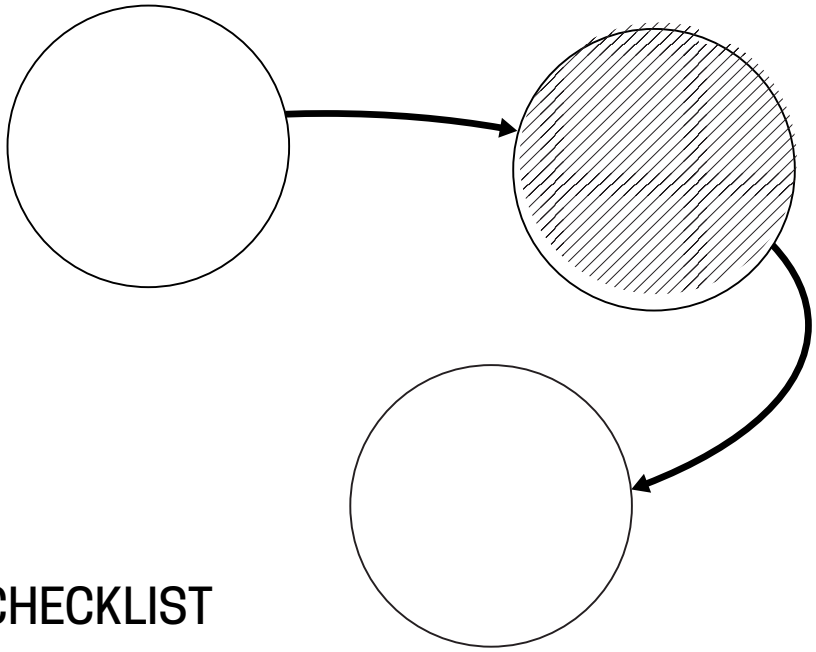
Setting up for a good interview

As was said in the previous section, think of interviews more as guided conversation than formal interviews with listed questions you have to follow. Your research guide should contain keywords or phrases that outline topics you need to cover. This format allows you to work the topics into the conversation fluidly, so that the engagement takes a natural tone.

The night before the interview, check your supplies. A tablet is fine to take notes, but no keyboards; the sounds of keystrokes is distracting to both the interviewer and the interviewee. In terms of dress, always attempt to look business casual.

Arrive at the interview site early so as to gather as a team before entering the interview. Ensure that everyone knows their roles at that time. Review your problem frame statement and elevator pitch; this ensures that the team is focused and each interview starts from the same informational basis.

Post-interview, gather the on-site team to discuss and jot down interesting points from the interview. Use this time to build on what you learned and develop new things to ask about in the following interviews. After you're done huddling, send your interviewee a quick email thanking them for their time.



CHECKLIST

- [ ] Review the HCD Guide pages 14 -19.
- [ ] Check with the Logistics Coordinator on interview site details before the day of the interview.
- [ ] Review the interviewee's background the night before the interview via social media, publication, and your Recruiter or Local Contact's notes.
- [ ] Gather your supplies and pack them.
- [ ] Have print and digital versions of your interview/ conversation guide.
- [ ] Review your project elevator pitch. This is the one or two minute project description you developed to use during the Recruiting phase.
- [ ] Focus. Get yourself mentally ready to deeply listen and interact with another person.

Setting Up the Room

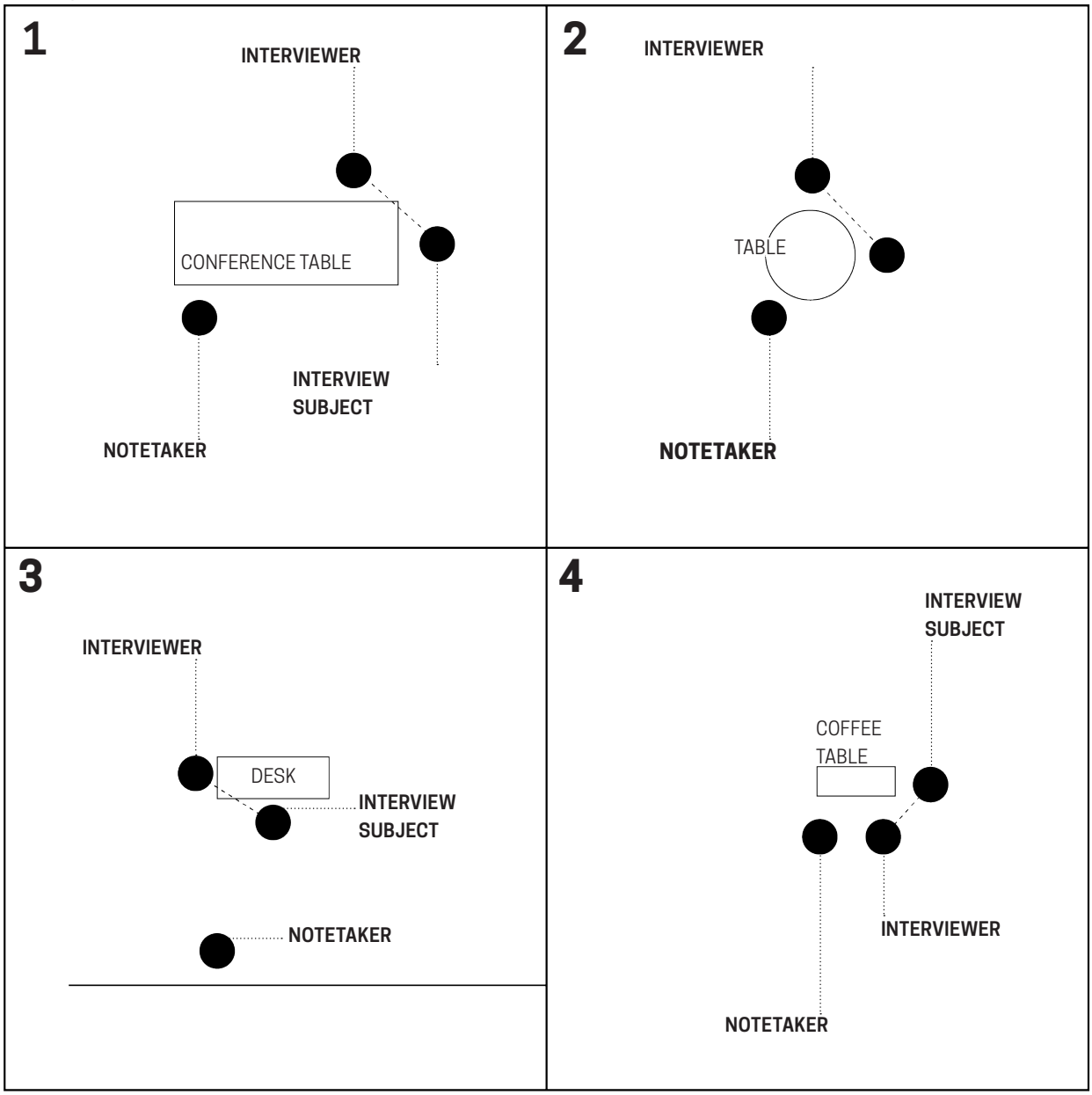
When your team walks into the interview space, whether it's a coffee shop, an office, or a person's home, you need to be able to quickly set up the room to optimize the interview time. This means understanding how to work with the architecture of the room in order to use sight lines, team member placement, and body language to your best advantage.

The Interviewer should be positioned about 45 to 35 degree angle from the Research Participant. This is so that they have the option to meet eye-to-eye, but do not have to do so all the time. If the reasoning for this confuses you, think of the conversations you might have had while driving in a car. Sitting side-by-side, instead of face-to-face, often makes it easier to have difficult conversations. Participating in a shared activity, such as driving, means there is less pressure to talk to fill silence. You can also look away from your conversation partner without injecting meaning into the movement. That space allows for thought and consideration before speaking.

Correct positioning in the room allows for quick relationship-building with participants.

The Notetaker should be positioned out of the sight line of the Interviewee. As Notetaker, deflect attention after initial introductions. Acknowledge any attention from the Interviewee, but gently drive the attention back to the Interviewer. Always encourage the Interviewee to focus solely on the Interviewer.

Diagrams of Possible HCD Interview Rooms Set-Ups

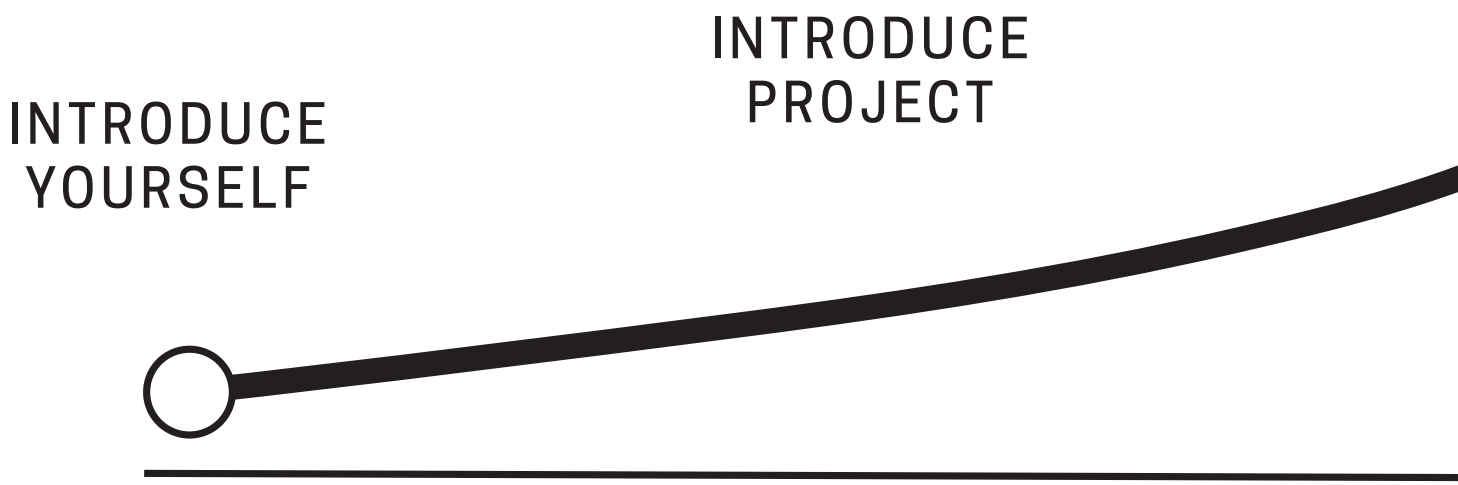


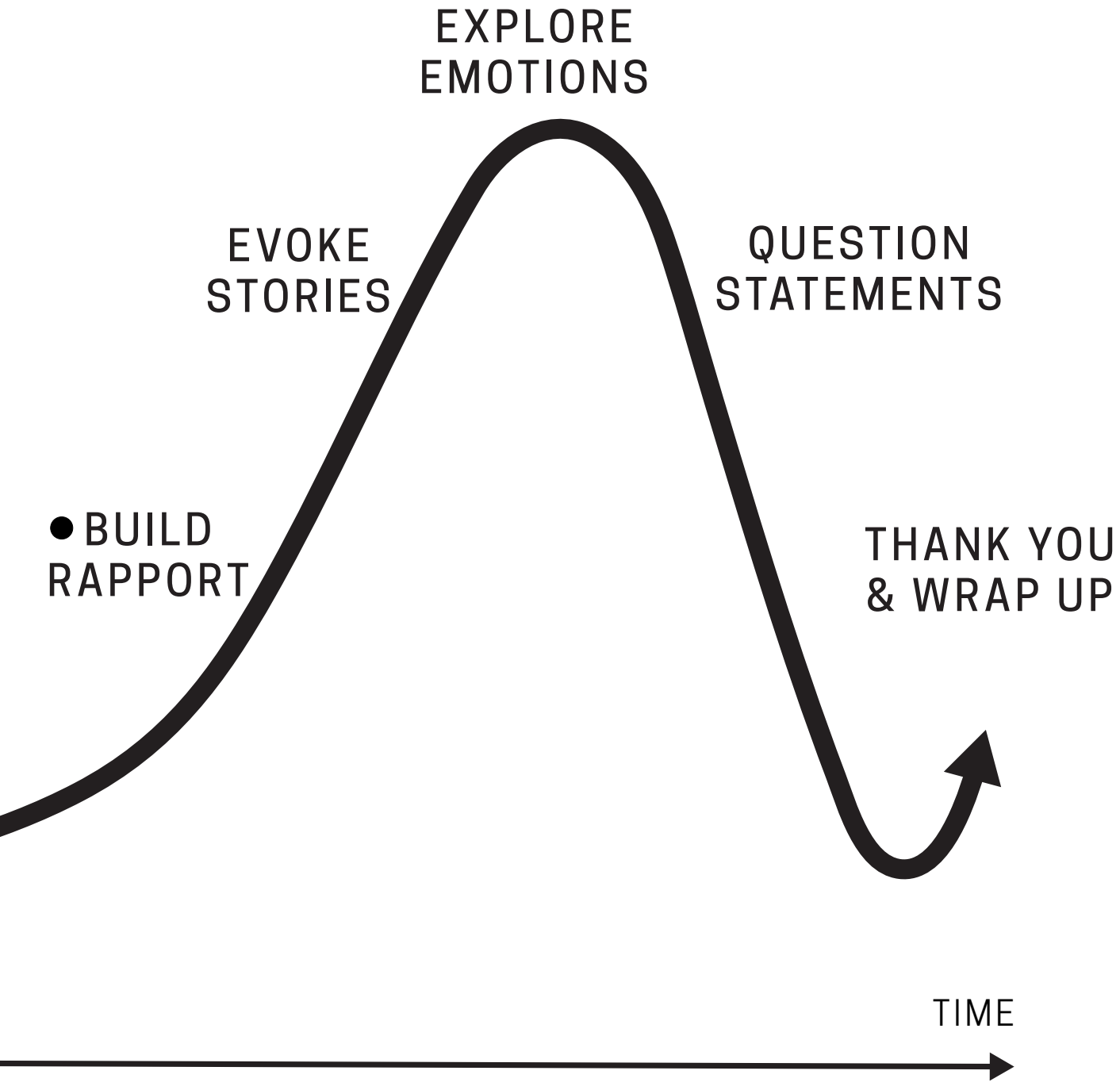
In box 4, it is unavoidable that the Notetaker is in eyeline view of the Interviewee. In this situation, the Interviewer should lean slightly forward, while the Notetaker leans back in their chair. In this way, you work as a team to focus the attention of the Interviewee onto the Interviewer, keeping the Notetaker in the background.

Whenever possible, notes should be handwritten on pad or notebook. A tablet without keyboard is also acceptable. When taking notes, some people like to write single words or short phrases; some people like to write whole sentences. Ensure that you can read your handwriting. The Notetaker is responsible for quickly transcribing the notes after the post-interview meeting for distribution to the larger team.

Visualize the Interview

This diagram from Stanford's d.school visualizes the temporal and energetic progression of a successful interview.




EXPLORE
EMOTIONS
EVOKE
STORIES
QUESTION
STATEMENTS
BUILD
RAPPORT
THANK YOU
& WRAP UP
TIME

Interview Tip

1. Avoid explicitly asking questions about your participants during the interview. Asking direct questions means particpants will answer with what they feel sounds right, good, or insightful.

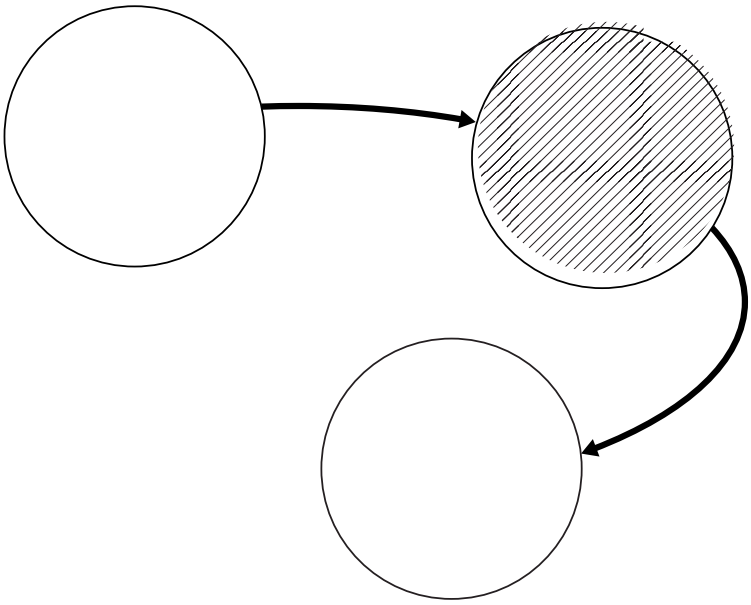
2. Avoid placing the subject with a window behind them; the light coming through means you won't be able to see their face.

3. If possible, sit where you can see a clock, but place the particpant, if you have to choice, where they cannot see it. If your participant appears to be losing focus or is getting fidgety, it's okay to ask to check the time or if they need to take a pause. They might be uncomfortable, but about to provide significant information. Another calming tactic is to ask them if it's okay to continue.

4. Making small talk helps build rapport, so intstead of jumping right into the research concerns, open the discussion with nuetral matters. Small talk can help create the trust and comfort level that allows for deep, meaningful conversation.

5. Be flexible - every interview is different, so you will need to shift your approach depending on your participant.

OS



6. Mirror their words - don't lead with what you think they mean. Use their words to ask questions. Sometimes this is as simple as taking a word or phrase they just used and repeating it back to them in a questioning tone of voice.

7. Notetakers should also try to capture non-verbal messages, such as noting the level of passion the participant registers in response to a question, or whether they shift their weight or deflect a topic.

8. Ask for copies of the things they reference. Asking "Could you email that report/ document / flier to me after the interview?" not only gathers information for you but also tells your participant that you are interested in them and their work.

9. Post-interview, team members should offer and welcome feedback about the interview. This feedback about your craft as both interviewers and listeners. Each team member should practice both giving and receiving constructive, nuanced feedback. What worked well? What could the interviewer, notetake, or observer improve on?

Use the entry on the next page as a model for the detailed record of each interview. This is the basic information that you need to record for each interview. Note this information in an organized way about all interviews on the blank parts of this page, in a spreadsheet that you can print out or on scrap sheets that you can tape, staple, or three-hole punch into this book.

INTERVIEWEE (NAME & TITLE): _____

Date:
Contact info (phone / email / social media):

Location of interview (full address):

Interviewer:

Notetaker:

Notes / Other:

Keep these notes detailed and neat. This will allow you to quickly reference the people with whom you've already worked, increasing your project efficiency and thoroughness.

Observatior

Setting up for good Observation

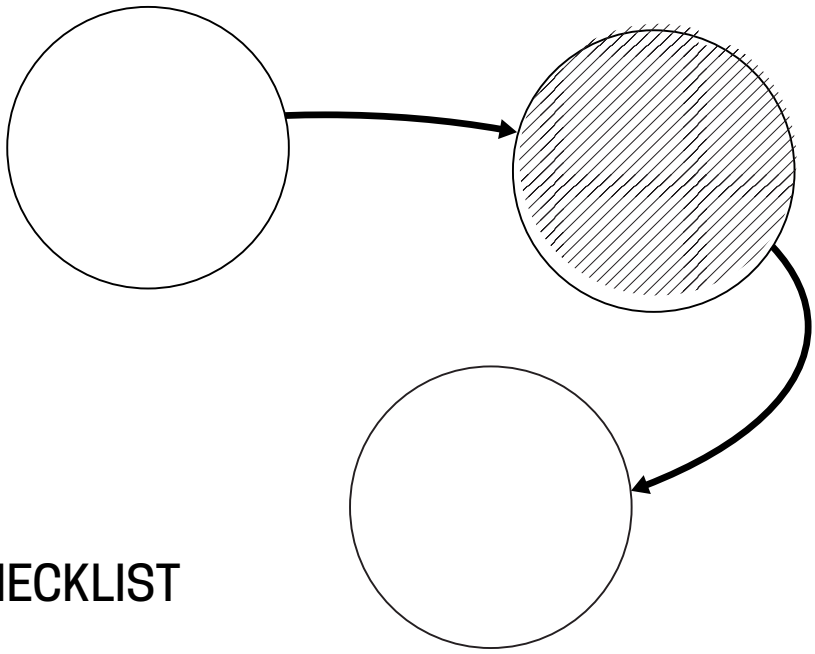
Observations present an opportunity for first-hand understanding of your participants' experience. Observations, like interviews, have many styles, but a good place to start is to choose one of two broad approaches: fly-on-the-wall or participatory observation.

Fly-on-the-wall observations mean that the researcher stays silent while the participant accomplishes the task(s) that are pertinent to your project. Take notes and, if possible, pictures, while they accomplish their work so that you can understand the ins and outs of the system(s) in which they interact.

Participatory obeservation means getting a hands-on experience of the system through playing a role in the system(s). This can mean anything from playing a role in the interaction with your participant to actually learning all or part of the system from the participant so that you can experience it yourself.

In both of these methods, the data you collect will be multi-sensorial. It's important to note what you see and hear, of course, but also pay attention to what you might touch or how you might have to move, what smells or distractions there might be. When writing your notes, strive to use expressive language so that you can remember these different sensorial aspects of the observation.

ns



CHECKLIST

- [ ] Review the HCD Guide pages 14 -19.
- [ ] Check with the participant the day before to see if specialized gear is needed.
- [ ] Review the participant's background and how what information you might have on how they work.
- [ ] Gather your have your supplies and pack them: camera, recorder, notebook.
- [ ] Have an idea of which method you might prefer for this observation: fly-on-the-wall or participatory.
- [ ] Print out and have digital versions of your interview/ conversation guide.
- [ ] Review your project elevator pitch.
- [ ] Focus. Get yourself mentally ready to deeply listen and interact with another person.

Observation

Fly-on-the-wall Observation

1. Introduce yourself at the beginning of the observation. If you need to, use your elevator pitch to briefly explain to everyone present what your project is and how you think observing them will help your work. Providing background de-mystifies your work and allows people to feel at ease.

2. Place yourself somewhere in the room where you have as wide a sight line as possible without being in the direct sightline of any of the participants.

3. Throughout the observation, unobtrusely take notes and photos, if photos are allowed. Remember to turn off the sound on your camera so you don't have a distrcting shutter noise when you take photos.

4. Note where you have questions about the process, but save them until after you are done with the observation. Your goal is to understand the entire flow of the system; interruping the participant with questions will create a flow that does not represent the true participant experience.

5. If the participant continuously engages you as they move through the system, be prepared to pivot into a more active role, even into one or participatory observation.

n Tips

Participatory Observation

1. Introduce yourself at the beginning of the observation. If you need to, use your elevator pitch to briefly explain to everyone present what your project is and how you think observing them will help your work. Providing background de-mystifies your work and allows people to feel at ease..

2. Place yourself whereever the participant directs you and follow their lead.

3. As you participate, be aware of what your level of embarassment or anxiety might be due to the fact that you're doing something new, and what might be due to the fact that the system in which you're particpating creates discomfort for participants.

4. Feel free to ask questions if you're confused about the process. Note these points if you can, as they indicate points at which either the participant has simply gotten used to a bad system or points at which new users of the system might encounter difficulties.

Use the entry in this section as a model for the detailed record of each observation. Notes of an observation can include photos, diagrams, and expressive language that describes the sensorial aspects of the system. Note this information for other observations either in the blank parts of this page, in a spreadsheet that you can print out or on scrap sheets that you can tape, staple, or three-hole punch into this book.

PARTICIPANT 1 (NAME & TITLE):

PROCESS BEING OBSERVED:

Date:
Contact info (phone / email / social media):

Where (full address):

Interviewer:

Notes:

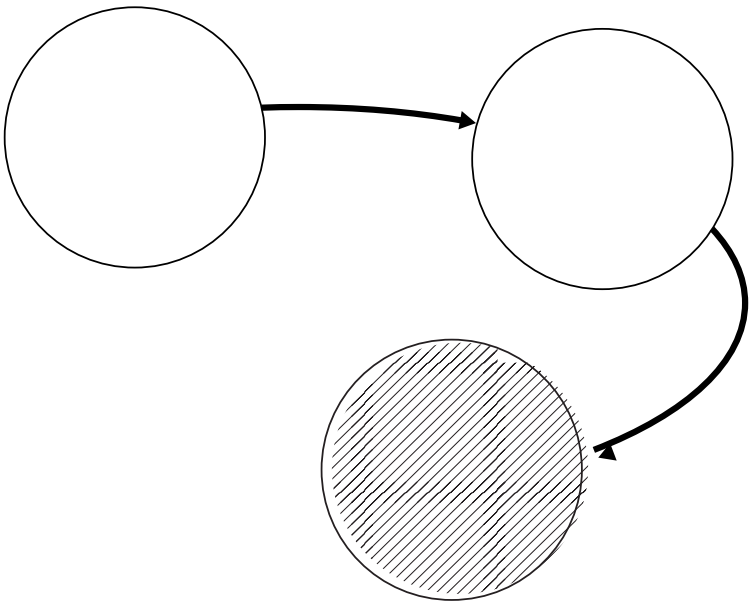
8

Synthesis

Insights, aka, Converging the data in your Research

In design research, the word "insights" means patterns, recurring ideas, or gaps you and your team find during the process of looking at your research as a whole. The synthesis process serves as the data parse or analysis of your work. You are no longer looking at this work as the words from individual interviews, but instead as a group or whole. This is where you move from a collection of facts to an understanding of those facts.

This means sitting down as a group, reading all the notes from all the interviews your team has conducted, and discussing, arguing over, and organizing the contents of those notes and interviews into the patterns and recurring ideas that have emerged as well as identifying gaps in the system or your understanding of the system. This data parse process is the first step toward the final phases of your project: **Deliverables** (which you and your Leadership decided on at the beginning of the project), **Immediate Actionables** (items identified in the research parse as not needing more research), and **Recommendations** (what the research has identified as meriting further study).



CHECKLIST: INSIGHTS

- [ ] Review HCD Guide pages 20 - 25.
- [ ] Book a private conference room with a closing door and exterior windows.
- [ ] Supplies:
  - [ ] Sticky notes
  - [ ] Blank computer paper
  - [ ] Sharpie markers
  - [ ] Painters' tape, also known as paper tape or blue tape. Masking also works.
  - [ ] Camera: phone or separate camera
- [ ] Each team member should prepare for this Synthesis session by reading all the notes from the interviews they did not attend.
- [ ] Each team member should print multiple copies of all the notes you took for each interview for which you acted as Notetaker.

READING, QUESTIONING, JOTTING NOTES

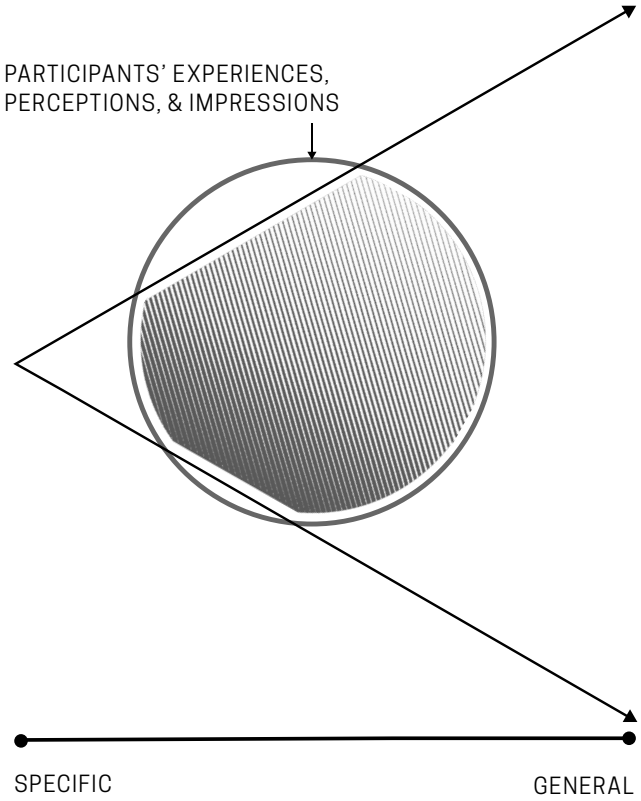
1. **Read Notes:** Once the team is gathered, each team member chooses notes from an interview they did not attend, and reads them through. If the team has read all the notes previous to the synthesis session, use this time for clarification of any questions regarding the notes. (see Step 2, paragraph 2). The Project Lead keeps a clock for the reading time. Time: 4 - 6 minutes.

2. After 4 - 6 minutes, the Product Lead should ask everyone if they have any questions for the person whose notes they're reading.

3. If there is a question, the person whose notes are being queried should provide a clarification. Examples of possible questions are: "What was the context of this statement?" or "What do you mean when you use the word ____?" or "Can you explain this to me? I don't really get it."

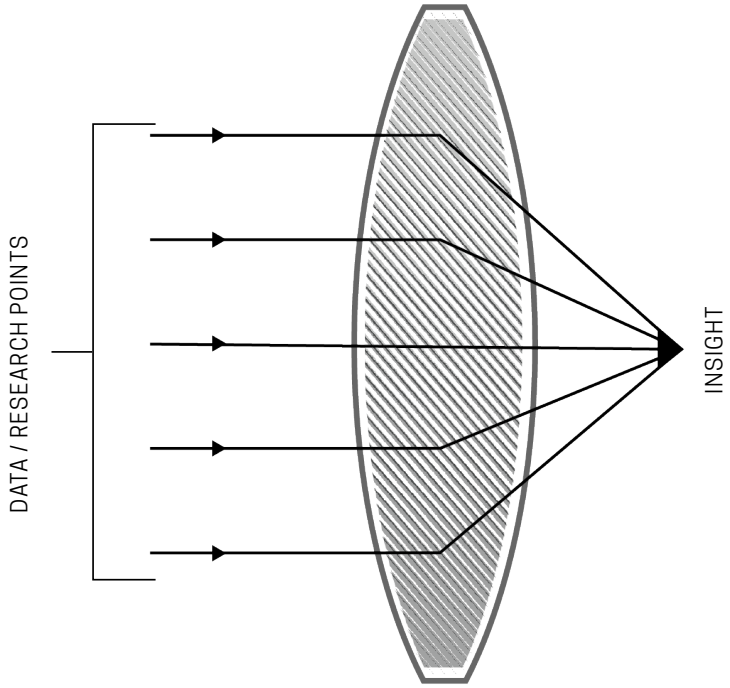
4. The Project Lead should continue the rounds of reading and questioning until everyone has read all of the notes from all of the interviews. This is why it's important to read as much before you get into the room as possible, so that you can already have questions to ask and move efficiently through this part of the day.

5. **Rapid Recall:** On sticky notes, one idea per note, each team member should write the most vivid words and phrases they remember from their own research as well as from the research notes. Team members may also jot down words or phrases that merge common themes across the research, like "Scheduling conflicts" to signify a lot of notes on how scheduling is a common pain point heard from multiple interviewees. The Project Lead should repeat this interval as many times as the team needs. Time: 4 minutes / round.



INSIGHTS VISUALIZATION:
Insights are the portions of your participants' perceptions and impressions that lay inside the scope of your project and are roughly in between very specific or individual information and very general or conceptual information that you heard from them.

INSIGHTS VISUALIZATION:
In terms of your project, Insights means looking at your research through the lens of your Project Frame.



Primary Clustering Exercise

1. Team members gather their sticky notes and place them on a single wall or the windows of the room.
2. Team members should step back from the wall and start looking for the ideas, words, and phrases that seem to go together. Make meaningful clusters by the concept(s) written on the sticky note; don't just put similar or the same words together. This is called "clustering". Time: 10 minutes.
3. Do not be silent! Talk out loud to one another; ask questions, ask opinions.
4. After 10 minutes, the Project Lead should ask if the team needs more time.
5. Repeat the 10 minute intervals as many times as it takes until all or most of the stickies are clustered.
6. One by one, each team member acts as the leader as the group names each cluster. Everyone on the team must participate both as a group member as well as the leader. To understand how to name the cluster, ask yourselves out loud "What is this cluster about?" or "What does this cluster really mean?" What the clusters are actually saying is your insight. Name the cluster that.
7. Take photos of the entire wall. Take some wide shots, take some of the clusters, and some up close up. Make sure you can see all the sticky notes in the photos. If some overlap, move them around so that you can read the writing in the photo.
8. Record all the names of all the clusters you and the team find during your primary analysis. Use these entries as a model for the details you should record of each cluster. Use all the blank space on this page as space for these records. Below each cluster name, jot down your reasoning for giving the cluster that particular name.
9. If you run out of room, use the other parts of this book, a spreadsheet you can print out, or a scrap piece of paper you can tape, staple, or three-hole punch into this book.

CLUSTER 1 (NAME):

Why we named this cluster this name:

CLUSTER 2 (NAME):

Why we named this cluster this name:

CLUSTER 3 (NAME):

Why we named this cluster this name:

DOING, SAYING, THINKING, FEELING ANALYSIS

1. Take all the stickies down from the wall, including themes. Set the themes aside.
2. Use the Painters' tape to mark off a large quadrant on the wall. See the next page for an example.
3. Label each quadrant one of the following: Doing, Saying, Thinking, Feeling.
4. Rotating the leadership as before, go through the stack of stickies individually and place them into the quadrants that seem most appropriate.

    a. To understand where a sticky might go, look at it and ask: "Is this sticky talking about doing something? Or saying something? Are they thinking something or is it about thoughts? Is it talking about an emotion or feelings?"

5. As before, do not be silent! The team should ask each other questions in order to land on the most accurate possible interpretation of the stickies in terms of its origin and context.
6. Take photos of the entire wall when you are done, ensuring that you can see each sticky in at least one photo.
7. You can repeat this exercise or the previous one to surface different themes and connections between your data points. This information has a lot of depth and dimension; some concepts have multiple meanings that can be associated with it.
8. Use this space to write down the names of the clusters you and the team find during the Doing, Saying, Thinking, Feeling analysis. Keep the names as close to their original position in the quadrants as possible, as the spacial position of each name can be a key part of the logic you and team use in this exercise, even if some of the names span more than one quadrant. If you run out of room, use the other parts of this book or a scrap pieces of paper you can tape, staple or three-hole punch into this book.

DOING

SAYING

THINKING

FEELING

Recording these clusters beyond just taking photos means being able to follow your own logic later and take action from your work.

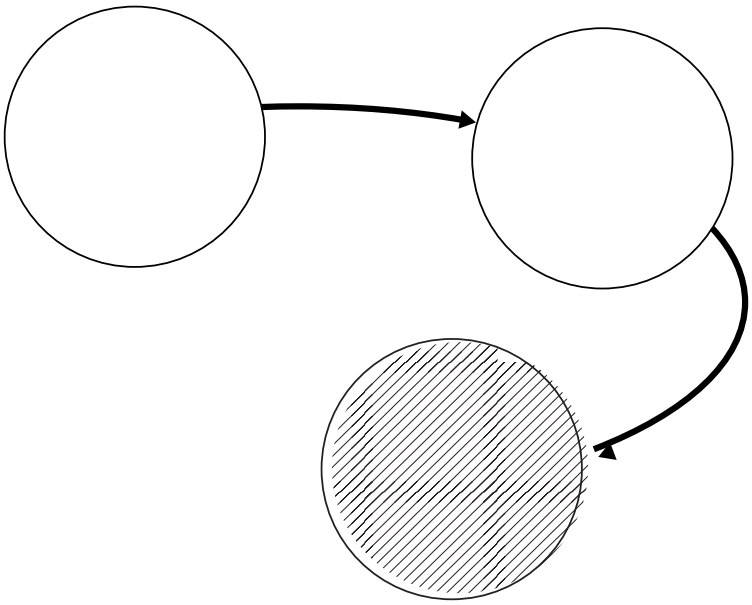
Synthesis

Opportunities, aka diverging your insights

Finding Opportunities means identifing fields of potential improvement based on your insights. You derive opportunities by expanding or diverging your insights out through the lens of your department, team, or business line.

Each field of opportunity will probably contain multiple solutions or possible products. Resist the urge to jump from a single insight to a single solution; if you do that instead of identifying fields of opportunity, you'll be cutting yourself off from looking at a variety of solutions, which means you might miss the best or most appropriate one(s).

Some Insights will not have Opportunities for your team. You will know that you have this type of insight on your heands if the insight you're examining would require your team to have expertise, influence, or time that is not possible given your situation. Note, however, that your team might be able to create action based on some of these insights through notifying other teams or departments of your findings. You and your Leadership can work to make those collaborations happen in the future if you choose to.



CHECKLIST: OPPORTUNITIES

- [ ] Take no longer than a one hour break between the Insights the end of the Insights discovery phase and the start of the Opportunities discovery phase

- [ ] Supplies:
  - [ ] Sticky notes
  - [ ] Blank computer paper
  - [ ] Sharpie markers
  - [ ] Painters' tape, also known as paper tape or blue tape. Masking also works.
  - [ ] Camera, or the camera on your phone

- [ ] Write all the Insights discovered in the first three phases of the Synthesis process on computer paper using Sharpie markers. Use a new sheet of paper for each Insight.

- [ ] Tape up the Insights across the wall or windows in a row.

- [ ] There is no time limit here, but the Project Lead needs to pay careful attention to the energy in the room. Everyone, including the Lead, will be tired. Push everyone to keep up the work until it is thoroughly done.

FIND & DEFINE OPPORTUNITIES

Go through each Insight and try to define 2-3 Opportunities for each.

- This is not about finding the "right" answers. This is about looking at original research through the lens of what is possible for your team, department, or business line in order to see new and better opportunities on which to work. Strive to find the best opportunities. Again, there is no single right, perfect opportunity. Each Field of Opportunity will have within it multiple solutions to the problems you have studied.

- Not all Insights will produce 2-3 Opportunities; some will produce more than three; some will produce less.

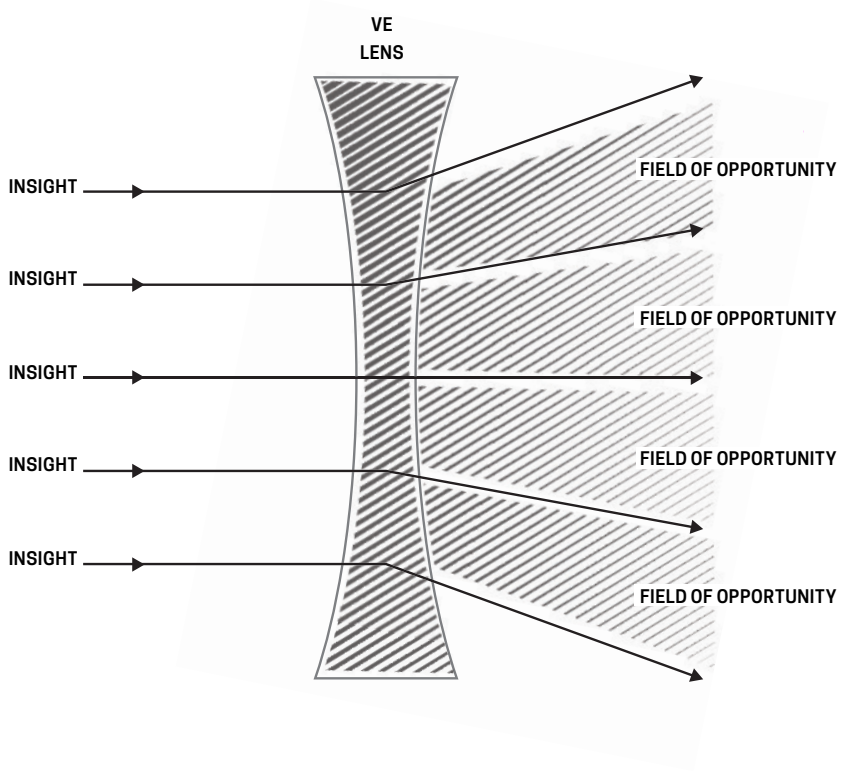
Write the Opportunities you find on separate sheets of blank paper and tape or pin them up underneath the associated Insight.

- Sometimes an Insight will not have an Opportunity for your department, team, or business line. This happens when the Insight points to something that is out of your group's control, such as an IT problem when you're not in IT, or a clinical problem when you're not a clinician. As was said in the introduction to this section, communicate Insights like this to your Leadership if you can. Suggest they open a dialogue with the appropriate group. Sharing findings across groups makes possible high impact, future projects.

Each person on the team should lead at least one round of looking at an Insight through the lens of your department, team or business line and finding Opportunities.

Take photos of the Insights and Opportunities wall. Ensure you can see each Insight and Opportunity and their relationship in the photos. This documentation will allow you to go back and trace your logic later if there are questions about how you and your team arrived at an Opportunity or if someone would like to expand on your work.

Go relax. Light exercise can also be useful at this time.



SYNTHESIS PART 2:
Look at your insights through the lens of the VEO organization: what it does, what its assets are; what its goals are.

Use the entry on the facing page as a model for recording the Opportunities you and the team find. Refer to the HCD Guide, pages 26 -27 for further notes on this stage of work.Note the relationships between the Insights and Opportunities that emerge from them so that you can follow and explain your logic to your Leadership and Stakeholders. Also take photos of your wall. To further record, use a spreadsheet you can print out, or scrap pieces of paper that you can tape, staple, or three-hole punch into this book.

INSIGHT

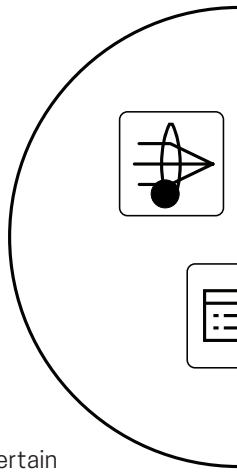
OPPORTUNITY 1:

OPPORTUNITY 2:

OPPORTUNITY 3:

Using this layout allows you to see the links between Insight and Opportunity. Its clarity and simplicity also means that it can also be used directly in your presentation deck, increasing your efficiency of work.

Communica
Deliverables



What to expect:

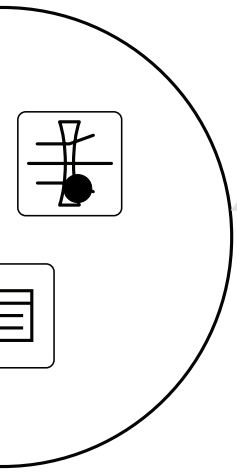
In this stage, you'll organize your findings into a report and produce any explicit deliverables that were decided on at the beginning of the project.

At this point, you might find that one of two extremes may have occurred: either you don't return the results your Leadership and/or Stakeholders would like to hear, or you have confirmed exactly what they thought. For example, at a technology start up, a Founder might want to implement a certain feature or service. A research team might talk to users about the possibility of this feature or service and find that, actually, users either aren't interested or only a few are. Given the interest, implementing the feature would not be worth the company's time. Although this news might make the Founder a little disappointed, they will be able to review the team's findings, see that they're based in valid research, and make a wise business decision. Knowing not to implement will ultimately save the company time, money, and prestige.

Conversely, your research might confirm what your Leadership and Stakeholders previously thought. In this situation, it's easy for people to say that they already knew this information and to question whether they should have enacted the entire research process. Point out that, previous to your research, the organization had an idea and some colloquial evidence of what might be happening, but now they not only have rigorous data backing those ideas, they also now have identified starting points for informed action.

.

ation&
S



CHECKLIST

- [ ] Organize all materials on a shared drive using a consistent naming protocol and file hierarchy.
- [ ] Photograph the pages of this Guide, combine them into a PDF, and put the PDF at the top level of the shared folder so that anyone can review and follow your project history.
- [ ] Create a presentation deck using your findings. Guidance is on the following pages. Below, find design details for creating an impactful presentation:
    - [ ] Use photos in your deck.
    - [ ] Use the presenter notes section to include details you will verbally present.
    - [ ] If necessary, create an appendix to include details or raw data.
    - [ ] Practice presenting your deck to Leadership and Stakeholders.
    - [ ] Show your work. Effective slides emphasize your talking points; avoid large amounts of text in your deck. Be present and conversational in your presentation; don't just read your deck aloud to your audience.

Producing Deliverables, & Recommendation

At the end of a research round, with all the travel and coordination and mental exertion, it can seem daunting to go through the work of parsing and understanding the information you've gathered. This, however, is the final push before moving into the Design phase or a new research round. Communicating your rigorous and thorough Synthesis phase will allow your Leadership and Stakeholders to understand your project's depth, interest, and richness.

At the least, leave the synthesis session with these three sections of your work identified: Deliverables, Immediately Actionables, and Recommendations.

Deliverables should have been defined before the research began. Sometimes the deliverable from a project is simply a report of your work. Sometimes it is a report plus other visualizations of your work, such as a journey map. During the synthesis session, make a plan for how you will produce these items. Assign different team members different parts of the work, if appropriate and feasible.

Immediately Actionables are items you and the team identify from your research that can move directly into a design phase. Some

Immediately Actionables,

ns

aspects of you work will not need further research: you and the team see a gap or a need and know how to fill that gap or need. These immediately actionable items can be communicated to leadership in your report and be assigned for design and production.

Recommendations are the actions you see as needed based on the information you've gathered. These can include recommendations for further research, for partnership with other groups or individuals, or for project ideas. These recommendations should be formed based on the Opportunities you and the team identified. They give your Leadership and Stakeholders visiability into what is possible for the Design phase.

When your project's Deliverable(s) have been produced, the Immediate Actionables packaged for decision-making action or non-action, and the Recommendations organized, the moment has come to develop a coherent, informative, and persuasive presentation of findings. Besides your oral presentation, you should also prepare a presentation deck. Use the layout on the following pages as a guide for developing the deck.

Use this layout as a model for creating a presentation deck of your findings and deliverables. Your slide progression shows the story of the project. For maximum effect, each slide should contain only a few words.

A well-crafted deck enhances a well-crafted verbal presentation. So, to make an impactful presentation, practice your speaking component with your visual component. Finally, a good deck will be useful if you want to continue to grow the project later with the same or different stakeholders.

SLIDE 1: QUOTATION FROM RESEARCH:

"QUOTATION FROM RESEARCH"

SLIDE 2: INSIGHTS & OPPORTUNITIES FROM THAT RESEARCH:

INSIGHT

. . . . . .

OPPORTUNITY 1:

OPPORTUNITY 2:

SLIDE 3: IMMEDIATELY ACTIONABLE OPPORTUNITIES:

IMMEDIATELY ACTIONABLE OPPORTUNITY

SLIDE 4: RECOMMENDED NEXT STEPS:

RECOMMENDATION

. . . . . .

EVIDENCE FOR RECOMMENDATION

This slide progression shows the story of the project. It will be useful if you want to continue or grow the project later or with new groups.

Complete!

You and your Team have concluded your Human-Centered Design Discovery project. Please remember to thank all your team and everyone who was of special help along the journey.

Thank You!

Contact Information

Please send HCD specific questions and feedback to Insight & Design: Insight&Design@va.gov

Please send general questions and feedback about VEO to: Vets-Experience@va.gov

Thanks and Acknowledgment

Numerous people looked at drafts of this guide and gave useful feedback. We are grateful to all of them.

We extend our appreciation to everyone at the Veterans Experience Office and especially our direct collaborators on this project: Laureen Barone, Rebecca Keough, Juliza Ramierez-Wylie, Erin Siminario, and Todd Tinius. Additionally, to those at the VA Innovators Network, especially Kayt Havens.

Thanks to the entire Lab | OPM team, whose dedication to capacity building and engagement with wicked problems allows for this deep dive on design methodology and craft.

We would also like acknowledge the other thought leaders in the field of social impact and design thinking who inspired and informed this guide: 18F, USDS (United States Digital Service), Luma Institute, Ideo and Ideo.org, Frog Design, IBM Design, The d.School at Stanford University and Art Center College of Design in Pasadena.

— Ana Monroe, Roseann Stempinski, Aaron Stienstra
Lab | OPM + Insight & Design Team, VEO

Glossary

3 Es

Effectiveness, Ease, and Emotion are the 3 core qualities that VE measures across the enterprise. These are based on a Forrester Research Inc. pyramid model of customer experience.

5 Whys, aka, Laddering

A method by which an interviewer derives additional detail and undercurrents from an interviewee. Typically characterized by the interviewer asking "why" in regards to a qualified or abstract word or phrase used during the an answer to questions. A common metric is for the interviewer to do this five times in a line of question.

Accessibility

The extent to which content is available, understandable, and usable by all audiences, regardless of sensory, physical, cognitive, intellectual, or situational disabilities or impairments.

Best Practice

Procedures or approaches that are accepted or prescribed as being correct or most effective.

Clustering

A research analysis method characterized by the grouping of words or phrases that have a single or set of commonalities. In Design Research, this is often enacted physically by the assembly of words or phrases written on single pieces of paper into a, proximate group.

Concept/Context mapping

An ethnographic research technique, concept/context mapping is a process that tries to understand the environment in which the behavior under study takes place.

Customer Experience (CX)

Customer experience (CX) is the product of an interaction between an organization and a customer. This interaction includes a customer's attraction, awareness, discovery, cultivation, advocacy and purchase and use of a service. It is measured by the individual's experience against the individual's expectations.

Decode

To understand. To analyze in order to find meaning.

Empathy

The action of understanding, being aware of, being sensitive to, and vicariously experiencing the feelings, thoughts, and experience of another through a shared experience.

Ethnographic research

Ethnographic research tries to understand how people live their lives. Unlike traditional research, who ask specific, highly practical questions, ethnographers may visit homes or offices to observe and listen in a non-directed way. While this observational method may appear inefficient, it enlightens us about the context in which customers see their own environment.

'Fail early, fail fast, fail small'

A Design Research principle expressing the ethos that, through quickly making and testing small, unsuccessful solutions to big problems in quick succession, drawing lessons in terms of what works and does not work from those tests and revising the next solution accordingly, more effective and successful end solutions can be reached than if a single large solution was launched once and without testing.

Front Stage / Back Stage

Parts of services that are visible to the service user are called front stage. Part of services not visible to the service user but are interacted with by the service provider are called back stage.

Guided Tour

A research methodology during which a participant shows researcher(s) their physical space, collections, or other assets so that the researcher(s) understand the participant's context and reality through the participant's point of view.

How Might We Question

A "How Might We" (HMW) question serves two purposes. First, it is the frame of inquiry, or the area of research. And second, a HMW question should spur and inspire the research team. A good HMW research question will focus but also leave room for exploration.

Human-Centered Design

Human-centered design (HCD) is a design and management framework that develops solutions to problems by involving the human perspective in all steps of the problem-solving process. Human involvement typically takes place in observing the problem within context, brainstorming, conceptualizing, developing, and implementing the solution.

Ideate

To form an idea of; imagine or conceive. In Design Thinking, this refers to imagining or conceiving of multiple ideas for solutions to problems, usually in succession and building off each idea.

Innovation

A new idea, method, or device. In Design Thinking, usually characterized by a break from traditional or institutionalized methods, production methods, or products .

Intercepts

Intercepts (intercept interviews) are conducted on site with partcipants while they are interacting with services at the research site.

Internal bias

A universal situation in which humans feel or show inclination or prejudice for or against someone or something. In Design Thinking, the inherency of internal bias is accepted, and we correct for these biases is through awareness and acknowledgment of them.

LEAN (process)

An approach that focuses on people, process and purpose and the alignment between the three.

'No wrong ideas'

In Design Thinking, the principle that, in order to forward innovative thinking, the group or individual performing the thinking session must accept and consider all ideas as possible solutions.

Pain Points

In experience design, pain points are real or perceived problems experienced by customers within a system.

Problem frames

The area of research in regards to a particular problem.

Qualitative research

Primarily exploratory research. It is used to gain an understanding of underlying reasons, opinions, and motivations. It provides insights into the problem or helps to develop ideas or hypotheses for potential quantitative research.

ROI

Acronym for: Return on Investment.

Root cause

The fundamental reason for the occurrence of a problem.

Shadowing

A research methodology during which the researcher follows the participant through the participant's activities. These activities show the researcher the participant's physical context as well as their interaction within that context.

Sensemaking

To make sense of; to understand.

Snapshots

A representative sample of research. In design-oriented presentations, this refers to a collection of photographs, quotations, and synthesized research that is formatted to tell the story of the research endeavor.

Stakeholders

Persons, groups or organizations that have direct or indirect stake in an organization because it can affect or be affected by the organization's actions, objectives and policies.

Sympathy

The action of understanding, being aware of, being sensitive to, and vicariously experiencing the feelings, thoughts, and experience of thorough emotional and intellectual understanding of another's experience. Contrasts with empathy in that it does not include a shared experience.

Synthesis/synthesizing

To combine (a number of things) into a coherent whole. In Design Thinking, this refers to the collection and integration of the substance of data points into a logical and meaningful collection.

Touchpoints

Any point of contact between a customer and a service or service provider. This could be the design of a receipt, the comfort of a waiting room or the usability of a web page.

Yes, And

In Design Thinking, the logical opposition to the statement, "No, But..." Meant to set up acceptance and integration, this form of reply to statements can allow for expansive conversation instead of a negation of opinions and options.

Additional Notes

***Tip**

Make copies of this blank consent form to use for your field research.

Unique ID: _____

Project: _____

Quotes, Photography and Video Consent Form

Thank you for your willingness to participate in this Veterans Affairs Research Study.

Use of Quotes

When we write reports or presentations on what we learn from the interviews, we sometimes use specific quotes from study participants. Quotes bring to life what we learn and are an important part of sharing your experience with others. If you give us permission to use your quotes, we will not include your name or a photograph of your face next to the quote. This protects your identity and makes the quote anonymous. If you approve of your quotes being used in future publications or presentations of our work, please include your name and signature in the section below.

Name _____

Signature _____

Date _____

Photography and Video

The project team may take pictures or video during the interview. Photographs and Videos bring to life what we learn and are an important part of sharing your experience with others. If you give us permission to use photographs or videos of you, we will not include your name or a quote as part of the photograph or video description. This protects your identity. If you approve of photographs or video being used in future publications or presentations of our work, please include your name and signature in the section below.

Name _____

Signature _____

Date _____

Please keep a copy of this document in case you want to read it again.